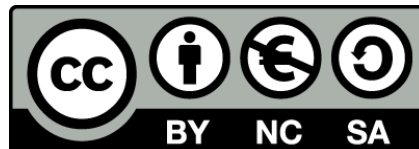




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Alʿilbīrī's *Book of the rational conclusions*
Introduction, Critical Edition of the Arabic Text and Materials
for the History of the Ḥawāṣṣic Genre in Early Andalus

Theo Loinaz



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Tesi doctoral

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Director: Miquel Forcada



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and Materials for the History of the Ḥawāṣṣic Genre in Early Andalus**

Memòria presentada per a optar al grau de doctor
per la Universitat de Barcelona

Programa de doctorat en Història de la Ciència

Autor: **Theo Loinaz**

Director i tutor: **Miquel Forcada**

Barcelona



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Abstract

The *Book of the rational conclusions*, written on an unknown date by a physician from Ilbīrah, is a multi-section medical pandect of polythematic nature. Its text includes separate units dealing with apothecary-related matters, natural philosophy, therapeutics, medical applications of the specific properties of things, a regimen, and a dispensatory. In this dissertation I offer a critical edition of the entire Arabic text (Part II) that is preceded by a description of its manuscript tradition and a limited survey of the contents of all its sections (Part I). I also propose a hypothesis regarding the likely chronological context of the compilation. The core of the study, however, is the in-depth analysis of the section on the specific properties of things, to which the whole Part III is devoted.

*Amari, ez-izartetik nintzendu ninduzulako
eta naizentzen bethiere lagun izan zaitudalako.*

*Ismari, urthetan ttipiagoa izanagatik
bizian aitzindu hatzaidanorri, eta triadatxoari ere bai.*

لشقيقتي العالیه، بنت الماضي والاشتياق وأمّ المستقبل والأمل

*A la meva família, tota sencera,
que ja sabeu els vostres noms
i que m'heu ajudat a arribar-hi.*

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Preface

I do not want to be a doctor—or at least that is not the reason why I embarked in this journey nor the stimulus that has driven me through my research. And yet it is mainly because I must become one that this text had to be submitted now and thus. It is a late child, for sure, but at the same time it has been delivered too early. It comes to light, moreover, badly mutilated, but that is a story that must remain untold here.

These pages are a piece of my mind and my heart, and a substantial portion of my past life too. But it is also a thesis, “just a thesis” as I have been repeatedly told for the last ten years. In the end I had to come to terms with the fact (so obvious to everybody but to myself) that I cannot, and certainly should not, spend the rest of my life elaborating on a text that, in the end, is destined to be just that: a thesis.

If, after all, this happens to be my swan song, I would like the reader to be aware that I could sing better and also that I knew a few more tunes.

Acknowledgements

This dissertation is largely parthenogenetic and it is also the child of intellectual isolation, but my work would have been simply impossible were it not for all those that have preceded me and whose names are duly registered in the Bibliography. Catalogue makers, lexicographers, editors and translators, researchers, to all of them I owe so much. If I have failed to do justice to their work or misinterpreted their teachings, the blame is all mine. I can say, not without pride but also with some concern, that I am the sole responsible for this text, including all its shortcomings and mistakes.

During these years I have been graced with a few opportunities to access some foreign collections thanks to the kind invitations of Prof Burnet at the Warburg Institute and late Prof Sezgin at the Institut für Geschichte der Arabisch-Islamischen Wissenschaften. At the former I discovered the Hebrew translation of Ibn Alhaytam's treatise on the specific properties, at the latter I consulted so many manuscripts that have proved instrumental to my research. I made a few personal acquaintances too, and in Frankfurt I was honoured with the company of Farid Benfeghoul and of Prof King.

For their help with some manuscripts that contributed greatly to my analysis, I must thank particularly Dr Casulleras and Dr Álvarez Millán.

Last but not least my thanks go to Prof Forcada, who has worked against the clock to make this submission possible.

Part I

Text and context

General introduction

1.1 Subject, main goal, and collateral information

The object of the present study is a multi-section polythematic but essentially medicine-centred compilation that is transmitted in two manuscripts (see Part I Chapter 2) under the title of *Book of the rational conclusions* (*Kitābu nnatāʾiġi lsaqlīyyah*, henceforward *Natāʾiġ* or simply *Nat* in abbreviation). According to my current interpretation (which is justified throughout Part I of this dissertation, particularly in Chapter 3) *Natāʾiġ* represents a quite thorough pandect that includes: a remarkably comprehensive manual for apothecaries (see Part I Chapter 4), a complete medical treatise that offers a natural philosophical introduction (Chapter 5) and covers also practical therapeutics (Chapter 6), a full treatise on the specific properties of things (the whole Part III is devoted to this matter), a regimen or summary of dietetics (Part I Chapter 7), and finally a small collection of medical recipes (Chapter 8).

The nature of these texts ranges from presumably original to unquestionably derivative and their compilation appears to be the original work of an Andalusī physician from Ilbīrah named ABŪ MUḤAMMAD ṢABDULLĀH B. AḤMAD (from now on ALḤILBĪRĪ). The author-compiler may have written some of these sections from scratch, but there is positive evidence that most of them were put together from pre-existing texts with no other intervention than the choice of passages and occasional synonymical substitution.

Despite all efforts, there is no certainty as yet about the identification of *ALʔIL-BĪRĪ* nor, accordingly, about the date of compilation of *Natāʔiğ*. However cumulative evidence gathered in the course of this research points with a high degree of probability to the mid/late 10th century (see Part I Chapter 9).

I do not consider the critical edition of the Arabic text (= Part II) a goal in itself but rather a necessary basis on which to work and an instrument for other researchers by which to develop their own interpretation of the text. Establishing the text and making it available was, of course, an important task in the context of this dissertation, but it was never its main goal. The original—and still largely prevailing—aim of my research was rather to explore the transmission (and, if possible, the ultimate traceable origins) of the materials collected by the author in the section on the specific properties of things (= *Nat* III according to a division that shall be explained below in Part I Chapter 3). This inquiry was initially conceived as a training in the methods of source criticism (more on this below in the section on methodology) and as an examination of their applicability to a tradition that has been often considered hopelessly confuse and blurry, and the constitutive elements of which are thought to be transmitted in a chaotic way. It was thus as a challenge that my study of *Nat* III begun and although I hope to have shed a little light on the matter, the challenge is still there and the research is by no means over.

By a simple calculation of proportions the reader can judge from Chapter 4 in Part III that the analysis of the materials has outgrown all reasonable dimensions with regard to the expectations of a thesis. While the extension of such a full-blown study would not have been unprecedented, submitting the entire text for evaluation was certainly not advisable under the current circumstances—and I am afraid that the alternative draft presented here has not greatly alleviated the readers' task in this regard. Besides, any study of a mostly unexplored text requires, of course, a proper introduction of the material witnesses and a cursory survey of the contents, as well as at least a brief reference to its author and to its temporal and cultural context. In the case of a book like *Natāʔiğ* that introduction necessitated some elaboration and it eventually gave rise to the current Part I.

A hard (and admittedly arguable) decision was made only too recently to excerpt the original study and to transform it into a representative sample of the application of source criticism to the materials under scrutiny (this is Chapter 4 within Part III).¹ As a necessary complement, I include an analysis of the imme-

¹ It is somewhat ironic (and also quite telling of the prehistory of this dissertation) that the true core and beating heart of my research should have been relegated to the status of a closing chapter of the last section of this final draft.

diate genetic origins of *Nat III* (= Part III Chapter 1) and a compact discussion of the concept itself of 'specific property' (Chapter 2) as well as some remarks on a few outstanding figures from the corpus of authorities reflected in the transmission (Chapter 3). The resulting draft is overall sketchy and the shortcomings of the abridgement are only too noticeable, but the submission of the text cannot be delayed any longer.

Being epistemically omniscious and naturally digressive, I give some attention throughout this dissertation to all sorts of incidental, tangential, and even only remotely related matters. Although it cannot be actually defined as a collateral *goal* of this research, discussion of terminology, etymology, and even botanical identification is pervasive (but never a priority) in the text, and these sporadic notes may be of some interest not only for the history of Islamic medicine. A conscious effort has been made, however, to sift the information and to separate primary data (on the body of the text) from complementary and tangential details (consigned to the footnotes), but the criteria for discrimination are always subjective and therefore arguable. Whenever a digression is considered to be disruptive by normal standards, I extract it from its original locus and append it as an excursus at the end of the corresponding chapter, alongside tables and other complementary data.

Explicit argumentation and even verbosity are a noticeable feature of the style deployed in this text, and while the reader is not necessarily required to know any Syriac or medicine to understand the exposition, a modicum of patience is admittedly needed to go through it from beginning to end.

1.2 Methodology and instructions for use

My overall approach to *Natāʾiǧ* and to its contents is mainly philological and historico-critical in nature. On the side of textual criticism, due emphasis has been given to codicology, palaeography, and linguistic matters, not only with respect to the establishment of the text itself but also regarding any other written passages adduced in the course of the research—in the hope that any detail might throw some light on obscure loci and at the cost of being sometimes exceedingly punctilious or over-explanatory to (apparently) little profit.

As for source criticism, it is kept to a bearable minimum in Part I then to become the chief focus of Part III, most particularly in Chapter 4, which is indeed an implementation of the methods of *Quellenkritik* or *Quellenforschung* (in their modern sense) at a microscopic level.

On the other hand, this text-centred approach does not completely preclude occasional references to *realia* or to the actual practices presumably reflected by

the text, but I must be emphatic that no attempt at all has been made to explore the interface with ethnomedicine, nor to combine the information provided by *Natāʾiğ* (or by any other text) with contemporary knowledge of ethnobotany, ethnozoology, or ethnominerology. More particularly, I have avoided on principle any temptation to check—let alone justify or validate—the actual accuracy and efficacy of the doctrines and remedies transmitted in the corpus.¹ In other words: this is essentially an inquiry into the *transmission* of pieces of medical and paramedical bookish lore, *qua* written artefacts, in the Helleno-Islamicate tradition, not an investigation on the practice of the medical art in Andalus or elsewhere.²

The text that I submit here is not exclusively addressed to the initiated and I have often resorted to a liberal dose of propaedeutic exposition, but some degree of familiarity with Arabic and with the Helleno-Islamicate medical tradition is expected from the reader of these pages. In like manner, previous acquaintance with the methods of textual criticism should greatly help the reader to navigate this dissertation. However, although the analysis of the texts may occasionally lead to the discussion of nosomical or biological identification nowhere shall I engage in medical definitions, nor shall I delve into the details of botanical or mineralogical taxonomy.

¹ A paradigmatic example of this strategy of resorting to contemporary science to vindicate a mediaeval text is, for instance, a monograph conceived as “an attempt to explain the rational basis of Anglo-Saxon medicine in the light of modern physiology and pharmacology” (CAMERON 1993: IX), which yielded rather mixed results and was likewise diversely received (cf. MORY 1994; VOIGTS 1995; RIDDLE 1997; SCHALICK 1997). The predominance of this sort of “medical verification” since the nineteenth century is not surprising given the unrivalled protagonism of *physicians* doubling as historians and often also as editors and translators in the field. It is indeed mostly from the medical quarters that a remarkable number of papers of the most disparate quality are published which tackle such questions. Islamicate medicine is not an exception to this trend (with a particular vogue concerning Unani and Ottoman medicine) and remarks on the therapeutic effectiveness (or lack thereof) of such and such drug sporadically insinuate themselves even into the commentaries on classical medical Islamicate texts.

² Something shall be said in this dissertation about the pervasive misconception of practically every written line from a medical text as a reflection of actual practice. Needless to say, my criticism of certain aspects of the medicine-centred method (most particularly the tendency to anachronistic interpretation) and my choice of a text-centred approach should not be understood as a dismissal of one of the pillars of the history of medicine and allied sciences (within which this study is, after all, framed) but rather as a self-imposed limitation in the scope of the present research.

Referencing style and bibliography

All titles of books, whether edited or extant only in manuscript transmission, are cited in transliteration (for the system used for Arabic in this study, see below) and in abridged form. Readers are encouraged to consult the list of primary literature in the Bibliography first and then proceed to the text itself. For titles in the Hippocratic and the Galenic collections the standard abbreviations of the *Thesaurus Linguae Graecae* and the LIDDELL–SCOTT *Lexicon* are used. An obvious exception to this norm are such texts as have no original title and are widely referred to in secondary literature by conventional labels, eg “the Syriac *Book of medicines*” or “the Syriac *BNG*” (= *Buch der Naturgegenstände*).

Occasionally and according to a criterion of contextual relevance, the full unabridged title and even its original form (Greek, Hebrew, alifatic Arabic) may be provided, especially for its first mention. For practical reasons, I frequently resort to further abbreviations (all of which are self-explanatory) in the footnotes, eg DIOSCORIDES’ *Materia medica* is abridged as *Mat. med.* and even as *MM* (the latter particularly in unbroken series of mentions). Wherever I have found it pertinent and the context allowed (once again especially in the footnotes), I have further abridged references to primary sources by omission of book sections (eg “*Tasrif* II 430₁₅”, meaning volume II of the published facsimile).

For secondary literature, the style is “LOINAZ 2023: 973” (which is, of course, a fictional auto-reference to this thesis). As noted in the Bibliography, one single second name has been provided except for those few cases in which a possible ambiguity has recommended otherwise (eg GARCÍA or ÁLVAREZ).¹

In the case of lexicographical sources and in order to avoid a sterile proliferation of letters, the markers “s.v.” (= *sub voce*) and “s.r.” (= *sub radice*) have been omitted wherever the lexical item is entered in the mentioned dictionary under the same form.

The Bibliography at the end of this dissertation is introduced by a brief note explaining its underlying mechanics, but it may be worth mentioning here that the list is a positive one (only those titles that have been cited in the text are registered).² Titles (both primary sources and secondary literature) that I have not accessed directly are regularly marked as “[n.v.]” (= *non vidi*) in the text and

¹ Incidentally, referring to GARCÍA SÁNCHEZ is necessary to help the reader find the item in the Bibliography but the combination CARABAZA and GARCÍA 2009 makes a double-name reference unnecessary. Other instances of possible ambiguity are resolved in the same way.

² An honest caveat: given the particular circumstances under which the final compilation of this text has been conducted and especially as a consequence of the drastic reworking of the original draft, there might be some title that either is cited in the text but not recorded in the Bibliography or vice versa. I would like to stress that if that were the case, it is not an intentional practice and that such mistakes shall be duly emended.

with an asterisk (*) in the Bibliography.

I should add, on a personal note, that limitations in the availability of many items (both primary and secondary) have had negative repercussion in my analysis. On the other hand, I have not felt compelled to provide lengthy strings of references for the most basic information only to show that I can read. For biobibliographical data I regularly record the latest or the most complete update available to me, and readers shall find there all references to previous literature.

Transliteration of Arabic

The transliteration system applied throughout this dissertation is admittedly idiosyncratic, but a balance has been sought between my preferred criteria and common practice. As far as the individual graphemes are concerned, I only deviate from the international standard in the case of ع /ʕ/, ط /ṭ/, and the representation of the glottal stop /ʔ/. I claim no originality, of course, and my current preferences are large and by inspired by the late Prof. CORRIENTE's recommendations and by the fact that any transliteration ought to be not only unequivocal and clear (thence /ʔ/ and /ʕ/ rather than /ʔ/ and /ʕ/, respectively) but it should also reflect the acrolectal norm (ie *Fuṣḥā* Arabic) whenever that is the register used in the texts under examination.

The glottal stop is consistently represented (as /ʔ/) except in absolute initial position, in which there is no possible ambiguity. Dispensing with the graphic representation of the *hamz* in that context further allows to preserve a more familiar form of proper names. Transliterating أحمد as *ʔahmad* may be phonologically correct but it is also impractical and, after all, the same pronunciation obtains regardless of the spelling (unlike in the case of /ʕ/). Let it be noted that no artificial separation of the article has been implemented and that the assimilation of /l/ is systematically reflected in the transliteration: «*annūr*», «*ARRĀZĪ*».

Overall the norms of the so-called Classical Arabic have been adhered to, particularly with regard to the *waṣl* and to the rules of *waqf*. I transcribe «*fi ṭṭibb*» (not «*fi al-ṭibb*», «*fi 'l-ṭibb*», or «*fi l-ṭibb*»), also «*mina lmadīnah*», «*ḡalasati lmarʔah*», «*fiṣrūna dirhamā*», etc.¹ A general exception has been made (exclusively for ease of readability) to the norms of *waqf* in the following cases: the *-a* of third-person singular masculine perfective forms of verbs is not dropped in order to avoid ambiguity (*kataba*, not *katab*, even in final position), and by the same token the final vowel of second-person singular pronouns (*-ka* and *-ki*)

¹ On a side note, for the sake of clarity (and also for aesthetic reasons) French guillemets («») have been preferred over standard quotation marks ("") in the case of words or passages quoted in transliteration and also in non-Latin writing systems.

is also retained. For the third-person singular masculine enclitic pronoun, *-hu* shall be found both after long syllables and in a close syllable, *-hū* in all other positions (the same applies, of course, to the harmonic variant *-hi/-hī*).

Missing index

An explicit apology is in order for not having provided an index (in fact, a series of indexes) for this text. I am aware that such an instrument would be most useful to find one's way through a lengthy dissertation like this. Needless to say, a full battery of indexes (thematic, onomastic, and language-specific) shall be prepared for a future version of this study if it is to see the light in some form, but given that the present text is to be made available in digital form and that not-so-modern technology allows to search for any given word in a PDF, I have sacrificed this traditional (and, I insist, reasonable) element until more favourable circumstances arise.

1.3 Ideological issues

On a quite different note, my interest in and appraisal of *Natāʾiġ* has never been inspired by partisan feelings of any kind. Unwilling to feign ideological apathy and with full awareness of an unwholesome socio-cultural context of escalating Chauvinism and Islamophobia, I have deliberately cancelled any expression that might fuel appropriationistic revisionism or invisibilisation while at the same time considering Andalusī traditions, with all their specific traits, as European traditions—in the most strictly geographical and historical sense of 'European', which is after all the only non-fictional one.¹

At the formal level and in order to avoid any ambiguousness, in this study the words 'west' and 'east' are systematically written in lower case and have invariably a geographical meaning. Furthermore and against common practice in academic writing, Andalusī place names and the corresponding gentilics or demonyms are given in transliteration (but not in italics), eg Qurṭubah and

¹ The prolonged obliteration of Arabic culture from the literary history of mediaeval Europe even in the form of mere influences is partially mirrored in the context of the epistemic traditions by an alterisation of Andalus as non-European (and even "oriental"). According to this ideological (and ahistorical) definition of Europeanness, the medical traditions of Anglo-Saxon Britain and of Andalus would be classified differently despite their sharing an essential Graeco-Roman foundation and their being conveyed in two languages that had at some point arrived from the east. It is only insidious and blind Chauvinism that would make of the Christian physicians mentioned by IBN ǦULǦUL representatives of so-called European medicine whereas IBN AL-HAYṬAM and ALʾILBĪRĪ would be practitioners of a medicine imported from the east—as if all bookish medicine had not been imported into Iberia from the east.

Qurṭubī (not Cordova and Cordovese), Iṣbīliyah and Iṣbīlī (not Seville and Sevillian), although the same toponyms may be mentioned in Latin (Corduba, Hispalis) or in English in a different chronological context.

At the contentual level and following the same guideline, witnesses from the Latin and even vernacular Christianate European corpus have been occasionally adduced in order to better illustrate the extent of a shared legacy—one that for want of a better name shall be labelled here ‘Helleno-Islamicate’ and which can be described as “diversity in unity”.¹

I must confess, however, that have not been bold enough to adhere always to my own criteria and that I am liable to legitimate criticism for the conventional use of ‘Indian’ and ‘Chinese’ instead of the historically more accurate (but perhaps still less readable) Hindī or Ṣīnī, to give just two examples of deeply problematic terminology.

Moreover, I have also failed to reflect my own stand with regard to individual self-identification and I have given in to the currently prevailing practice of referring to scholars in a gender-marked way. During the last revision of the text I tried to substitute ‘they’ (and ‘them’, ‘their’) for the original ‘he’ and ‘she’ in the case of secondary literature, but the level of ambiguity produced by this style was simply unbearable. Hopefully I shall find some solution for this problem in the near future. In all other cases (except, of course, in the translation of original texts in which a gender is explicitly marked) I have resorted to ‘they’ and, let it be noted, to ‘it’ (occasionally ‘It’ to avoid ambiguity) in the case of god (Abrahamic or otherwise).

¹ Nothing of this is new, of course, and the existence of this shared legacy is not only almost universally acknowledged by the Academia but also held as one of the tenets of contemporary history of science and technology. Nevertheless, this received belief has never translated into an actual integration of all legacies into one single general picture. Beyond rhetorics and shallow manifestations of political correctness, much of the current scholarly discourse bears still the traces of another very different legacy, one of constructed dichotomies (West/East, Europe/Islam) and more or less explicit sectarianism. As for the label proposed here, it may have at least the merit of being less prone to nationalistic interpretation and also more inclusive than the time-honoured *Graeco-Arabic*, particularly as far as the second element is concerned.

The manuscript tradition

Two different sets of texts reflecting more or less extensively the primitive contents of *Natāʾiğ* are transmitted in two manuscripts of eastern origin which are nowadays held at the National Library in Paris (manuscript P) and at the Dāhiriyyah Library in Damascus (manuscript D).² These two texts differ noticeably in length, P being by far the more complete one—or rather the less incomplete, for it shows several lacunae and a number of epigraphs and even whole chapters are missing from it. Despite being much shorter, the form of *Natāʾiğ* transmitted in D cannot however be considered an abridgement (the segments shared by both manuscripts are textually identical) but ought to be seen rather as an excerpt or a partial copy in which most of the sections are only vestigially represented. Furthermore, the text of *Natāʾiğ* in manuscript D includes a few materials that are not to be found in P and some which seem to stem from the original compilation.

Some attention is given in this chapter to the codicological and contentual description of these two witnesses.³ The first reason for doing so is general and

² A remark in ḤANNŪN and ṢABBĀĠ 2007: 13–14 would seem to imply that there was a manuscript in SĀMĪ ḤADDĀD’s private library containing not only *Mufarriḥu nnaḥs*, but also a copy of *Natāʾiğ* and several other chapters on medicine. However, the description of that manuscript, which is said to have been copied in 1354/1935–1936 by MUḤAMMAD RIḌĀ, matches exactly that of an item currently in London, Wellcome Library MS WMS Arabic Haddad 430, which only transmits *Mufarriḥu nnaḥs* and there is no evidence at all that it ever contained any other text (cf. SERIKOFF 2005: 197–200 and a digital reproduction available at <http://wamcp.bibalex.org/>). Nowhere else is any mention of a third copy of *Natāʾiğ* to be found and I therefore assume that P and D are the only extant copies of the text—although “[w]as mag sich alles hinter der oft zu lesenden lakonischen Bemerkung *Kitāb fi ṭ-ṭibb* „ein Buch medizinischen Inhaltes“ verbergen!” (ÜLLMANN 1970: 5).

³ The description is not, however, exhaustive in what concerns codicology and particularly

programmatic: the analysis of the manuscripts used for any given edition can—and should—nowadays profit greatly from the recent development of Islamicate codicological studies (Arabic and otherwise). Even if the primary concern of historians of science is certainly the *texts*, these cannot possibly be fully understood in their social and historical dimensions without approaching also the *manuscripts* in which they were transmitted across space and time and which are, after all, “evidence of a text’s historical and cultural afterlife”.¹

The second reason is particular and pragmatic: when confronted to a text like *Natāʾiğ* that in its extant form presents itself as virtually anonymous and achronous,² any information that can be retrieved from codicological evidence should be more than welcome. Moreover, formal analysis of the manuscripts can help to assess how much of the primitive text may be missing from a lacuna (as in the case of the one that affects *Nat* I.3.1 in manuscript P) and may also shed some light on the history of its early transmission (collation marks on manuscript D are proof that there was at least a third copy of *Natāʾiğ* in circulation in the 12th c.) as well as on its reception.

palaeography, as the research conducted in this dissertation is basically textocentric. A full and definitive description of both manuscripts (based on autopsy in the case of P and on inspection of the whole codex for D) as *artefacts* must be deferred to some other occasion. On an incidental note, ‘codicology’ is used here in a quite conventional and comprehensive sense without delving into methodological details (for a convenient survey of the evolution of the concept of codicology and the different methodological approaches involved, cf. DEL BARCO 2017).

¹ TARRANT 2016: 24. A few glimpses into the apparently limited afterlife of *Natāʾiğ* can be gained, indeed, from some marginal annotations added to both D and P by their respective readers.

² Here and elsewhere I use ‘achronous’ as a hyponym of ‘undated’ to qualify any text the date of composition of which is not only unknown but also currently impossible to establish even approximately. In this specific sense the word is unrelated, other than etymologically, to ‘narrative achrony’ as defined in literary criticism (ie independence from chronology or temporal autonomy as an authorial strategy, cf. GENETTE 1980: 79–85) although it certainly shares the essential reference to a “dateless and ageless” text/event.

2.1 The Paris manuscript

2.1.1 Location and shelf mark

The manuscript that provides the basic text for the critical edition and which shall henceforth be referred simply as P is Paris, BnF MS Arabe 2961 (= Ancien fonds 1068). It is a single-text codicological unit containing exclusively the text of *Natāʾiġ*.¹

A note by the Aleppine Maronite priest Joseph ASCARI dated 1733 precedes the title page:

Hic liber manuscriptus arabicus *Illationes mentales* inscribitur, Auctore Maometho Abiabdalla medico cognomento Alacbari. Continet hic liber demonstrationes philosophicas, et canones medicinales, temperamentorum corporis humani cognitionem et utilitatem. Fit quoque hic mentio de qualibet morborum specie que in unoquoque humano membro euenire potest, et cuilibet morbo adiacet suum remedium. Absoluta fuit huius libri scriptura die Mercurii uigesima octaua mensis Zilchedae anno Egyrae 612.

2.1.2 Title

The title of the text is inscribed on a separate page on fol. 1r, with partial vocalisation and two ornamental florets at the end of the title and at the bottom of the page (see Figure 2.1). The inscription reads thus in normalised spelling:

كتاب النتائج
العقلية في الوصول إلى
المناهج الفلسفية والقوانين الطبية
ومعرفة أمزاج الأعضاء البشرية
ومنافعها وذكر الأمراض اللاحقة
بكل عضو وعلاج ذلك

¹ The first catalogue reference to the manuscript is provided by DE VILLEFROY, who under no. 1068 reports that the codex had been recently brought from Constantinople and registers in abridged manner the title (*Illationes mentales*, following ASCARI's note), the author (whose *nisbah* he misspells as *Alubari*), the contents, and the Hiġri date of the copy (cf. DE VILLEFROY 1739: 214). In a more complete description of the manuscript DE SLANE suggests reading the *nisbah* as relating to the Andalusī city of Ilbīrah and he also identifies the main thematic units of *Natāʾiġ* (cf. DE SLANE 1895: 529). The author and the text are summarily recorded in VAJDA's *Index* too (cf. VAJDA 1953: 140, 522).

The misspelling «الاحقة» (for «اللاحقة»*) on the title is probably significant, as it is shared with manuscript D. The same title is seen again in the *explicit* on fol. *130v 1–4, now with a correct spelling for the word in question:¹

نجز كتاب النتائج العقلية
في الوصول إلى المناهج الفلسفية والقوانين
الطبية ومعرفة أمزاج الأعضاء البشرية ومنافعها
وذكر الأمراض اللاحقة بكل عضو وعلاج ذلك

2.1.3 Authorship

The name of the author is mentioned for the first time beneath the title on the front page in a subscription that can be normalised as:

تأليف الشيخ أبي عبد الله محمد بن أحمد الطبيب الألبيري رحمه الله عليه
الألبيري [الأكبري] P.

The enigmatic *nisbah* (which has actually been “reconstructed” by a later hand, as the folio bears the signs of restoration) is clarified by two additional mentions of the name of the author on fol. 22v 8–9 (= A) and then in the *explicit* on fol. *130v 5–6 (= B). In both instances a different version of the filionymic and the first name is provided, as well as the correct form of the gentilic:²

^A قال أبو محمد عبد الله بن أحمد الطبيب الألبيري رحمه الله
^B تأليف الشيخ أبي محمد عبد الله بن أحمد الطبيب الألبيري رحمه الله عليه
في الطب مبرهن

According to P, therefore, the text of *Natāʾiġ* would be the work of ABŪ MUḤAMMAD ʿABDULLĀH B. AḤMAD, who worked as a physician in Ilbīrah, the capital of the homonymous *kūrah* in Central Andalus.

¹ An asterisk before the number of a folio (as here in fol. *130v) indicates that it is found only in the younger foliation (see below for the details on the double foliation of P). For ease of presentation all references to P in this General Introduction follow (unless stated otherwise) the younger numeration of folios.

² The fairly common misreading of ل as ك needs no special comment but it is worth noting that the same mistake affects also the toponym *Šulayr*, which on P 5v 2 is copied as «شكبر» yet it is otherwise perfectly vocalised.

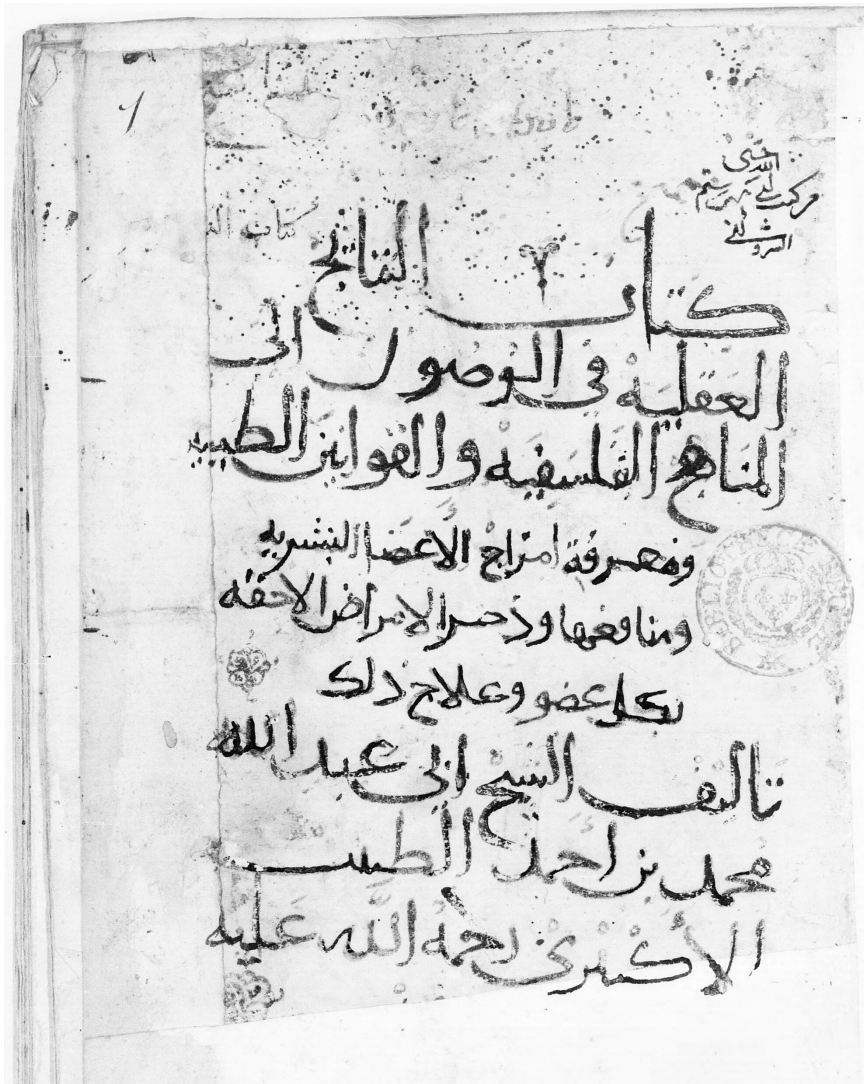


Figure 2.1: Title page of manuscript P (Paris, BnF MS Arabe 2961).


٤
 3
 فِي النَّارِ أَعْيَ صِنَاعَةَ الطَّبِّ إِذَا مَشِيَ عَلَى غَيْرِ سُنَّهَا
 وَسَانَ بَعَا غَيْرَ طَرَفِهَا وَلَا حَيَوَانَ أَفْضَلَ عِنْدَ اللَّهِ
 مِنَ الْإِنْسَانِ وَالْحَيَوَانَ أَفْضَلَ مِنَ النَّبَاتِ مِنْ تَلْفِ هَذَا
 الْحَيَوَانَ الْفَاضِلِ عَيْشًا وَظِلْمًا وَتَمَرًا أَيْدِي بَرِّ جَوْا
 لَهُ آخِرُهُ وَكَذَلِكَ مِنْ تَلْفِهِ جَمْعًا لِأَبِي صِنَاعَةَ الطَّبِّ
 فَأَدَّ اللَّهُ بِنَا إِلِي أَفْضَلَ الْأَعْمَالِ الَّتِي تَرْضَى بَارِيْنَا
 لَدَيْهِ **ذِكْرُ الْأَلَاتِ** تَكْوُنُ وَدَرْ الطَّبِّ
 مِنْ حَجَرٍ أَوْ تَرَابٍ أَوْ بَرَامِ الْحَجَرِ . مَعَارِفُ الصِّفَةِ
 مِنْ حَشَبِ الْأَرْضِ وَالطَّرْفَا . السُّكْرَاتِ
 زُجَاجٍ وَالرَّبِيدِيِّ . الْأَرِيَارِ وَالْقَدْرُ وَكُوسٍ
 سَبِي الشَّرَابِ مِنْ زُجَاجٍ أَوْ قِصَّةٍ . الْخَوْضُ عَوْدُ
 عَوْدُ الْبَقِصِ . الْمَلَا عَوْ قِصَّةٍ وَحَدِيدُ مَقْضُصٍ
 أَوْ عَوْدُ الْبَقِصِ وَالْأَرْضِ وَالطَّرْفَا . مِيَاةُ الْخَلِطِ
 عَدْبُهُ حَلْوُهُ . خِرَقُ الصِّفَةِ كَانِ أَوْ صَوْفٍ

Figure 2.2: Paris manuscript fol. 3r.

نقي ودلك حرق الطرب الميارس معسولة في كل
 طرفه غير لا تترك ليلا لتجرب. مناخل السخبر
 والحبر لا تخل فيه شي فيه دهن الأبطا وخلق مدهو
 بدهن تختم العسل أوزبدي ملوخ. الحقان زبدته
 جرات الشراب زبدته ستافس الزئوب مزججه أوان
 التراهه الخاش والرصاص. أوان الأتحال
 الزجاج. أوان الخلول الفخار الرقيق. أوان
 العسل مزججه الباردة في الفخار العظيمة والحجارة
 والأدهان الحارة في الزجاج
القول على ليمك السكدة الخزال
 وقيل نقيته وهو ثلاثة أصناف تسمى وصي وهديك
 وعلامة الخالص منه أنه يمتلي فخه النافحة وسمها
 خروزر فانه يبرعف ويعتومته راحة النمل ويرو
 مع الدهر وتشد دم البشر وصمغ الجور ورب التورج

Figure 2.3: Paris manuscript fol. 3v.

جز كتاب التلخيص العقليه
 في الوصول الى المناهج الفلسفيه والقوانين
 للطبييه ومعرفه امراض الاعضاء البشريه وفعالها
 ودر الامراض الاخرى بكل عضو وعلاج ذلك
قاله الشيخ علي بن محمد
 تاج الدين الطيب في شهر رجب سنة 730 لله
 من ايام الناصر الملك المنصور
 وكان الفتح من سنة 730 يوم الاربعاء الثامن والعشرون
 من رجب سنة 730 لله



حتمونا

Figure 2.4: Paris manuscript fol. 3v.

2.1.4 Date

The copy is dated “Tuesday 24 of Dulqaʿdah, year 612” of the Hiġrī calendar (that is March 1216 CE) according to the scribal colophon on fol. *130r 13, which is written with a rather hurried hand and where no mention of the copyist is made:

نجز الكتاب بحمد الله ومته و
حسن توقيفه وعونه ووافق فراغه الثلاثاء الرابع
والعشرين من ذي القعدة سنة اثنتي عشرة وستائة، والحمد لله رب العالمين
وصلّى الله على محمد وآله وسلّم

There is, however, a second colophon on fol. *130v (see Figure 2.4) that does not only repeat the title and the authorship as seen above but also provides a new date “Wednesday 28 of Dulqaʿdah, year 612”, following a *ṭawīl* verse:¹

وَمَنْ يَأْمَنُ الدُّنْيَا يَكُنْ مِثْلَ قَابِضٍ عَلَى الْمَاءِ حَانَئَهُ فُرُوجُ الْأَصَابِعِ
وكان الفراغ من نسخه يوم الأربعاء الثامن والعشرين من
ذي القعدة سنة اثنتي عشرة وستائة

Leaving aside the obvious disagreement between the two passages as to the exact day² and despite the fact that the first colophon uses *naġaza* without any reference to copying (which coincides formally with what seems to be the original colophon of *Natāʿiġ* as transmitted on fol. *130v 1–6) both dates must refer to the *copy* of the manuscript and not to its authorial compilation.

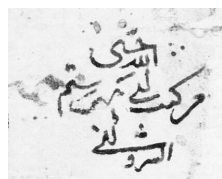
¹ The verse is transmitted without ascription by IBN BASSĀM in *Daḥīrah* III 154₁₄ and the modern editor of that text, namely Iḥsān ʿABBĀS, locates its origin in MAĠNŪN’s *dīwān*, where it has a different opening hemistich. An exhaustive concordance of attestations for this verse (which is partially ascribed to ABŪ NŪWĀS) is provided by WAGNER 2008: 139 no. 313, who further suggests that one might consider its three parallel transmissions as actually three different verses rather than as three variants of one original verse.

² Either «الرابع» should be emended as «السايع» in the first date, or «الثامن» in the second one ought to be read as «الخامس», both options being equally plausible on palaeographical grounds.

2.1.5 Owners

According to VAJDA's notes, the manuscript had at least one Jewish owner before passing into the hands of ABŪ BAKR B. RUSTUM AŠŠARWĀNĪ, whose seal he affirms to be found on many manuscripts acquired in Constantinople in the beginning of the 18th c.¹ The latter's ownership mark can be read indeed on fol. 1r on the upper-right side just above the title of the book:

حَتَّى
الله
من كتب أبي بكر بن رستم
الشرواني



The stamp of the Royal Library (Bibliotheca Regia) can also be seen at the beginning and the end of the manuscript on fols. 1r and *130v.

2.1.6 Codex structure and page layout

P is a codex on paper consisting of 130 folios, 21 cm long and 13.5 cm wide.² No information is available on the origin of the paper,³ nor could any details be ascertained with regard to the binding beyond the evident fact that it is not original, since trimming has affected most noticeably the title page on fol. 1r and the uppermost edge of fol. 1v, also the ending of a few words (eg on fol. 16r 11) and some of the marginal corrections (as on fols. 13v, 16v, 19v), as well as the two squares copied by some reader on the left margin of fol. 12r, and likewise the recipe added on the right margin of fol. 59v.

¹ This information is available in the dossier *Notices de manuscrits arabes rédigées par Georges Vajda. Notices des manuscrits Arabe 2760 à 3184*, chemise 5, pages 60–61, available online at <http://archivesetmanuscrits.bnf.fr/ark:/12148/cc12924f/ca152> [last accessed on 26 Sept, 2023]. AŠŠARWĀNĪ's ex libris is found, for instance, on the right margin of the title page of BnF MS Arabe 2442 (= Ancien Fonds 982) containing a part of IBN AṬṬIQAQA's historical compendium, and also on the upper-right corner of the title page of Istanbul, Ayasofya University Library MS 6375 transmitting ALMAĞŪSĪ's *Kāmil* (cf. the first page of the facsimile published by SEZGIN). That our manuscript was for a while in the possession of a Jewish reader, on the other hand, was certainly inferred from a damaged inscription on fol. 1r of which only the initial letters can be intuited («—٥ ٦»?), and also from a marginal note in Hebrew characters on fol. 11r 7 «אנדרל».

² Since I could not inspect the manuscript *in situ*, these codicological data are borrowed from the descriptions made by DE SLANE 1895: 529 and GARCÍA 1995: 192–193.

³ The manuscript predates the Italian introduction of watermarks (from 1264 onwards) and none of the techniques for the descriptive analysis of non-watermarked paper (for which cf. DÉROCHE 1991: 52–56) can be implemented on a digital reproduction.

The state of the codex is for the most part good apart from some stains and sporadic blots and holes, with the noticeable exception of fols. 1–6, which show heavily worn edges. The words on the title page have been grossly manipulated (actually tampered with) by a latter hand (see Figure 2.1).

Foliation

Most folios show a double numbering on the top left-hand corner of every recto: to the older Arabic one a later (probably French) numeration has been added. The original order of the folios is retained in the older foliation, which is however defective as it skips two folios (fols. *17 and *101 are left unnumbered) and also jumps from $\varepsilon \cdot$ to $\varepsilon \nu$. The younger foliation, in turn, reflects the current rearrangement of the manuscript, during which a few alterations were introduced at the beginning of the codex. The correct sequence is: fols. *1, 2–5, *17, 6–8, 11–16, 9–10, 18–*130.

Given that the two foliations diverge and converge back at several points, in the edition of the Arabic text the original numbering has been kept throughout and the younger one has been provided, of course, when the original one is not available.

The folio marked as 17 in the new foliation (it bears no number in the original Arabic one) is not only misplaced but it also shares the almost-full vocalisation and the noticeably smaller and more elegant script of fols. 1–5, with which it forms a primitive unity.¹ In fact, from fol. 6r onwards the text is copied in a quite different style, vocalisation becoming now testimonial (although not altogether inexistent). There is, thus, a clear stylistic boundary between fols. 1–5+*17 and the rest of the manuscript that cannot simply be reduced to the work of two different hands.² Moreover, the epigraph *On flemingia* at the end of fol. *17v is truncated and the rubric «البلسان» on fol. 6r lacks the marker *القول على* that invariably introduces every lemma, which shows quite unequivocally that some no longer extant items must have been included in between.³

¹ It should follow fol. 5, since the epigraphs on asafoetida, tincar, rhubarb, algalia, saffron, and flemingia (*Flemingia grahamiana* Wight & Arn.) do not belong in the discourse on minerals but rather in the same series that ends with aloes on fol. 5v. The non-original catchword «البلسان» on fol. 5v must, therefore, postdate the rearrangement of the folios (see the next paragraph for a provisional interpretation of the several layers of catchwords present in the manuscript).

² It was probably this manifest difference between fols. 1–5 and the rest of the text that persuaded GARCÍA that at least two different hands had taken part in the copy. While this hypothesis is perfectly legitimate and perhaps also correct, the difference is better described as a quite radical change in design. As for the inference that the scribes “no tenían muchos conocimientos del tema, ya que son frecuentes los errores en la escritura de términos técnicos” (GARCÍA 1995: 193), it may go beyond what a careful reading of the text warrants.

³ Of all the lacunas that affect the extant text of *Natāʾiǧ* this is the only one for which a direct

Quire structure

Multiples of ten are systematically overlined in the older foliation of the manuscript (eg ١٠, ٢٠, ١٢٠, etc.), which might be interpreted as a sort of quinion signature,¹ but a much better indication in this respect is provided, apparently, by the presence of an older layer of catchwords that predates the modern reconstruction of the codex. Catchwords (consisting of one or two words) are in fact noted in most versos² and while most of them are unmistakably late,³ a few probably date back to the original binding of the codex. This older series is quite easily distinguished both palaeographically (it is remarkably close to the hand of the scribe) and with regard to the position of the catchword at the bottom page (it is characteristically far from the inner margin, occasionally almost centred as on fol. ٢٦). Its distribution every then folios would likewise suggest that the codex may have originally consisted of quinions.⁴

Now, on the upper left margin of fol. ٧/7 the remains of a signature for the second gathering («٢٦») can still be seen. Given that fol. 7 cannot possibly have been the seventh folio in the original form of the manuscript (at the very least fol. *17 must have preceded it) and if a homogeneous collation is presumed for the whole codex, the text missing between *On flemingia* and *On balsam oil* might amount to two folios. Scrutiny of the digital reproduction of the manuscript does not allow, however, for any definitive conclusions.⁵ There are, neverthe-

material cause can be identified (namely the loss of at least one singleton or a bifolium).

¹ Quinions or quinternions (ie sets of five bifolia) are the most common quire in the Islamicate world (cf. DÉROCHE 2005: 84–89, GACEK 2009: 210–213) and overlined quire signatures are well attested in the manuscript tradition (cf. GACEK 2009: 215 for an example of such a notation), but I have found no reference to quires being signalled *in the foliation*.

² Pace GARCÍA 1995: 193, who affirms that the manuscript “no incluye reclamos”. Incidentally, if some of these signs proved to be actually by the copyist (or at least contemporary to the copy) as the hand would suggest, it is worth noting that catchwords are only exceptionally attested before the 12th c. and that they became only relatively frequent by the second half of the thirteenth century (cf. DÉROCHE 2005: 99).

³ The lower calligraphic quality of some of them would seem to point to a hand not altogether familiar with alifatic writing, but their outlook is admittedly reminiscent of the text of the recipe added at the end of the manuscript on fol. 130v. These “non-original” catchwords should probably be ascribed to more than one hand, cf. particularly those on fols. ٨, ١٠, ١٦, ٢٣, ٢٤, ٢٥; then those on fols. ١, ١١, ١٥.

⁴ This distribution of the catchwords is sure from fol. ٢٦ onwards: ٢٦, then ٤٧ (because the numeration jumps from ٤٠ to ٤٢ as seen above), ٥٧, ٦٧, ٧٧, ٨٧, ٩٧, then ١٠٦ (since *101 has no older number), ١١٦, ١٢٦.

⁵ Some bifolia are easily distinguished (eg 32v–33r, 52v–53r, 62v–63r, 72v–73v, 82v–83r) and their distribution, again, seems to point towards a quinion-based structure, but then *17r appears to be a singleton (thence its misplacement), which might be an indicator of a more heterogeneous composition. There is little to gain, however, from such an exercise of speculation—verging on semi-divinatory guessing—and a sound assessment of the collation of P is better left for a future

less, two loci at which the presence of an old catchword provides additional confirmation (together with the older foliation) that an alteration of the original order of the folios has happened, probably when the codex was rearranged and rebound in Paris. Thus on fol. 8v «معدنی» announces not fol. ۱۵/9 but fol. ۹/۱۱, and on fol. 16/۱۴v «الإخلاط» corresponds to the *incipit* of fol. ۱۵/9.

Page layout

The text is copied in a clear and abundantly pointed eastern *nash* script with one single black ink,¹ rubrication being implemented through a thicker and slightly larger style of writing. Pages contain between 14 and 17 lines for the most part, with a tendency towards slightly more packed pages in the final folios of the manuscript, where a maximum of 19 lines per page is reached on fols. 108r and 109r–109v, for example.²

Text justification is large and by systematic and overall successful.³ It is never achieved by resorting to line-fillers or *bouts-de-ligne* and only exceptionally by elongation (which is relatively frequent only in the case of rubrics), the most usual strategy to deal with over-long lines being rather superscription beyond the text-block only on the rectos.⁴

in situ analysis of the manuscript.

¹ Cf. GARCÍA 1995: 193.

² Despite the aforementioned strong difference in style between fols. 1–5+*17 and the rest of the manuscript, there is no divergence in the number of lines at the breaking point: fol. 6 contains 14 lines in both the recto and the verso just like the preceding folios.

³ Even at its worst (especially towards the end of the manuscript) lines never show a genuine *en drapeau* or *en dent de scie* unjustified distribution, although some pages may admittedly give that impression (eg fols. 74v, 75v).

⁴ For an explanation of these terms and of the prevalence of such practices in the Arabic manuscript tradition, cf. GACEK 2009: 146. Paradigmatic examples of a line continuing into the outer margin with the final word being partially (and even entirely) written in a slanted way are found on fols. 2v 5, 4r 9, 23r 11, 27r 7, 28r 7, 29r 3, 31r 3, 32r 7|8, 33r 8, 45r 11, 50r 8, 51r 11, 54r 5, 56r 7, 58r 6, 60r 3|11, 66r 1, 77r 8, 82r 5, 100r 1|2, *101r 9, 102r 3, 112r 3, 116r 11, 117r 11, 118r 15, 122r 12, 127r 11, 129r 14. Slanted superscription is implemented only exceptionally on a verso (as at 77v 7), but it is significantly abundant on the initial fols. 1v 12, 2v 5, 3v 3|13, 4v 8, and 5v 6|8. There are a few instances of true superscription in which the word is actually written in the space between the lines (eg fol. 128r 5|8|9) and sporadically one or two letters can also be superscripted even on a verso (as at fols. 1v 8, 29v 5, 84v1, 104v 1, 123v 1|2|9, 124v 2, 125v 1). One single case of separation of a part of the word (*rejet dans la marge* in the French-speaking tradition) is to be found, at fol. 120r 4.

Breaking a word between lines is, nevertheless, quite usual throughout the text and the breaking may happen after any non-connector, including the conjunction – و – as for instance:

95r 2–3	للقولنج العا رض من للبلغم
103r 12–13	ود قاق للقرنفل
104v 5–6	وا فستين روى
106v 5–6	«شبل هندي وز عفزان
105v 16–17	والشدد و زخ الاحشا

An exceptional case of blank space separating the last letter of a word in order to justify a line is found twice on fol. 10v 14|15.

Stop marks and textual boundaries

The manuscript shows quite a liberal use of various ornamental stop-marks. They are especially frequent at the boundary of text units, most often at the chapter and epigraph level but also separating smaller fragments and even items within an enumeration. An exhaustive analysis of the morphological variability of these symbols and the exact contexts in which they appear lies beyond the scope of this codicological description but an illustrative sample is provided hereunder.¹

— A floret-like symbol features conspicuously at the beginning of the text on the title-page (twice: first separating the title and the authorial ascription, then somewhat bigger after the *rahmalah*) and afterwards in a slightly different but still flowery form on fol. 3v 9 in a blank space that marks the boundary between *On instruments* and the first lemma of the untitled epigraph on simple drugs (see Figures 2.1 and 2.3, respectively). Two additional instances are found on fols. 5v 13 and *17v 12 within the same chapter at the end of the lemmata *On aloes* and *On saffron*, after which it is never used again in the remainder of the manuscript. In combination with nearly-full vocalisation and a finer calligraphic style the use of a floret like this suggests that copy of the manuscript may have been originally projected with a more ambitious design than what the final execution achieved.²

¹ For a brief but fairly comprehensive survey of textual dividers and paragraph marks in the Arabic manuscript tradition, cf. GACEK 2009: 268–269.

² As the reader can judge from Figure 2.3, this symbol is relatively similar to the floret used as a prostration mark (*sağdah*) in a Qurʾān dated 1001–1101 CE and reproduced in GACEK 2009: 269.

— Another noteworthy symbol is \dot{Y} (likewise with some variability as to its exact shape), which has several different functions in P and is moreover, and perhaps significantly, shared by D.¹ In P it marks a not overtly strong pause (a sort of semicolon) at fols. 27v 2|3|4|9|11 (see Figure 2.5 below), 28r 3, 30r 12, 33r 10, and 47v 3, and perhaps a stronger full-stop at fols. 28r 13, 28v 5, and 29r 6 (in all three instances before *tumm*) and at fol. 54r 4, in all cases within the same epigraph.

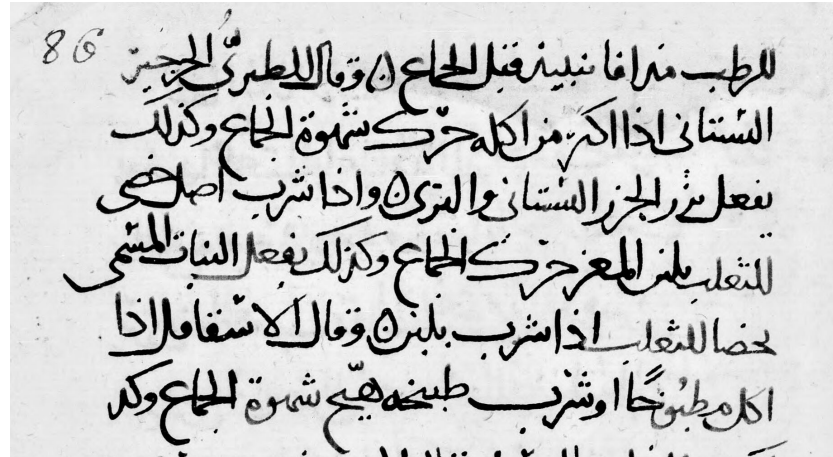
A clearer function as a boundary mark may be seen at fol. 48v 5, where it closes the brief introduction to *Nat* II.2 THERAPEUTICS just before the first epigraph of that section, and also at fols. 62r 9 and 64v 9 between different epigraphs within a chapter. It also signals the beginning of explicit quotations from GALEN at fols. 51v 5 and 51v 15 (both introduced by the words «*waḥakā Ġālīnūsu lḥakīm*») and then again at fol. 55r 11 («*waqāla Ġālīnūsu lḥakīm*»). From then on it vanishes and is never used again. None of these functions is privative of this symbol and they can all be taken over by the *intihāʔ* full-stop too.

Figure 2.5: P fol. 27v.

¹ It may correspond to the “v-signs” in GACEK’s typology but unfortunately the items to which that author refers for further illustration either do not include a graphic reproduction of the manuscript in question (as in GACEK 1991: 134, no. 141) or show a symbol that bears no resemblance at all to the one in P (cf. GACEK 1984: 17, no. 19). Despite their similarity in shape, it should not be assimilated with the exclusively ornamental sign η added over the β of the word *كتاب* in the title page of P (see Figure 2.1).

— Much better represented is the most usual full-stop Δ that well deserves the qualification of “favourite paragraph mark” in the Islamicate manuscript tradition and was apparently generalised from its original function as a quintet-marker in the Qurʾān.¹ In P it takes most often the less simplified form of Δ with a dot inside since the beginning (eg on fol. 3r–3v) and quite regularly throughout the text, yet the simple dotless version is also sporadically used (eg on fol. 14r 4 and especially on fols. 18r–21v).

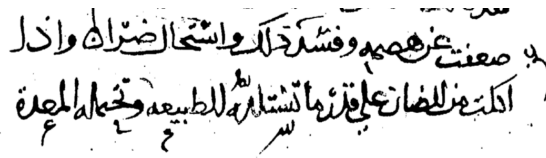
An even more stylish shape (Δ with a well-marked descending stroke) is used with relative frequency too (eg on fols. 9r 15, 33r 6, 36r 4, 46r 12|16, 48r 2, 51r 5). All three variations of the Δ mark appear in free distribution and overall they signal either full stops within an epigraph (as on fol. 3r) or the end of a قول (for instance on fol. 14r 4), but never in a consistent way. A more systematic use as a quotation boundary marker can be noticed throughout the section *Nat* III ḤAWĀṢṢ, as on fol. 86r:



¹ In accordance with its original numerical value ($\Delta = 5$). From there it would have entered ḥadīṭ texts and it was eventually reinterpreted as an ending-mark (since both انتهاء and انتهى contain this consonant) and gained an extraordinary currency in the manuscript tradition down to contemporary times (cf. GACEK 2009: 269–270).

Diacritics, vowel marks, and other signs

With some understandable exceptions the consonantal ductus is fairly generously pointed and there is no shortage of *ihmāl*-marks either.¹ A specific marker for *ح* in the form of a small underscripted *ح* is quite frequent throughout the text, whereas analogous markers for *ص* and for *ع* are much rarer (and slightly more usual in the rubrics than in the body of the text). On the bottom line of fol. 47r, for instance, there is a remarkable accumulation of marks provided for the last four words of the line:



The consonants /r/ and /s/ are on the contrary quite regularly marked as *ر* and *س* respectively, which paradoxically results in some ambiguous readings and may even have misled the copyist in a few cases.²

Vocalisation is almost complete on the opening folios 1v–5v and also on the misplaced folio *17, only to become an exceptional feature for the balance of the manuscript, but no section of the text (and actually very few pages in the manuscript) is totally devoid of vowel marks. The vowel sign *kasrah* takes an inverted shape except when combined with hamzah or with *tanwīn*.³ In like manner, the *šaddah* and the *ǧazm/sukūn* are not uncommon in all kinds of contexts, even when not strictly necessary.

¹ These include on the one hand “exotic” drug names that the copyist may have found already unpointed in his Vorlage, and on the other extreme of the spectrum the most common words for which an Arabic-reading user never actually needed such graphic help. In the latter case diacritical points could be dispensed with and the common scribal practice of omitting them should be understood (rather than complained about) as an example of work efficiency. Even the former, frustrating as they may result, will always provide a better basis for speculation and conjecture than a mere blank on the line.

² An illustrative example of graphic uncertainty is the word *مُر* ‘sour’, which oftentimes can be only inferred from the context rather than actually “read”. As a matter of fact none of the possible spellings «مر», «مز», and «مز» should be edited without consideration of the actual meaning of the phrase, that is whether it is ‘sour’ or ‘bitter’ that makes sense in each case. Of the two words *مُر* is without any doubt the one that fares worse in the manuscript tradition (where it is mostly written as «مر») and unfortunately also in some modern editions.

³ Some vowel marks (particularly those with *tanwīn*) may have been added later by a different hand (see for instance on fol. 128v).

Different combinations of these symbols can be illustrated by the following selection of words:

47r 2	المزة	52r 1	دَبَّرْنَا
47r 2	التقى	79v 1	حَلَّل
47r 5	من للتوسطِ	97r 3	وَحَبَّب
47r 6	وللتؤم	94r 12	من كل واحدٍ
96r 9	الصبرِ	129v 9	حتى يخرج
47r 4	الدم	127v 9	للصداع للغارض

Marginalia

Despite being rather sparse, annotations on the margins of P are typologically quite diverse. The most important ones from an editorial point of view are, of course, emendations by the copyist himself. These are usually indicated by a dash over the pertinent locus within the text and they are sometimes further marked with صح superscripted to the marginal correction (eg on fols. 2r 1|14, 25r 6, 81r 8, 103v 11, 110v 14, 114v 12, and 118v 13).¹ They may involve more than one single word (examples of substantial corrections are found on fols. 13v 9, 17v 8, 57v 7, and 115v 1) to a maximum of five lines on fol. 19v 13. In some rare cases the emendation is simply written above the locus (as for instance on fol. 16r 1, where «العطر» has been written above «الطب») or under it (as on fol. 25r 15: «منقادًا» under «منفتقا»).

There are a few examples of scribal conjectures too,² which are clearly distinguished by the word أظنه following the suggested emendation. See, for example, the left margin of fol. 15r 9–10, where the text is correctly interpreted as still pertaining to the lemma on the magnet stone in spite of the wrong rubric; also fol. 18v 8 «المصري أظنه» to «الشب المسرف» and fol. 65r 5 «وكثيرا أظنه» to «وكزبره».³

Whole recipes are copied on the right margin of fols. 59v and 65v, and also on the left margin of fol. 81r. These are apparently by the copyist's hand (or by

¹ The dash is most often of the vectorial type (ie ˘ and ˘ pointing towards the margin on which the emendation is to be found) on fols. 2r 1|14, 16v 9, 25r 6, etc. (left margin); and on fols. 3v 2, 7v 9, 13v 9, 16v 6|12, 17v 8, 19v 13, etc. (right margin). It is only from fol. 37v 2|13 that non-vectorial dashes begin to appear occasionally as emendation marks.

² Cf. GACEK 2009: 80–81.

³ Of the latter two the one on fol. 18v 8 may be a sensible trivialisation of a rather exceptional name for a kind of vitriol (see the remark thereon in the survey of *Nat* I.3.2), while the correctness of the clerical suggestion on fol. 65r 5 is currently impossible to assess: the reading “coriander” tallies perfectly with the preceding ingredients but “tragacanth” also makes sense in view of the following “frankincense resin”. Further examples of scribal conjectures are found on fols. 75v 19, 124v 17.

a remarkably similar one at any rate), and the recipes on fols. 59v (صفة لضيق «صفة لضيق») and 65v (صفة للثقل في السفلى «صفة للثقل في السفلى») would be actually thematically pertinent if they had been originally included within their respective epigraphs in *Nat* II.2 THERAPEUTICS, whereas the one on fol. 81r (صفة القولنج «صفة القولنج») seems out of place within a treatise like *Nat* III ḤAWĀṢṢ that consists entirely on quotations.¹

Amongst non-clerical marginalia, an additional recipe was copied by an unmistakably different hand on the right margin of fol. 124v, appended to the section on collyria within *Nat* V PHARMACOPOEIA. The writing is rather hard to decipher and the amount of each ingredient is expressed by a number according to a standard format characteristic of later recipe literature. It was probably the same hand that filled the right margin of fol. 125v with at least one (perhaps two) recipes. Also at the very end of the manuscript, on fol. 130v under the date, another late hand has added a recipe for a sief in very much the same format.

On the left margin of fol. 10r two *budūh* squares of order 3 were added some time before the manuscript was trimmed. They are written upside down relative to the text, contain numbers rather than letters (the constant sum of the one on the bottom is certainly 15, but the one on the top seems to be anomalous), and bear no relation to the matter dealt with on the adjacent text (namely stones, with no mention of engravings or any similar subject).²

An extra-textual *basmalah* has been added on the upper margin of fol. 57v. There is also a Judaeo-Arabic transcription «אֶנְדֶּרֶל» on the right margin of fol. 10r 7 corresponding to «الجنديل» in the text, which may be ascribable to the Jewish owner whose name is no longer extant on the inscription on fol. 1r (for which see above).

On fol. 106r 2|17 the words «مؤخر» and «مقدم» have been added by the copyist himself on the margin and indicate that the order of the two recipes has been altered. A few similar cases of *repentirs* are found also in the text block, as on fol. 122v 15, where «مائة» has been cancelled and then «ابريل» has been provided with a ّ mark in superscript. A peculiar case of correction is found on fol. 128v, where the initial hyphenating criterion of the copyist has been altered by a later hand so that the final words on 128v 4|6|8 do not break between lines.

¹ All three recipes have been damaged by the trimming of the folios. With regard to the one on fol. 65v, the abbreviation «ح ش» appended at the end of the recipe might perhaps provide some clue as to its origin.

² For squares being copied on the margins of manuscripts regardless of their actual contents, cf. GACEK 2009: 150–151.

2.1.7 Palaeographic and linguistic features

As stated above, there is no place (in this case quite literally so) in a content-centred research like this for a full-fledged analysis of the manuscript witnesses with regard to their hand and spelling. Besides, neither of the copies is an autograph and they do not even belong to the original linguistic context of the work, therefore extreme caution is required lest scribal particularities should be projected onto the author. On the other hand, any Andalusī particularities that may have featured in the original text had very low chances of survival in its eastern transmission, for they would have been more or less consciously “normalised” by the copyists. The usual exception to this linguistic normalisation are, for obvious reasons, lexemes that, being obscure to the scribes, must be copied (not with a certain amount of guessing) as found.¹

Some brief observations can be made, however, for an overall characterisation of P. First, the unit formed by the opening folios 1–5 + *17 is by no means to be taken as a representative sample of the spelling of the manuscript, as it is almost completely (but not always correctly) vocalised. The fragment shows, in fact, full *taškīl*, including a remarkable overrepresentation of the *hamzah*.² This feature, together with the finer layout of the text in these folios, suggests that the copy may have been initially conceived as higher-end product, and the abundance and diversity of non-linguistic markers analysed above would strengthen this impression. Afterwards, from fol. 6 onwards the text transmitted in P can be considered quite regular in its general lack of signs for the *hamz* and for the vowels, but nonetheless some consistent and grammatically pertinent spellings indicate quite clearly that the copy is not yet at the lower end of the spectrum—and the parallel testimony of D further confirms the suspicion that *Natāʾiǧ* may have circulated from the beginning in a partially vocalised form.

Many of the features that have been traditionally attributed to Middle Arabic and which are actually quite characteristic of the Arabic Fachprosa since its beginnings are to be found in P but there is no telling whether they are truly reflective of ALʿILBĪRĪ’s intended style or idiolect. The question becomes only further complicated by the fact that most of the materials included in the compilation is a word-by-word reproduction of pre-existing texts of different geographical and chronological contexts. In other words, there is little to gain from the examination of such apparent inconsistencies as «روس» on fol. 76r 12 against «رووس» fol. 98v 16 as (1) they can equally represent */ruʔs/* or */rūs/* and */ruʔūs/* or */ruwūs/*, respectively;³ (2) we have no way of knowing which of these possible

¹ See below Chapter 9 for an analysis of such Andalusī lexical items.

² Which is, furthermore, unsystematic (cf., for instance, fols. 1v 3 «افعاله» and 2v 5 «ياخذ») and also excessive or plainly wrong at times (cf. 1v 5 «اختياطه», 1v 6 «الأجتهاد لهم واختار», or 3r 7 «ذكر الآلات»).

forms was actually intended by the author when he set to write his text; (3) even if scribal intervention could be ruled out, the author could still be simply copying the words found in his Vorlage.

Some illustrations of the graphemic peculiarities of P are to be mentioned in the editorial criteria in Part II of this dissertation and in a future version of this study a separate epigraph may be devoted to the analysis of these features. For the time being, it must suffice to note that the manuscript preserves overall remarkably well what may have been the original text of *Natāʔiğ*,¹ which was certainly written in general compliance with the norms of Fuṣḥā Arabic but at the same time showed some permeability to substandard (only sporadically basilectal) and geolectal features.

2.1.8 Contents

Manuscript P transmits the more complete extant text of *Natāʔiğ*.¹ The following table shows how the diverse sections that make up the compilation are reflected in the manuscript (only the modern foliation numbers are given):

fols. 1v 1 – 21v 6	I APOTHECONOMY
1v 2 – 3r 6	I.1 <i>Deontology</i>
3r 6 – 3v 9	I.2 <i>On instruments</i>
3v 9 – 5v 13 *17r 1 – *17v 14 — 6r 1–7	I.3.1 <i>On simple drugs</i>
6r 7 – 16r 15 18r 1–6	I.3.2 <i>On stones</i>
18r 7 – 22v 6	I.4 <i>On the shelf-life of drugs</i>
fols. 22v 7 – 48v 3	II.1 NATURAL PHILOSOPHY
fols. 48v 3 – 75v 2	II.2 THERAPEUTICS
fols. 75v 2 – 92v 4	III.1 ḤAWĀṢṢ
fols. 92v 4 – 93r 9	III.2 EXCERPTS FROM AGRICULTURE
fols. 116v 16 – 123v 15	IV REGIMEN
fols. 93r 9 – 116v 16 123v 15 – *13or 13	V PHARMACOPOEIA

A justification of this division and of the different labels used in it, as well as a limitedly comprehensive survey of their internal structure and contents, are to be found below in Chapters 3–8.

³ Despite a widespread assumption to the contrary, the absence of a written sign for the glottal stop is as probatory of non-hamzated realisations as the lack of vowels signs is reflective of a vowel-less pronunciation.

¹ But not quite the whole of ALʔILBĪRĪ's medical work as affirmed by CARABAZA and GARCÍA 2009: 384. As has already been said and will be shown in detail below, whole chapters are missing from several sections even in P.

2.2 The Damascus manuscript

2.2.1 Location and shelf mark

The full reference to the second manuscript witness (henceforth simply D) is Damascus, Dāhiriyyah MS 3157 Ṭibb 32 (no. 136 ṭ. m. according to HAMARNEH's catalogue), item no. 2, fols. 34r–60v and probably also items nos. 3–4.¹

2.2.2 Cotransmission

Manuscript D is a multi-text unity of circulation of eighty-one folios containing five different texts essentially medical in nature and it is also probably a composite made of more than one codicological units.² As far as its textual contents are concerned, the manuscript comprises:

- 1 — a copy of *Mufarriḥu nnaḥs* by the twelfth-century physician ŠARAFUD-DĪN B. ʿUMAR B. ABILFUTŪḤ ALBAĠDĀDĪ, then ALMĀRDĪNĪ, known as IBN ALMARʿAH.³ No mention is made, apparently, of the name of the scribe or of the date of the copy of this first item.
- 2 — *Natāʿiḡ*, which is apparently bound together with the preceding text.⁴

¹ The first modern reference to D is provided by HAMARNEH 1969: 439–444, then that scanty codicological information is further abridged in ALḤĪMĪ 1981: 425–426 and it is echoed also in PEÑA *et al.* 1981: 95 and in GARCÍA 1995: 192, whereas CARABAZA and GARCÍA 2009 is based on inspection of photocopies of part of the manuscript. Incidentally, in his entry HAMARNEH 1969: 442 (and afterwards ALḤĪMĪ) states that *Natāʿiḡ* ends at fol. 62, but the scribal colophon closes the text actually on fol. 60r (which is also the end of the quire) and it is therefore possible that his references to foliation after item no. 2 might be actually slightly wrong.

² The manuscript is quite traditionally classified as a *maǧmūʿ* by HAMARNEH 1969: 439 but he does not provide any explicit information as to the exact nature of this composite. I intentionally avoid the label ‘miscellany’ as it has long been emphasised that it “may not be an appropriate term for describing structurally or textually complex codices” (SHAILOR 1996: 153; cf. also FRIEDRICH and SCHWARKE 2016: 5–8, 15 for further references on the concept of miscellaneity and for an alternative denomination ‘multiple-text manuscript’).

³ SERIKOFF 2005: 198 follows the spelling of the title page and reads the laqab as “Ibn al-Murra”. The author is dated towards the end of the 12th c. by HAMARNEH 1969: 439 without further reference or justification, and only a vague *terminus post quem* is provided by the mention of ALĠĀFIQĪ on fol. 21r 22 (on ambergris). The treatise, which in some copies is ascribed to IBN SAḤNŪN ATTANŪḤĪ (d. 1294), was edited in 2007 by ḤANNŪN and ŠABBĀĠ. An additional copy of *Mufarriḥu nnaḥs* not used in that edition is preserved in Harvard, Houghton Library (Harvard University) MS Arab SM211 (available online), while the copy at the Wellcome Library has already been mentioned above.

⁴ No information is provided by HAMARNEH in this regard, but the photographic reproduction shows quite clearly that fol. 34 is physically united (probable stitched) to the preceding item whereas no such continuity is perceptible between fol. 60 and subsequent folios.

3 — according to the catalogue description item no. 3 (which would open with a chapter on washing clothes, «*bābun fi ġusli ttiyāb*») is “one of several chapters on medicine gathered from disparate sources containing recipes for washing and cleansing clothes”.¹ These five folios would show no order and some epigraphs might be defective according to the same description. No author or copyist is mentioned. The possibility is high that these epigraphs might have been originally part of *Natāʔiġ*, as Chapter X of IBN ALHAYTAM’s *Iktifāʔ* closes with an identical sequence and the geponic passages collected in *Nat* III.2 are probably related to the same now-lost segment.²

4 — the excerpt from GALEN’s “Book 4 of the *Book of foodstuff*” copied on fols. 69²–75² is no doubt related to the compilation and transmission of *Natāʔiġ*, as it matches word by word (including the wrong reference to that non-existing Book 4) the *incipit* of the trophognostic treatise that opens the section *Nat* IV REGIMEN in P. This element shared by both manuscripts is all the more interesting in view of the date in which it was apparently copied, namely in 713/1313, by a certain AMĠAD B. ANNAĠĪB MUFADḌAL B. AṢṢAFĪ BŪLUṢ.³

5 — the last text in the composite is a brief fragment of IBN ALĠAZZĀR’s *Iṣtimād* IV copied on fols. 76²–81² by the same scribe of item no. 4 on Ġumādā Alʔāhirah of 710 (= October 1310).⁴ Although there is hardly any chance that new evidence should emerge concerning the prehistory of D, the collocation of ALʔILBĪRĪ’s *Natāʔiġ* and IBN ALĠAZZĀR’s *Iṣtimād* may be significant regarding the eastern circulation of these two western treatises.

A second scribe by the name of MUḤAMMAD ṢĀDIQ FAHMĪ ALMĀLIḤ ALKĀTĪB is mentioned as having copied the text (only item no. 4?) for the Ḍāhiriyyah library on Saturday 17 of Ḍulḥiġġah, year 1329 (= 9 of December of 1911).⁵

Judging from the different dates of copy found in the several colophons D is certainly not a single production unit but rather a collection of a number of originally independent units that were joined together at some point—and some of the items appear to have been copied at an extraordinarily late date. The only

¹ Cf. HAMARNEH 1969: 443.

² Cf. HASANI 1990: 23 and see also Chapter 3 for more details on this hypothesis.

³ Cf. HAMARNEH 1969: 443, where the fragment is said to be copied on nine folios, which does not tally with item no. 5 beginning on fol. 76r. The name of the copyist is given by HAMARNEH as *Amġad* here but afterwards it is “emended” as *Aḥmad* in the description of the next item.

⁴ Cf. HAMARNEH 1969: 443–444.

⁵ Cf. HAMARNEH 1969: 444.

available description of the manuscript is however rather unhelpful as to the details of the exact contents and chronology of D. Any definitive conclusions must therefore be deferred until a reproduction of the entire item can be consulted. At the time of the submission of this dissertation and despite the kind help offered by Drs GARCÍA SÁNCHEZ and CUSTODIO LÓPEZ Y LÓPEZ I have been unable to gain access to a reproduction of items nos. 3 and 4, which has been certainly detrimental to the critical edition of *Nat IV* (which is based on one single witness) and to the reconstruction of the text as a whole. As shall be shown below, these two segments of D might shed some definite light on the question whether *Nat III.2* and *Nat IV* are original parts of this *kunnāš*, as they seem to be, or rather later additions. This deficiency should be hopefully corrected in a future version of this study.

2.2.3 Title and author

Since they have already been introduced as transmitted in P, these two elements can be dealt with within a single epigraph here. The inscription on fol. 34r contains both the title of the whole text and the authorial ascription. It reads thus in normalised spelling:¹

كتاب النتائج العقلية في الوصول إلى المناهج
الفلسفية والقوانين الطبية ومعرفة أمزاج
الأعضاء البشرية ومنافعها وذكر الأمراض اللاحقة
بكل عضو منها[؟] وعلاج ذلك ومداواته وذكر الأحجار
والعقاقير وأعارها تأليف أبي محمد علاء الدين بن أحمد الطبيب
الإلبيري رحمه الله غاية في الطب مبرهن كلماً فيه

.اللاحقة [اللاحقة D.

Mark the misspelling «اللاحقة», which is actually a conjunctive mistake shared with P (in D it seems that some scrupulous reader tried to emend it by adding a small letter ل over the original text). The title of the treatise appears then for the second time on fol. 40r 2–5 preceding a series of recipes that are not included in P. Let it be noted that this is the only instance of the title in either P or D that reads a singular «مزاج» rather than the less frequent plural «أمزاج»:

كتاب النتائج العقلية في الوصول إلى المناهج الفلسفية
والقوانين الطبية ومعرفة مزاج الأعضاء البشرية ومنافعها

¹ Some words have been jotted down beneath the inscription by a very similar hand and in quasi-tabular format: «العناصر أربعة الماء والهواء والنار والأرض | الأزمنة أربعة | الطبائع أربعة مقسومة على خلقة الإنسان».

وذكر الأمراض اللاحقة بكل عضو منها ولعاج ذلك ومداواته
إن شاء الله تعالى

No title is mentioned in the final colophon.

As to the authorship of the text, there is no doubt, despite the locus being slightly damaged, that the author's name reads ʕALĀʔUDDĪN on fol. 34r,¹ but he is also mentioned at fol. 40v 2–3 after the *basmalah* that introduces the section on natural philosophy, and there his name is actually ʕABDULLĀH as in P:²

✧ بسم الله الرحمن الرحيم ✧
قال أبو محمد عبد الله بن أحمد الطيب
الإيربي رحمه الله ✧ ✧ ✧

2.2.4 Date

The copy of *Natāʔiġ* is dated on the colophon on fol. 60v to “the middle [ie the second] decade of Rabīʕ Alʔāḥir of the year 570” Hiġrī (that is late November 1174 CE). A second date is mentioned, nonetheless, in this colophon that appears to have never been taken into account in previous descriptions. After what might at first glance seem like a reiteration of the preceding note (the same “the middle decade” is mentioned) it is now to the month of Ġumadā Alʔāḥirah that the copyist refers, and the year that follows is seemingly represented by an enigmatic chronogram that must remain unsolved for now:³

تم بحمد الله وعونه ونصره
وتأيد تاريخ النسخة في العشر الأوسط
من ربيع الآخر من عام سبعين وخمس مائة
وهذا الكتاب المبارك في العشر الأوسط
من شهر جمادى الآخرة من عام سـ صـ ؟
— ؟ —

2.2.5 Endowment

A triplicated *waqf*–statement on the name of Mullā ʕUTMĀN ALKURDĪ features twice on the first page of the unit containing *Natāʔiġ*, where it is accompanied

¹ This can be ascertained even on the photocopy and it is confirmed by HAMARNEH's *in situ* inspection (cf. HAMARNEH 1969: 441; ALĤĪMĪ 1981: 425).

² Even if he reproduces this exact sentence in his catalogue, HAMARNEH does not comment on this manifest onomastic disagreement and in his entry he ascribes the work to $\text{ʕALĀʔUDDĪN ABŪ MUḤAMMAD B. AḤMAD}$ (cf. HAMARNEH 1969: 442).

³ Cf. GACEK 2009: 58–59 for a definition and several examples of chronograms. Let it be recalled that HAMARNEH 1969: 444 mentions a late colophon dated December 1911 at least for item no. 5 of the miscellany.

by the pious expression: «*ʿalā ʿalabati lʿilmi min arḥāmihī wasāʿiri lmuṣlimīn*». The full donation formula is repeated afterwards on the header of fols. 34v and 35r (see Figure 2.6), then in abridged form on fols. 35v and 36r, it is marked merely as *waqf* on fols. 43v–45r, 47v–48r, 51v–52r, 55v–56r, and finally it is noted down on three of the four margins of the last page (fol. 60v), where the bottom inscription repeats the full formula one last time.¹

2.2.6 Structure and page layout

The text is copied on paper on 27 folios, 18 cm long and 13.5 cm wide.² Although no information is provided by the catalogue on the binding, the folios do not appear to have been trimmed; if they were, the procedure did not affect any of the marginalia contained in the manuscript.

The state of the manuscript is overall relatively good except for sporadic stains and holes. There are, nevertheless, not a few loci, and even whole pages (eg fol. 35v), that are severely damaged to the point of being actually unreadable were it not for the help provided by comparison with the parallel text of P.

Foliation and quire structure

Folios were not originally numbered (a modern foliation in traditional Arabic numbers has been added on every recto, mostly at the top-left corner) but there are clearly visible quire-signatures. On the top-left corner of fol. 44r «ثاني كراس» marks the beginning of a new quire, as does «الثالثة» on fol. 54, which means that at least the part of MS 3157 that contains the text of *Natāʿiḡ* was made up of quinions. In addition to these quire-signatures, catchwords of the horizontal type have been consistently added, certainly by the same hand that copied the text, on every verso. These catchwords can include more than just one word, especially (but not exclusively) when the first of them is a preposition.³

¹ On the subject of bequests (known as *waqfiyyāt* in the Islamic east) in relation to manuscripts, cf. DÉROCHE 2005: 330–332 and GACEK 2009: 17–18. With regard to GACEK's typology, D does not contain a "full-developed *waqf*-statement" but rather one of the short kind.

² Cf. HAMARNEH 1969: 439; ALḤĪMĪ 1981: 426.

³ eg fols. 34v «وهي عنده», 36v «قد نقصت», 38v «في البول», 39v «على مقلا», 40v «في معلولها», 44v «رأس الفاك», 48v «ممثل أصغر», 49v «من الوصول», 51v «من بعدها», 53v «في مزاجها», 54v «من الوصول», 55v «من الوصول», 57v «فإنه يبرأ». «قال الطبري», 58v «الفصل الثالث عشر», 59v «فإنه يبرأ».



Figure 2.6: Damascus manuscript fols. 34v-35r.

من مائة من جمال الغنم وقال اذا وجدت الدوية
 التي لها رجل كثيرة التي اذا استت اسد ارت
 وصرت في حرقه وعلقت على من يرمي قلعها اصداق
 وقال الطبري اذا جعل العسل الذي تصد اليه
 ورص وطوى به على حرقه كان وامسك باليد
 المسرى او الصوق على نغزها الفقا ادهب حتى الع
 والذبح يترك وقال الازدي ان يترجم براده قرن
 الابل مستوفى يشرب نفع من حمى العبد والبرقان
 تنفع عظمه وقال ان اخذ الخرد الطول
 الا رجل اليه لا يطير ويخون في السنين وعلق
 على من حمى العت نفعه ن ن ن

الفصل الثاني في حمى المدية
 قال ادمسور بن ورس ان يترجم من القنات بلسان
 الحمل صاحب الورد فيل ورد لها نفع منها وقال
 سقطوا بان جعل العنكبوت حيا في القلوب فصم
 وعلق على العنكبوت نفع من حمى الكلبه وفي حمى الحرج
 ان جعل العنكبوت في حرقه سودا وعلق على العنكبوت
 نفع من حمى الكلبه وقال ان يترجم العنكبوت
 مع شراب قنار ورجي الورد النعنه ساعة
 دهن بها الشبه وهو يترك بعينه من حمى
 وقال الطبري ان العنكبوت الذي تصيد اللباب
 ادا سد حرقه وعلق على احد الاسر من الحوم
 حتى لورد ابراه وهو حرقه ن ن

فانه يرا

Figure 2.7: Damascus manuscript fols. 50v-60r.

Page layout

The average page consists of 23 or 24 lines, occasionally 22 and only exceptionally as few as 20 when two rubrics coincide on the same page. The text is regularly justified, mostly by elongation (which is pervasive), and only rarely does it go on into the margin (eg on fol. 35v 6) in order not to split up a word at a line break. With three single exceptions in the whole text (on fols. 37r, 56r, and 58r, all three at the last line of the page) the copyist does not resort to slanted superscription: if a word continues beyond the justification line, the protruding segment is copied in the same horizontal ductus. In some cases some lines may be centred rather than justified, as in a few epigraphs (cf. fols. 42r 7, 47v 15–18, 49r 13) and most notably in the quasi-tabular arrangement of the names of the zodiac signs on fol. 42r 17–19.

The eastern *nash* script in which the text is copied is overall clear and quite generously pointed. The same black ink is used throughout and rubrication is reflected mostly through conspicuous elongation and only occasionally also by resorting to a slightly larger (but actually not thicker) script.

Titles are said to be written with red ink (apparently in the whole manuscript) by HAMARNEH 1969: 439, but this cannot be ascertained from the photocopies consulted for this research.

Stop marks and textual boundaries

Traditional “punctuation” is well represented and although it does not compare, either in diversity or abundance, to P, one of the most characteristic traits of D is indeed the use of a four-pointed symbol ∴ as a textual boundary marker.¹ It can be used to mark the beginning of a new text unit, as at fol. 35v 6, where it precedes (duplicated ∴∴) the title of the chapter *On the shelf-life of drugs*, then it consistently separates the different subepigraphs within that chapter. A similar “rubricating” use is evident at fols. 45r 10 and 54v 10; and clearly also throughout fols. 56v–59r, where it is combined with a centred epigraph as a *faṣl*-mark. Besides, a function of “blank-filler” can be intuited in many instances, most especially at the beginning of *Nat* II.1 on fol. 40v 1–3, or at fol. 47v 14, where four consecutive ∴ symbols fill the blank before the epigraph (*bāb*) on the four seasons of the year. This symbol can be combined with the *intihā?* mark, eg on fols. 40r 1 and 41r 8.

¹ It resembles the three dots indicating a single-verse division in Qurʾān manuscripts (cf. GACEK 2009: 269), but also similar marks used in the Syriac manuscript tradition.

Marginalia

There are a number of words and even whole text segments written on the side margins of the manuscript. These include corrections by the same hand, with a simple arched stroke at the spot where the emendation belongs serving as a *signe-de-renvoi*,¹ eg fols. 34v 18 left margin «لي», 35r 18 left margin «ولولا», 35v 24 right margin «في أقل», 59v 13 right margin «لسان» (the correction is written perpendicularly to the text). Also a case of clarification on fol. 38v 16, where the initial spelling «هرون» has been corrected by addition of an alif but the resulting form («هلرون») being still unsatisfying, it has then been clearly spelled on the margin.

Another set of emendations has been supplemented by a noticeably different hand and involves not only single items (eg fol. 37v 8) but also remarkably long strings of words skipped by the copyist, as for example on the left margin of fol. 43r «لاحر الفلك ودبره وطرفه وكذلك هو منقسم ايضاً», or on the left margin of fol. 44r 7 «ماوي سيال خلق من الماء الذي هو نارد رطب وهو» (see also fols. 44v right margin, 45r left margin, 51r left margin). This seems to be the same hand to which the collation mark *qūbila bihī* at the bottom-right corner of fol. 37r ought to be ascribed. Additional collation statements (also *qūbila bihī*) apparently by a third hand can be found on the lower margins of fols 41r, 43v, 49v, 52v.²

Marginal glosses by a different hand can also be found, such as for instance «يعني الكراوية», which apparently explains «قرمانا», on the right margin of fol. 38v18. An exceptional case of non-scribal interlineation is seen on fol. 42r 17–18, where under the names of three of the signs of the zodiac namely «الكبش», «التوءمان», and «العذراء», a much finer qalam has noted down their more common equivalents «السنبل», «الجوزاء», and «الحمل», respectively.

A series of small vertical strokes over the letter or letters to be deleted are occasionally found, eg on fol. 45r 19.³

Finally, some ان شاء الله seem to have been added later as a filler, since at fols. 40r 22 and 43r 6, for instance, the writing is quite different from original instances of the expression (cf. 35r 19).

¹ This is, in fact, one of the most usual marks for emendation in the manuscript tradition, cf. GACEK 2009: 170–171 (with the reproduction of a very similar sign), 250–251.

² There probably are more collation marks than those signalled here, but this could not be ascertained on my photocopies. In any case, the conclusion is clear that at least a third copy of *Natāʾij* was in circulation in the original temporal and geographical context of D.

³ For the several attested strategies of cancellation in Arabic manuscripts, see GACEK 2009: 48.

2.2.7 Palaeographic and linguistic features

As stated above with regard to P, the linguistic analysis of the text of *Natāʾiǧ* on the evidence of the two extant witnesses must be postponed. The contribution of D to that analysis is slightly more ambiguous than that of P, for its most salient trait is a quite systematic substitution of *t* for *ṭ* throughout the text:¹

34v 18	أكثر
35r 6	كثيرا
59v 17	كثيف
59v 19 60v 6	متقويين
<i>passim</i>	تاليل تم ثلاث

This must certainly be understood as a substandard interference (the only major one detectable in the manuscript, indeed) but it can hardly have been a feature of the original text.² On the other hand, in the use of the *hamzah* and of the vowel signs the copyist of D does not differ significantly from that of P.

¹ There are only a few exceptions to this substitution, cf. «يشقه» at fol. 34v 13 and the hybrids «تلاث»/«الثالث» at fol. 43v 14|15|16|17, for instance.

² It is quite likely that the same phenomenon applied to */d/* too (since Neo-Arabic defricativisation affected both dentals in the same way), but in this case the unpointed spelling is not so unambiguous.

2.2.8 Contents

The relevance of the testimony of D for the reconstruction of the primitive text of *Natāʾiǰ* shall be discussed below, as well as the actual contents of each section and the patchwork strategy so dextrously implemented by the copyist. The following table shows the correspondence between the text of D, the different sections of the compilation, and the parallel segments in P. For manuscript P only the older foliation is noted (unless, of course, there is none, in which case the modern one is referred to and marked with an asterisk):

D 34v 1 – 38r 16	I APOTHECONOMY	
D 34v 2 – 35r 1	I.1 <i>Deontology</i>	= P 1v 2 – 2r 14
D 35r 2 – 35v 5	I.3.2 <i>On stones</i>	= P 10r 9 – 18r 6
D 35v 6 – 38r 16	I.4 <i>On the shelf-life of drugs</i>	= P 18r 7 – 22v 6
D 38r 17 – 40r 1	DAMASCUS SUPPLEMENT ^A	—
D 40r 2–22	DAMASCUS SUPPLEMENT ^B	—
D 40v 1 – 55v 20	II.1 NATURAL PHILOSOPHY	= P 22v 7 – 45v 8
D 55v 20 – 56v 1	II.2 THERAPEUTICS	= P 74v 11 – 75v 2
D 56v 2 – 60v 9	III ḤAWĀṢṢ	= P 75v 2–18, 87v 16 – 92v 3
D 69r ² –75v ²	IV TROPHOGNOSTICS	= P 116v 16 – 122r 16 ²

As can be immediately inferred from the space occupied by each major textual unit when compared to its extension in P, absolutely none of the sections is copied in its entirety in D. In fact, with the exception of *Nat* II.1, which only lacks some two and a half pages of the edited text, it is evident that just some fragments have been excerpted from the original compilation. Now, while the resulting composite can be legitimately qualified as inharmonious, there does not seem to be any reason to suppose with HARMANEH that the primitive order of the folios has been altered.¹ On the contrary, with the only exception of the three recipes for enemas copied on fol. 40r 2–22 (which might stem from a more complete version of the dispensatory in *Nat* V than the one reflected by P or otherwise from a more complete form of *Nat* II.2), the sequence of the sections is *exactly the same* in both manuscript witnesses. The contents of D corroborate therefore, even in their fragmentariness, the testimony of P regarding the primitive form of *Natāʾiǰ*.

¹ Cf. HARMANEH 1969: 442. He is right, however, in noting that some parts must be missing and that the book is defective in this regard. On the other hand, HARMANEH's opinion seems to be echoed—or rather amplified—in the affirmation that “parts I and II” of *Natāʾiǰ* appear in inverted order in the Paris and Damascus manuscripts (cf. CARABAZA and GARCÍA 2009: 386), which seems rather unwarranted.

2.3 The relationship between the manuscripts

There is no possible *eliminatio* of either of the manuscripts as worthless, since they are siblings and each of them preserves elements (not just variant readings) that are missing from the other. The reason to choose P as the copy-text or base manuscript is self-evident: the text that it transmits is more than four times as long as that of D. This vast quantitative difference notwithstanding, with respect to the establishment of the critical edition D contributes a key segment of the title, a few sparse but nonetheless pertinent words and phrases throughout the text, a quotation in *Nat* III ḤAWĀṢṢ IX.IV.4 that is omitted by P, and a whole fragment of uncertain status.¹ Its value is all the greater, indeed, given that it seems to predate the copy of P by some fifty years and it has further been subjected to collation with at least one additional copy different from P.

If the shared reference to the non-existing “fourth book” of GALEN’s *Alim. fac.* were not sufficient proof of cognacy, the few sentences quoted by HAMARNEH from D show beyond doubt that the two manuscripts include an identical and otherwise unattested treatise on trophognostics.² The chronology, however, is problematic, as the addition of this item to the compilation would be much later in D and, moreover, apparently unrelated to the preceding text of *Natāʿiğ*.³

On the other hand, the question must remain open for the time being as to whether the epigraphs on cloth washing might have also been comprised in the primitive text of *Natāʿiğ*—which would not be surprising, as seen above, in view that in P *Nat* III ḤAWĀṢṢ is followed by a typologically not too dissimilar series of excerpts from *Filāḥah* and that the order of the sections in D would also correspond to what is transmitted in P.

Regarding those sections that are shared by both witnesses, divergences between the two manuscripts as to their macrostructure are not mirrored by significant variance in their readings. In fact they agree in a number of relevant loci, especially in sharing several conjunctive errors some of which seem to have been inherited from a common hyparchetype. These are to be found from the very title-page («الاحقة» DP instead of «اللاحقة»*) to the closing chapter on fevers of the section of *Ḥawāṣṣ* («سهطور سفس» P 92r 17 = D 60v 3, instead of «اطهور سفس»*).⁴

¹ For all these elements, see the preceding epigraphs on the title and contents of D. As shall be explained below when discussing the editorial criteria, items restored from D are marked as °—° in the critical edition.

² The wording of the opening passage is quite unique and cannot possibly be mistaken for any other congeneric text, nor does it reflect the original form of the Arabic translation GALEN’s treatise (see Chapter 7).

³ On strictly chronological grounds the excerpt copied in D (dated 1313 according to HAMARNEH) might even stem from P, a possibility that only inspection of the text itself may help assessing.

⁴ This commonality of misreadings strongly suggests that the copy against which D was collated

They both agree, moreover, on most phenomena of substandard grammar, particularly a sporadic wrong use of the cases, either the nominative for the accusative or vice versa (especially in the context of *casus pendens* but also regarding the predicate of the verb كُن and in non-agentive constructions). Some of these I would not classify as coincidentally shared errors but rather as retained linguistic features that were probably already present in the original text, although others could well have developed spontaneously in the process of copy (as in the case of deviations from the Classical rules regarding the morphosyntax of numerals).

Given that, after all, the critical edition of *Natāʾiġ* is based on just two textually quite similar manuscripts and since all variant readings are duly registered in the apparatus criticus, I do not find it necessary to duplicate that information here with a redundant list of loci at which the two witnesses agree on a mistake or are at variance in their readings. By the same token, aesthetically pleasing as it might be to provide a stemma, neither the paucity of available evidence nor the little profit that might be gained from it do warrant, I am afraid, adding such an item to this analysis.

could not have been much different from P and D in this respect. If my analysis of the marginalia of D is not wrong, none of the passages corrected by collation improved on any of these inherited (mis)readings, nor did the second copy help to emend the many disjunctive errors and missing words in D.

Once the material carriers of the text have been described it is *Natāʾiğ* itself that must become the focus of all subsequent analysis in this dissertation. Reference shall be regularly made, of course, to the manuscripts when their features are relevant to the discussion but, as stated previously, this study is quite traditional in its textocentric approach.

In the preceding chapter mention has been made in several occasions of the major units into which the text transmitted by P and D can be divided.² Section 1 below offers a justification for this division and a structural preview of each section. By discussing here the delimitation of the text blocks and the non-original titles by which they are to be referred afterwards the reader shall be put in a better position to understand some of the assumptions implied in the description of the individual sections in Chapters 4–8. A certain degree of overlap is to be expected from this partial duplicity, but the advantages of this arrangement of the information are greater, I hope, than its inconveniences.

Then, Section 2 brings to the fore some considerations on the concept of epistemic genre that I borrow from POMATA and which shall prove to be a fundamental tool for the examination of the different major text units of *Natāʾiğ*. The conspicuous difference not only in thematic contents but also in approach, source-exploitation, and even phraseology that can be noticed when moving

² No upper-level taxon markers are ever used in *Natāʾiğ* with the sole exception of *Nat V PHARMACOPOEIA*, which is referred to explicitly as a *maqālah*. I therefore resort to the label 'section' (at least provisionally) as a convenient reference to the major thematic units of the book. My admittedly fluid use of 'epigraph' and 'segment', on the other hand, ought to be understood as a reflection of the equally inconsistent taxonomy implemented by the author, who, as shall be shown throughout this chapter, appears not to have been particularly concerned with the exact organisation of his materials at an architectural or aesthetic level.

from *Nat* I to *Nat* II.1 or from *Nat* III to *Nat* V becomes, from this perspective, a natural consequence of their being essentially miniature replicas of the main epistemic genres within the Islamicate medical and paramedical tradition. As a complement to the application of this concept to the individual sections, some brief remarks are appended on the possible consideration of *Natāʾiğ* as an encyclopaedia—more precisely as a medical encyclopaedia—or rather as a pandect of the type known in the Islamicate tradition as *kunnāš*.

This chapter acts thus as a necessary preamble to the ones that follow and which focus directly and entirely, without further introduction, in the survey of the contents (*qua* data) of each one of the individual sections of the book. From that survey *Nat* III is excluded because the whole of Part III of this dissertation is devoted to its analysis.

3.1 The inner structure of *Natāʾiğ*

The first proper description of the contents of *Natāʾiğ* was based exclusively on inspection of manuscript P and even if the latest update on the subject takes into consideration the two extant witnesses and pushes the analysis somewhat further, the initial depiction of the text is not much altered.¹ The composite and polythematic nature of *Natāʾiğ* is duly highlighted and the question is raised as to the origin, whether authorial or clerical, of the collection in its extant form, but no explicit proposal is advanced with regard to the delimitation and characterisation of the different thematic units. Moreover, some of the data and interpretations included in those previous analyses are either highly arguable or plainly incorrect, which is the reason why a fresh look at the matter may be in order here.²

The table below summarises my current proposal for the structural interpretation of the compilation, which will be referred to in all subsequent epigraphs of this dissertation. Given that the exact correspondence between these sections and the two manuscripts has already been registered above and since a detailed survey of the contents of each section and subsection is provided below, the description of the contents will be only incidental:

¹ Cf. GARCÍA 1995: 192–202; then CARABAZA and GARCÍA 2009: 386.

² I have clearly stated in the General introduction to this dissertation that, despite all appearances to the contrary, my attitude with regard to previous scholarship is never polemical in a purely confrontational way and that no depreciation whatsoever (let alone disdain) should be read into any of my criticisms, here and elsewhere, of some of the views expressed by those who have quite literally preceded me in this extremely thorny field. In this particular case, were it not because of GARCÍA's initial exploration of a marginal and long-forgotten text, I would have never embarked in this journey.

<i>Natāʔiġ</i>	I	APOTHECONOMY
	II.1	NATURAL PHILOSOPHY
	II.2	THERAPEUTICS
	III.1	ḤAWĀṢṢ
	III.2	EXCERPTS FROM <i>AGRICULTURE</i>
	IV	REGIMEN
	V	PHARMACOPOEIA
	—	DAMASCUS SUPPLEMENT(S)

Nat I APOTHECONOMY¹

Being located as they are at the very opening of the manuscripts (beginning on fol. 1v in both copies), the several segments that deal with matters of direct concern to the apothecary (but not necessarily so to the physician) have never been suspected of being non-original. As a matter of fact, much of the current characterisation of *Natāʔiġ* is based precisely in these materials. However, there is no reference to this particular subject in the title of manuscript P and the only proem in the entire collection comes in fact *after* the ending of these chapters, which is certainly quite irregular.

Structure

The text begins un-introduced² and with no general rubric, immediately after a *basmalah*. On the whole there is a manifest lack of organisation throughout the section at the macro-level. The different taxonomic markers (especially *qawl* but also *dikr* and *bāb*) are not used according to any clear hierarchical criterion, and unelaborate juxtaposition seems to be the only compositional strategy deployed as far as major segments (ie subsections) are concerned.

Transition from one subsection to the next is most often abrupt, with the remarkable exceptions of the boundary between the pharmacognostic epigraphs (just after the ending of *On stones*) and of the paragraphs on the shelf-life of simple and compound drugs, where a brief statement on the extent of the knowledge required from the apothecary acts as a strong text-divider. This lack of organisation notwithstanding, authorial design can be intuited in the thematic sequence of the epigraphs (generalities of the profession, instruments, herbs and stones, shelf-life) and the lengthiest subsections are regularly divided into overall well-defined lesser units. The minimal constitutive elements of *On simple drugs* and *On stones* (namely the individual entries on each item) follow also

¹ For the explanation of this coinage, see below Chapter 4.

² Unlike *Nat II.1*, which has a well developed proem (and also an epilogue), and even *Nat II.2* and *Nat V*, which are both introduced by two different standard transitional sentences.

standard patterns with minimal divergence. Upon closer inspection, therefore, the seemingly unsystematic arrangement of the data is limited to the higher level of compositional layout and does not reflect on the informational contents of the section.

Two possible distributions of the major text units within this section can be proposed, of which I presently favour the one represented on the left side of the following table (titles between square brackets are not actually found as rubrics in either manuscript):

I.1	<i>Deontology</i>		
I.2	<i>On instruments</i>		
I.3	[<i>On simple drugs</i>]	I.3	[<i>On simple drugs</i>]
I.3.1	(aromatics) (—, balsam oil, naphtha)		
I.3.2	<i>On stones</i>	I.4	<i>On stones</i>
I.4	<i>On the shelf-life of drugs</i>	I.5	<i>On the shelf-life of drugs</i>

Little justification is needed for the first two and for the last segments, as all three of them are unmistakably rubricated on the original text. They are, moreover, unambiguously defined thematic units. The status of *Nat* I.3, on the contrary, is more dubious both with respect to its being a unique compound subsection (rather than at least two different segments) and to its title (if it ever bore one). In the text transmitted by P a series of twenty-one separate epigraphs beginning with *On musk* and ending with *On naphtha* follows, without any introduction, *Nat* I.2 *On instruments*. Then a much lengthier subsection *On stones* is found that shows some inner organisation and precedes the final segment *On the shelf-life of drugs*.

The suggestion to define *Nat* I.3 as a constitutive subsection despite the absence of a common rubric for all the epigraphs included in it¹ is inspired by the aforementioned remark about the competences required from the apothecary

¹ Since the extant beginning of *Nat* I.3 as transmitted in P is missing from D, it is impossible to ascertain whether this actually reflects the original form of the text. Shocking as may be the lack of a general title and even of any transition preceding the epigraph *On musk*, the high artisanship evinced by the first folios of P would seem to indicate that this gap or lacuna (if there is actually one) was already present in its Vorlage. As for the second alternative segmentation, it would make separate subsections of *On simple drugs* and *On stones*, which might find some basis in the title of D, where stones and simple drugs are mentioned separately (but then the order would be inverted). In any case, a narrow reading of the title of D would imply a definition of *ṣaḡāqīr* that would exclude minerals, whereas the apothecary-addressed remarks that close the discourse on stones clearly refer by the same word to an all-embracing category of simple drugs.

at the end of *On stones*. These few lines can be interpreted indeed as an epilogue for the whole series of epigraphs comprised between *On instruments* and *On the shelf-life of drugs*, not just for the entries on minerals, and at the same time they complement the guidelines sketched in the opening deontology, providing thus some much-needed coherence to whole of *Nat I*. According to this reconstruction, *Nat I.3* would comprise at least two different segments: a first one on (mostly) non-mineral simple drugs and a brief but clearly defined lithognomic treatise that bears the explicit title *On stones*.

The proposed label *On simple drugs* is not unproblematic, however, because *Nat I.3.1* includes such compound products as algalia (an aromatic mixture), tincar (which can be, according to the text, either a natural simple mineral or a hand-made preparation), and artificial naphtha (explicitly stated here to be a compound substance). The title has been chosen, not without much hesitation, as hopefully the less ambiguous equivalence of the Arabic phrase «*fi lʿsaqāqīr*» that features in the title of D. The wide semantic extension of the Arabic word makes it a most suitable title for a chapter in which drugs of plant, animal, and also mineral origin, both natural and artificial, simple and compound, are included.¹

Thus, in *Nat I.1 Deontology* the word is used in the singular (*ʿsuqqār*) and with-

¹ Etymologically Arabic *ʿsuqqār* has been long recognised as a borrowing from Syriac ܥܫܩܐ ‘root’, which in a medical context translates primarily Greek ῥίζα and βότανη but also developed a generic meaning of φάρμακον (cf. PAYNE SMITH, *Thesaurus* 2970; BROCKELMANN–SOKOLOFF, *Lexicon* 1132). The original meaning is still retained in Graeco-Arabic translations produced in a Syriac context, cf. for instance «οἰνοπία ῥίζα» ≡ «العقار المسقى اونوفيا» in GALEN, *Quod an. mor. corp. temp. sequ.* III (K IV 777₁₇ | M 40₂) ≡ *Quwā nnaḥs* III (B15); and, of course, in fossilised compounds such as *ʿsaqāqārḥā* ‘pyrethrum’ (< حمص منسك). In Arabic lexicography *ʿsuqqār* / *ʿsaqāqār* and also *ʿsiqqār* were generally recorded as the generic name for any medicinal plant, cf. «*mā yutadāwā bihī mina nnabāti waššaḡar*» in IBN MANḌŪR, *Lisān* IV 599a 5; also ABULHAYTAM: «*kullu nabtīn yanbutu mimmā fihi šifāʾ*» (= *Lisān* IV 599a 7–8). However, I am afraid that the reader would have been quite shocked to find that a chapter rubricated by the editor as *On herbs* should actually open with the mention of musk and ambergris. In fact, a wider concept of *ʿsuqqār* as φάρμακον not restricted to plants is also registered by lexicographers: an interesting double entendre is reported from ALĠAWHARĪ, who would have defined this word as “the roots of drugs” («*uṣūlu lʿadwīyah*», quoted in *Lisān* IV 599a 10), and a specific link to generic purging drugs («*alʿadwiyatu llatī yustamšā bihā*») is made by ALʿAZHARĪ (= *Lisān* IV 599a 6). In Andalus *ʿsiqqār* (with a plural *ʿsaqāqār*), is documented with a generic meaning ‘spice’ (in the sense of commodities to be found at the apothecary’s) in the *Vocabulista in Arabico* (cf. CORRIENTE, *DAA* 360 *{QR}). More pertinent to my proposal of reconstruction here is the widely attested use of *ʿsuqqār* in the alchemical corpus in reference to mineral elements, cf. for instance in the rather late and still unexplored anonymous *Tamrah* (= Paris, BnF MS Arabe 2626) a definition of tutty as «*ʿsuqqārūn maḥḍīnī, wahuwa šinfān: maṣnūṣūn waḡayru maṣnūṣ*» (P 35r 8), which provides a perfect parallel for the inclusion in *Natāʾiḡ* of tincar within a subsection on *ʿsaqāqār* (in fact, tincar itself is defined as «*ʿsuqqārūn maḡhūl*» in *Tamrah* P 35r 10).

out any qualification as a generic name for all the items sold by an apothecary (ie ‘drugs’) and in *Nat* I.4 *On the shelf-life of drugs* the phrase *alʿaḡāqīru lmufradah* is opposed to *alʿadwiyatu lmurakkabah*, which mirrors the traditional collocation *alʿaḡāqīru walʿadwiyah*. This apparent distinction between *ʿaḡāqīr* and *adwiyah* suggests that at least in the context of this section even such items as *algalia*, one of the two varieties of *tincar*, and *naphtha* (which are all explicitly said to be artificial preparations) are not considered “compound drugs” but still hand-made simple drugs in the sense that they would enter the recipe for actual compound drugs *qua* simple ingredients. At any rate, given that most of the drugs described in *Nat* I.3 are indeed simple ones and since a similar ambiguity obtains also in the traditional nomenclature of drugs in other languages, the title proposed here should not be too misleading.¹

Be it as it may, it is quite likely that the author never actually cared about the exact architecture of his text and the discussion on the arrangement and the titles of *Nat* I.3 has actually more to do with practicality: the different segments must necessarily be referred to in some clear and unambiguous way throughout this dissertation.² As far as the text itself is concerned, *Nat* I APOTHECONOMY simply mirrors the general layout of the whole collection, in which each section follows the preceding one without only minimal signs of coordination. The lack of a prologue and an epilogue certainly striking in APOTHECONOMY, but the omission of higher taxa surfaces again in *Nat* III ḤAWAṢṢ (for which the original source did have a well-organised design) and also in *Nat* IV REGIMEN.

A part of Natāʾiğ?

With regard to the authenticity of APOTHECONOMY considerations of typological order aside (interpolation rarely occurs at the very beginning of a text), the most compelling reason to assume that this material was indeed included in the original compilation is the explicit mention of two of its subsections in the title of D: «*dikru lʿaḡāqīri walʿaḡāqīr*» corresponding to I.3 *On simple drugs* and «*waʿaṣamārihā*» to I.4 *On the shelf-life of drugs*.³

¹ On a side note, there is also a slight possibility that the extant ending of the segment on non-mineral drugs (ie the epigraphs on balsam oil and on artificial naphtha) might have belonged to a separate subdivision within I.3 *On simple drugs*. As seen above in the description of P, some text is missing between the truncated epigraph *On flemingia* and the likewise mutilated entry *On balsam oil*, and none of the parallel texts on spices, aromatics, etc include a mention of either balsam oil or naphtha amongst the items discussed.

² For all the above reasons and for ease of reference, I will henceforward refer to the whole segment as *Nat* I.3 *On simple drugs* and to its subdivisions as I.3.1 (occasionally “on spices and aromatics” merely for the sake of stylistic variation) and I.3.2 *On stones*.

³ This, of course, could have been added a posteriori to reflect the contents of the manuscript, but only a fragment of I.3.2 *On stones* is included in D and nothing from I.3.1 at all, which must

There is, moreover, some strongly compelling evidence to support an Andalusī origin for these materials in the use of a few geographically marked words (*banānis*, *laḥṣīyah*) and references (Šulayr, Baṭamah, Andalusī antimony).¹ Then there is the fact that the whole chapter I.4 *On the shelf-life of drugs* is transmitted verbatim by AZZAHRĀWĪ (and much later by ARRUNDĪ too) whereas only the specific segment on compound drugs within that chapter has an identifiable eastern precedent and the remainder of the text appears to be unparalleled outside Andalus.

Only the short epigraph *On instruments* would remain without any evidential support, but this was to be expected on account of its brevity and inconspicuousness in comparison to the other epigraphs. There is good reason, however, both topological (where it is placed) and contentual (it includes a most characteristic western word *banānis*), to accept it as originally comprised in *Nat I* and, therefore, in *Natāʔiğ*.²

All in all, the absolute lack of any explicit link between *Nat I* and *Nat II.1* and the fact that the latter section opens with a proem introduced by the mention of the author whereas the former begins directly with a rubric are admittedly perplexing. Moreover, the disagreement in this regard between the two versions of the general title of the book is remarkable, especially given that manuscript P, which does not include the mention of APOTHECONOMY in its title, is the one that transmits the more complete version thereof. Despite all doubts and suspicions, the only known witnesses to the text include this section and they both place it in the exact same position. There cannot be any doubt, therefore, that *Nat I* was already a part of *Natāʔiğ* already by the mid-12th c.

Nat II.1–2 NATURAL PHILOSOPHY and THERAPEUTICS

This one is the only section for which one can assert beyond dispute that it must have been included in the original version of *Natāʔiğ*, for the title transmitted in both manuscripts leaves no doubt in this regard: the “rational conclusions to reach the philosophical methods and the medical canons” correspond to *Nat II.1*, while the “knowledge of the complexions” and the “mention of the ailments

mean that the title is actually inherited from a previous copy and that it reflects the contents of a former, more complete, stage of the text.

¹ For the catalogue and interpretation of these indicators of a specific geographic context, see Chapter 9.

² To be clear, I do not suggest that the Andalusiness of *Nat I* (or of any of its segments) amounts to proof of its original inclusion in *Natāʔiğ* and of its ascription to ALʔILBĪRĪ. It is linguistic coherence and a context apparently shared across sections that strengthens the assumption that the units cotransmitted in the two manuscripts stem from the same compilation. As a matter of fact, the burden of proof would lie rather with anyone denying this inclusion, although for the sake of the argument I shall often be oversceptical in my analysis.

that affect each organ and their treatment” reflect with accurate precision the contents of *Nat* II.2. Moreover, in the two witnesses *Nat* II.1 is preceded by a *basmalah* and it is introduced by an explicit reference to the author («*qāla Abū Muḥammad*»).

The transition from *Nat* II.1 to II.2 in P is seamless. There is no *basmalah*, just a simple full-stop (Δ) and a reader-oriented remark “*Now we turn to the bodily organs and their complexions*” that indicates that the philosophical-theoretical exposition is over and that now the description of therapeutics begins. As for D, the ingenuity of the copyist deserves some praise: if he was, as it seems, excerpting on purpose, the way in which he blends together two segments that are separated by some thirty folios in P while still keeping the text readable and meaningful is certainly remarkable.¹

A remark at the end of the therapeutic section informs the reader that “most of the book” is finished. While there can be no absolute certainty whether it was indeed *Nat* III that followed there, it is evident that *Natāʿiğ* as a book did not end with *Nat* II.2 and that at least one additional section must have been included. As I shall shown throughout this dissertation, there is not much reason to disregard the manuscript transmission of the compilation and it is quite probable that P reflects, albeit fragmentarily, its original form.

The combined testimony of P and D allows for the conclusion that *Nat* II was the core of a medical treatise that included at least two parts, one essentially theoretical, the other one mainly practical. This section most probably followed *Nat* I APOTHECONOMY and quite certainly must have preceded *Nat* III ḤAWĀṢṢ.² On the other hand, while this formal reconstruction of *Nat* II.1–2 is unproblematic, the unavailability of a second direct witness for the beginning of *Nat* II.2 is especially unfortunate as far as the contents of the section are concerned, because at least two and a half chapters are missing from the text copied in P.³

¹ There are, to be sure, several other possible explanations for this apparent blending. The copyist of D may have inherited the text in its present form, in which case the almost perfect stitching ought to be ascribed to a previous scribe. Still, the copyist’s Vorlage may have been awfully defective and lacked some three whole quinions; in that case, it would be rather Chance that deserves the merit of leaving such last and first words in the then-adjacent folios as the text would still make some sense. Whatever the case, none of these speculations have any direct bearing on the analysis of the primitive form of *Natāʿiğ* because the evidence provided by P is unambiguously sound in this regard.

² From the point of view of the reconstruction of the text it would be rather convenient if *Nat* II proved to be the first treatise in the collection, as this might explain the apparently defective transmission of *Nat* I and it would also tally better with the standard organisation of the *kun-nāš*-type text, in which pharmacognosics typically comes *after* natural philosophy and therapeutics. However, even in D, in which the reference to *Nat* I in the title *follows* the mention of *Nat* II, the treatise on apothecology is copied *before* the one on medicine.

³ This lacuna can be partially filled, however, with the help of the indirect transmission, through

However, even in its fragmentariness the brief excerpt of *Nat* II.2 included in D (which actually covers almost the entire chapter *Ther* 4.4 *On fevers and their treatment*) provides invaluable corroboration for the text transmitted in P as *Nat* II.1–2.

Despite this unity in authorial design (which is corroborated by the epilogue of NATURAL PHILOSOPHY), *Nat* II.1 and II.2 differ entirely in their thematic contents and, even more importantly, in their genetic origin. This becomes especially evident in a noticeable terminological (and often also nosological) divergence between the two sections and at least in the case of *Nat* II.2 the underlying source can be identified. The therapeutic section reproduces from beginning to end IBN MĀSAWAYH's *Nuǧh* (see Chapter 6). This quite radical difference, combined with practical reasons, justifies devoting two different chapters (namely Chapters 5–6 below) to the survey of their contents. I shall moreover allude to them regularly as 'sections' even if in accordance with my own proposal they are labelled *Nat* II.1 and *Nat* II.2.

Nat III.1 ḤAWĀṢṢ

No mention at all is made in the title of either manuscript of any section related to the specific properties (*ḥawāṣṣ*) of things.¹ What is even worse: in both witnesses the section is acephalous and begins exactly at the same point, namely at *Ḥawāṣṣ* II.IV *On oblivion*. In D by a new exercise of acrobatic text skipping *Ḥawāṣṣ* II.VI *On headache* is followed by *Ḥawāṣṣ* VIII *On the ailments of the body surface*, only that in this case the leap (which corresponds to some twelve folios in P) happens at a folio break.

The question (a truly fascinating one) of the origin of *Nat* III and the analysis of its cognates and sources are dealt with in all detail in Part III of this dissertation. From the strict perspective of the manuscript transmission of the text, there can be no doubt that *Nat* III ḤAWĀṢṢ circulated at least since the 12th c. within the collection of *Natāʿiǧ*, following immediately *Nat* II.2 THERAPEUTICS and in an already acephalous version at least in some of the witnesses.²

ZUHR, of IBN MĀSAWAYH's *Nuǧh* (see below). Needless to say, that external evidence gives an *impression* of what those two chapters may have looked like, for the differences between ZUHR's excerpts and *Nat* II.2 reveal a differential use of the source text (see below the Chapter 6 for further details).

¹ For everything related to the concept of *ḥāṣṣiyyah* (also *ḥāṣṣah* and *ḥuṣūṣiyyah*) in the Helleno-Islamic tradition, see Part III of this dissertation.

² A less satisfying (yet not altogether impossible) explanation of this acephalousness would be to presume that the author might have simply decided to skip all preceding chapters and to begin excerpting his source at this precise point. By a striking coincidence, the chapter on brain disorders is missing entirely from THERAPEUTICS and partially from ḤAWĀṢṢ too.

Nat III.2 Excerpts from *Geoponics*

The proper analysis of the sequence of passages appended at the end of *Nat* III is one of the many tasks that I have been unfortunately forced to postpone until more favourable conditions prevail. In this particular case the unavailability of both the Arabic text of IBN ALHAYTAM's *Iktifāʾ* and a reproduction of item no. 3 in the Damascus manuscript makes any speculation extremely hazardous and may, in fact, contaminate the conclusions drawn with regard to other sections of the book. The question, therefore, on the origin of this fragment and on its relatedness (or unrelatedness) to *Natāʾiğ* remains to be tackled properly.¹

As for the material description of the segment, manuscript P includes, after the *explicit* on fol. 92v 3–4, a brief series of passages apparently gathered under a common rubric «*Fī kutubi lfilāḥah*» and which, although typologically identical to ḤAWĀṢṢ, can hardly be a part of the preceding section because the book is unambiguously said to have ended before this rubric (although it actually has not). Typological cohesiveness is limited to the fact that the fragment consists on formulaic quotations (in this it is an unmistakable offspring of the *Ḥawāṣṣ* genre) some of which are explicitly ascribed to AṬṬABARĪ. The passages are all non-medical in nature, but this is not incompatible with their origin in a medicine-centred treatise on the specific properties of things. As a matter of fact, I am persuaded (but I do not have the means to prove my presumption) that a parallel—actually a cognate—to these quotations can be found in Chapter X of IBN ALHAYTAM's *Iktifāʾ* preceding the mention of the instructions on how to get rid of stains. Furthermore, a demonstrable cognate can be identified in an analogous and partially overlapping segment in ALMADĀʾINĪ's *Ḥawāṣṣ*.²

After all, the anonymous compiler of ^α*Ḥawāṣṣ* must have found interesting (and probably also pertinent to his treatment of the matter) to append to his essentially medical treatise a separate chapter with a selection of the myriad of disparate non-medical specific properties attributed in the Helleno-Islamicate tradition to all sort of things. On the other hand, given that it is virtually beyond doubt that he perused AṬṬABARĪ's *Firdaws* and that he drew quite extensively from it for his anthology, it is most probable that the original closing chapter preserved by IBN ALHAYTAM (but not by the Hebrew translator of *Iktifāʾ*) was directly inspired by the sequence of three miscellaneous chapters on the specific properties of things in *Firdaws*. In fact, rather than mere inspiration the com-

¹ This regrettable circumstance has resulted also in a much poorer critical apparatus for this segment of the text and the commentary on these passages is not included, for obvious reasons, in the sample that the reader shall find in Chapter 4 of Part III of this dissertation.

² On this author and on the working hypothesis that a number of passages in his *Ḥawāṣṣ* stem from the postulated parent text ^α*Ḥawāṣṣ* and are therefore cognate to *Natāʾiğ* III and to *Iktifāʾ*, see the corresponding section in Part III Chapter 1.

piller must have drawn from it most of his building materials, for AṬṬABARĪ hands down a convenient collection of passages (some of them explicitly ascribed to the author of the *Filāḥah*) that touch upon geponic matters, wondrous powers, and a rich selection of remedies by which one can get rid of stains.¹

Nat IV REGIMEN

In the Paris manuscript the text of the dispensatory (for which see below) is abruptly interrupted on fol. 116v 16, after the recipe for the pastilles of wormwood, by GALEN's discourse (*qawl*) on foodstuff. There follows a brief trophognostic treatise of the basic *Aḡḍiyah* type (dealing with meat, milk and milk derivatives, vegetables, and fruits) and several thematically related but only loosely connected epigraphs on dietetic advice (essentially what to eat and what to avoid, including a brief paragraph on clothing and a monthly calendar).² The text of *Nat* IV REGIMEN ends as at P 123v 15 and is immediately followed by the chapter on ophthalmological drugs (ie *Pharm* 7) within *Nat* V.

From a strictly formal point of view this lengthy and unexpected excursus should be considered to be dislocated, as it breaks, with no conceivable motivation, the sequence of chapters of the pharmacopoeical section and this can hardly have been its original position.³ On the other hand, although there are not any cross-references to or from other sections of the book and even if the title of the book does not mention it as a part of *Natāʾiḡ*, the characteristic locution *وَقَفَّكَ اللَّهُ ، وَعَلِمَ* that features twice in it may be interpreted as positive (albeit slight) evidence against the suspicion of an *extraneous* interpolation. The fact, moreover, that manuscript D also transmits the exact same GALEN-ascribed trophognostic excerpt, speaks in favour of this interpretation and I currently consider *Nat* IV REGIMEN to be an originally constitutive section of *Natāʾiḡ* (and I accordingly refer to it as *misplaced* rather than interpolated) until new evidence be brought to light that may alter this picture.

The position assigned in this survey to the dietetic section is strictly practical. If in the edition of the Arabic text the arrangement transmitted in manuscript P can be maintained (I have not extracted the section from its current position and *Nat* V PHARMACOPOEIA is therefore edited in its extant discontinuous

¹ Cf. AṬṬABARĪ, *Firdaws* VII.II.2–4 (§ 524₁–536₂₃).

² For an overview of the contents of this section and an explanation of the labels used here, see below Chapter 7.

³ Given that neither the beginning nor the ending of the text of REGIMEN as transmitted in P coincide with a new folio, one can safely rule out a simple material misplacement of the folios of the manuscript. Now, the position of the text, which begins and ends so very close to a new folio (and actually almost at the same line of the verso), might suggest that such a misplacement could have obtained either before or during the copy of P. Mark, in this respect, that the discourse on foodstuff was copied as an independent block in D item no. 4.

form), the same cannot be done if a coherent study of the contents of these two sections is to be reasonably conducted. It would make no sense to retain the original dislocation in the summarised commentary below. By the same token, the numeration assigned to REGIMEN has no implication with regard to its original position within the collection. Manuscript evidence (exclusively from P) has PHARMACOPOEIA follow *Nat* III but the book also ends quite explicitly after *Pharm 7 On oils*. If I may paraphrase GALEN, should the readers wish to call REGIMEN “*Nat* IV” or “*Nat* V”, let them do so—*de nominibus non est disputandum*—for it makes no difference at all as far as the discussion of its contents is concerned.

Nat V PHARMACOPOEIA

The formal analysis of the dispensatory transmitted in P (and perhaps also vestigially in D) involves two very different questions. On the one hand, whether it should be considered an original part of the collection; on the other hand, what its contents were and where it was placed within *Natāʾiğ*.

As far as the authenticity of the dispensatory is concerned, it seems to be borne out by the fact that manuscript P puts the *explicit* of the whole book and the scribal colophon just after the end of the section. Additional evidence that *Natāʾiğ* most probably included a pharmacopoeical section may be provided also by D, which transmits some medical recipes, yet not after *Nat* III ḤAWAŞŞ but much earlier in the text after *Nat* I.4 *On the shelf-life of drugs* (but this evidence is admittedly disputable). Besides, if the putative interpretation of *Natāʾiğ* as a *kunnāš* or medical pandect is not mistaken, pharmacopoeia would be the only major auxiliary to the medical art missing from the collection if *Nat* V were to expunged from it as an exogenous interpolation.

The question of the exact contents of the pharmacopoeical section is a more complex one. It can be assumed that it originally comprised *at least* the eight chapters transmitted in P, but it is far from certain that it did not include more material and there are, indeed, several indicators that it might have. First, the continuity of the text is interrupted by the aforementioned treatise on regimen and, given that no index of chapters is provided anywhere, one or more chapters might be missing from the extant copy. Then, some usual drug categories that regularly feature in most pharmacopoeias are nowhere to be found in the dispensatory as transmitted in P. This is admittedly an argument *ex silentio* but here is where the quantitatively scarce testimony of manuscript D with its two supplements becomes highly significant: the three recipes for enemas transmitted as a minimal series in *Supplement*^B are precisely representative of a category of drugs left unmentioned in P.

Finally, concerning the position that the dispensatory may have occupied in the original compilation, despite the testimony of D (in which the sequence of recipes was perhaps somehow attracted by the extensive mention of compound remedies in *On the shelf-life of drugs*), the order transmitted in P (ie at the end of the book) is in accordance with the almost unanimous practice in the Islamicate corpus: virtually all medical compendia place their respective recipe collections invariably at the end.¹

The Damascus supplements

With this provisional and deliberately uncompromising name I refer to the materials that are copied in D beginning on fol. 38r 17 and ending on fol. 40r 18–20. This segment follows without any solution of continuity whatsoever the preceding text of *On the shelf-life of drugs*² and is in turn immediately followed by the prologue of *Nat* II.1 on the verso. Now, it is quite obvious, even if the corroborating testimony of P were not available, that this series of recipes cannot possibly belong in the same epigraph and at the most they would represent an excerpt from another section.

These additional materials are distributed into two quite different segments. First, an excerpt on fols D 38r 17 – 40r 1 contains the recipes (and further instructions) for several opiates (*murqid*), one of which is explicitly ascribed to IBN ʿIMRĀN, then the formula for Hermes' hiera from HĀRŪN's (certainly meaning AHRUN's) book; finally a panacea for the eyes. This purely medical passages are followed, again without any textual separation, by a recipe for a red ink and by an alchemical excerpt from some sage («*qāla lḥakīm*») on the treatment (*tadbīr*) of arsenic and sulphur, then on the treatment of white marcasite, finally on how to moisten dry bodies.

Then on fol. 40r 2–5 the whole title is repeated:

كتاب النتائج العقلية في الوصول إلى المناهج الفلسفية والقوانين الطبية ومعرفة مزاج الأعضاء
البشرية ومنافعها وذكر الأمراض اللاحقة كل عضو منها وعلاج ذلك ومداواته إن شاء الله
تعالى

The second segment brings together the recipes for three clysters on fol. 40r 5–20.

¹ In AṬṬABARĪ's *Firdaws*, in fact, the main pharmacopoeical chapters come close after the sections on the specific properties of animals and on poisons and venoms. An apparent exception to this general arrangement is AZZAHRĀWĪ's *Tasrif*, but there surgery is considered a completely separate branch of medicine and it is discussed only after all other disciplines (anatomy, humoral theory, therapeutics, pharmacopoeia, pharmacognostics) have been exhaustively covered.

² Not even a ∴ symbol (which is used no less than twelve times on that page to separate subepigraphs) marks any boundary between the two segments.

These widely different elements of the fragment are, therefore, best classified into two sets the relation of which to the whole text of *Natā?iġ* is quite certainly not the same. If they are not considered an interpolation from some other text, the medical recipes in the first segment (= *Supplement*^A) might even derive from the now-lost chapters on the ailments of the brain and of the eyes in *Nat* II.2 THERAPEUTICS, while the three enemas in *Supplement*^B might be related to *Nat* V PHARMACOPOEIA, or even to the chapter on the organs of reproduction in *Nat* II.2.¹

¹ For a more detailed analysis of these contents and a provisional interpretation of the testimony contributed by *Supplements*^{AB}, see below Chapter 8.

3.2 *Natāʾiǧ* as a pandect

«The task of the early Byzantine physicians was not so much to compile well-organized and all-encompassing encyclopedias with literary qualities (something that they did, in effect), but rather to create a coherent medical library that made it possible for physicians to easily access relevant information for both practical and educational purposes. This work went beyond a simple assemblage, as it required locating and selecting throughout the available literature, the most relevant information (scientifically up-to-date, safe, and efficacious) in each field of medicine, and also putting together elements of different origins and possibly making them compatible.»¹

Such a description would not be entirely unfitting with regard to our text. When considered in its entirety, the compilation transmitted under the title of *Natāʾiǧ* reveals itself not only as polythematic but also as manifestly composite in nature, to the point that one may legitimately doubt whether it is not the product of clerical aggregation. This impression is certainly strengthened by the apparent lack of any explicit (or at least conspicuous) cohesive device that might string together the different sections (other, that is, than their cotransmission itself) and also by the complex picture of the manuscript transmission that has been sketched above. There seems to be a general prologue, no preview of the contents, no index, no cross-references across section boundaries.

In the first survey of the text GARCÍA suggested two possible explanations for the great difference in length between the two manuscript witnesses: either P is a collection of several works by ALʾILBĪRĪ or otherwise D is a partial copy.² On the other hand, as far as I am aware, such doubts have been expressed with regard to the structure of the text but not to the origin of the sections themselves. The current characterisation of the work depicts it as disorganised and even chaotic, but the possibility of alien interpolations seems not to have been ever mentioned. And yet overall disarray and incohesive compilation are often tokens of clerical manipulation. In the following two epigraphs I shall first summarise the evidence (some of which has already been presented) in favour of the

¹ TOUWAIDE 2020b: 364.

² Cf. GARCÍA 1995: 192, which for manuscript D still relied exclusively on ALḤĪMĪ's succinct description. I must admit that I do not quite share this disjunctive, for it does not seem to me that the two options are actually incompatible: P might well be a collection in the strict sense and D would still be a partial copy of that collection, as it does not include the totality of its contents. Still in CARABAZA and GARCÍA 2009: 386 the doubt emerges as to whether the text transmitted in P might be the result of several different treatises having been gathered under the same title. The reason for this suspicion is rather weak, the presence of a *basmalah* being quite regular at the beginning of major sections of a multi-part book.

genetic unity of *Natāʾiğ*, then I shall tackle the specific question on whether the text can or cannot be considered a proper medical encyclopaedia.

Genetic unity of Natāʾiğ

Leaving aside for a moment the suboptimal layout of the materials (more on that later), probably the major element of distortion that may actually cast some doubt about the original unity of *Natāʾiğ* is the fact that the whole section on apothecology (the one transmitted as *Nat I*) precedes the explicit proem in which the author introduces his book as a response to a request. From there on, the epilogue in *Nat II.1.6* and a transitional sentence link the section on therapeutics to the preceding natural philosophical prolegomena. Then, a colophon shared by both manuscripts shows quite distinctly that the book (which, let it be noted, is referred there as a “*madḥal* to the well-being of souls and bodies” just like the author promises in the proem) is not finished yet. Therapeutics are over with the treatment of fevers, however, and whatever followed there must have been some different discipline (or branch, or part) of the medical art. That might have been the dispensatory (= *Nat V*), which is introduced by a transitional sentence and is followed by a final colophon that provides forcible evidence that at least what immediately preceded was found by the copyist as a part of the same book. In its *weak* version, therefore, the hypothesis of the original unity of *Natāʾiğ* as a *kunnāš* or medical pandect would include *Nat II.1–2|5*.

Now, *Nat III* is acephalous and at its end P has an intriguing micro-colophon that affirms that “the whole [*kāmil*, perhaps rather an epithet?] book is finished”. This closing mark is partially shared by D, which after the last passage of the chapter on fevers in ḤAWĀṢṢ reads simply “it is finished”, but in that case it is indeed the end of the text and it is followed by the scribe’s final colophon stating the date of the copy. Here is where intertextual evidence must be combined with internal reconstruction.

First, the plausible origin of *Nat III.2* in the same source as the preceding treatise *Nat III.1* would seem to negate the affirmation that the book (which one?) is finished. After such an explicit end-mark one might expect that any subsequent materials would be clerical additions, which might or might not be thematically related to the preceding book but in any case should not be *genetically* derived from it—for in that case the book would not have finished yet. Furthermore, the dispensatory copied immediately after these geponic passages must be considered a part of *Natāʾiğ* as per the above hypothesis.

In sum, regardless of the apparent affirmation to the contrary, the copyist of P must have found *Nat III.1–2* already as a section within *Natāʾiğ* and quite probably in the same position as extant, that is after the therapeutical section

(where the copyist of D found it too) and before the the pharmacopoeia. There is no compelling reason to alter the conclusion previously drawn in this regard.

Then, *Nat IV* is found in the most unexpected position *intercalated* within the dispensatory. I have already expressed my current opinion that on linguistic and phraseological grounds the link of REGIMEN to the remaining sections ought to be exempted from doubt. As to its placement within the text, in my eyes the most (and perhaps only) puzzling fact is the apparently unmotivated nature of such an intercalation. Digressions of all kinds and sorts are quite regular in the Islamicate written tradition and medicine-related epistemic genres are no exception to this trait,¹ but I cannot detect what may have prompted the jump from the dispensatory to the regimen and then back to the recipes of the remaining categories of drugs. It may have had something to do with the material layout of the Vorlage, but a merely mechanical “mistake” on the side of the copyist seems unlikely, as there is no way the radical change in the subject could have gone unnoticed, and *Nat IV* is not a brief interpolation by any stretch of the mind. Perhaps the corresponding fragment in the Damascus manuscript shall bring some light to this crux.

In any case, for all the reasons adduced so far, I am currently inclined (with no personal stake in the issue and open to any better suggestion) towards a *strong* hypothesis according to which the extant sections *Nat II–V* are (probably in the same relative order) the minimal core of the original book and the self-standing treatise on apothecology (ie *Nat I*) is likewise ALḤILBĪRĪ’s work but its exact relationship to the core sections remains obscure to me.

Nothing is known about the author and therefore no help can be expected from a reference to a plurality (or a singularity) of titles provided by a biobibliographical source. The most economic approach would be to take at face value the testimony of the two manuscripts and to consider *Nat I* the opening section of the book, but the evidence in that regard is rather slim and it further seems to clash against what can be inferred from other loci.

Before moving forward from the question on the authenticity and genetic unity of the different sections comprised in *Natāʿiḡ* I must mention that there is one further (and almost definitive) argument that I have deliberately excluded from the above analysis as it does not bear on the inner structure of *Natāʿiḡ*. Linguistic analysis and source criticism (which will both be dealt with extensively in subsequent chapters) leave no doubt about the common shared context of all these sections. Baffling as the organisation of the units may appear now in its ex-

¹ The reader shall soon find out that digressiveness is an exceedingly contagious malady, especially for those who are too long exposed to it and have a natural predisposition to succumb to its effects.

tant form, each and every one of the text blocks was either written from scratch or selected, copied, and compiled by an Andalusī author who had access to a number of ninth- and tenth-century texts. While copyists may have introduced not a few misreadings and may be held responsible even for the several lacunae that affect the text, they certainly did not interpolate or append any significant amount of materials, except perhaps—and only perhaps—for the alchemical instructions and the recipe for an ink transmitted within the Damascus Supplement.

Architectural coherence of Natāʾiğ

That *Natāʾiğ* looks very much like a medical encyclopaedia was immediately noted by its modern readers and as seen above there is no shortage of objective evidence to back this impression.¹ Regardless of inner structure, the sum of the sections covers from cosmogony and the principles of human physiology to the preparation of compound drugs, including dietetics and conventional as well as non-conventional therapeutics. If *Nat* I is added to the picture, some notions of pharmacognosy are also to be gained from the text, but as I shall show in Chapter 4 APOTHECONOMY is not addressed to physicians but to apothecaries, and medicine is only a tangential subject there, never a central one.

Whether *Natāʾiğ* can be classed as a proper medical encyclopaedia depends on a number of considerations. First, on its being or not a genuine unity, which has been argued in a positive sense above but might be negated in favour of its consideration as a *collection* of texts (in the plural), which at least in strict taxonomical terms is not the same as a multithematic text (in the singular). Second, on the definition itself of “medical encyclopaedia”. This is not the place nor the time for elaborate theorising on concepts and definitions in which so many traditions are implicated and on which there is a vast amount of literature available. I shall limit myself to a few observations and leave the terminological debate for more propitious circumstances.

The first question boils down to the most likely interpretation of the author’s intention (which is obviously a highly subjective matter) and to a somewhat scholastic and essentially nominalistic ἀπορία. In the end, by the simple application of Ockham’s razor it is far more plausible that ALʾILBĪRĪ culled all his materials and compiled them as one single book than to postulate that he wrote a number of separate and self-standing treatises (two, three, four of them?) and

¹ Cf. “tiene la apariencia de una obra médica de carácter enciclopédico” in GARCÍA 1995: 205, who further compares it with *Firdaws*. Mark that the fluidity of the characterisation of the text as “one work” here but as a “collection of works” a few pages earlier is quite reflective of the difficulty to define the exact nature of *Natāʾiğ*.

that some devote copyist brought them together under on single title and provided them with some rudimentary coherence from beginning to end. In the latter implausible scenario, such a copyist ought to be considered the real “author” of *Natāʾiǧ*, which would still be a medical pandect by design. Besides, at least *Nat* II.2 and *Nat* III can be proved to derive from actual independent treatises, but that is precisely the essence of compilation in pre-modern times. The fact that a chapter or section reproduces (even literally) a treatise does not make of it a treatise—it is its relation to the remaining parts of the whole that defines it, and in this sense I have already insisted that the extant sections of *Natāʾiǧ* bear unequivocal signs of interrelatedness.

On the other hand, caution ought to be exercised (and that is the reason why I do not engage here in the debate) when using the categories ‘compilation’, ‘collection’, ‘miscellany’, ‘encyclopaedia’, etc in a strictly technical sense.¹ I, for one, being as I am far from familiar with the intricacies of textual criticism and literary studies, have tried to amend my initial tendency to terminological vagueness and I have corrected my repeated references to *Natāʾiǧ* as a miscellany and even as a collection. I can only hope that the choice of ‘compilation’ (both for the process and its result) is not conceptually wrong. Moreover, in the case of Islamicate medicine the vagueness of the word ‘encyclopaedia’ (even if ‘medical encyclopaedia’ is specified) can be avoided by resorting to Syro-Arabic *kunnāš*, which is indeed favoured by contemporary scholars alongside diverse non-Arabic equivalents such as ‘pandect’. Admittedly a *kunnāš* is not necessarily all-encompassing and it can even be a relatively brief summa dealing exclusively with therapeutics, but the most distinguished representatives of the category certainly aim at comprehensiveness and cover a wide range of topics besides the identification and treatment of the diseases.² As an evaluative and impressionistic label, however, ‘medical encyclopaedia’ has a clear advantage over all other options and it certainly makes for a great rubric with an undeniable marketing potential.³

¹ To give just one illustrative example from a contemporary scholar, elaborating on BAADER’s concept of *Corpusüberlieferung* FISCHER 2013: 39 propounds a distinction between ‘conglomerates’ (several usually brief tracts transmitted in the same order and arrangement in several manuscripts by chance rather than by intention) and proper ‘anthologies’ or ‘collections’ (defined as an intentional gathering of texts).

² Incidentally, a pejorative connotation seems to have been associated to the *kunnāš* by some elitist physicians in late Andalus, cf. a remark on *aṭṭariqu l-kunnāši* in IBN ZUHR, *Taysir* 56.

³ As a result, there is some inflation in the use of ‘encyclopaedia’. Thus, CHIPMAN 2010: 17 describes the structure of ALṢAṬṬĀR ALHĀRŪNĪ’s *Minhāǧ* as that of a “mini-encyclopedia”, while a “the first prominent proponent” of the genre of the “medical encyclopaedia” for PORMANN and SAVAGE-SMITH 2007: 10 is ORIBASIUS. Now, the difference between the *Collectiones* and *Minhāǧ* does not lie exclusively in their respective sizes.

As rightly pointed out by GARCÍA, it is indeed AṬṬABARĪ's *Firdaws* the pandect-type treatise of which *Natāʾiğ* is the most reminiscent. This resemblance is not limited to their polythematic nature (ALMAĞŪSĪ's *Kāmil* and AZZAHRĀWĪ's *Taṣrīf* are by no means poorer in their coverage of diverse topics) but it extends to a feature that is as manifest as it is hard to substantiate objectively: they share an overall primitiveness (no depreciative connotation intended) that distinguishes them unmistakably from most other treatises in the medical tradition. With regard to the priority of the contents over the form (a tendency far more noticeable in our Andalusī author than in his eastern predecessor), the unapologetic use of archaic and often pseudepigraphic sources, the expansive attention given to matters cosmological and philosophical, and not least the unconcealed interest in the specific properties of things, the pandects of AṬṬABARĪ and ALʿILBĪRĪ are nothing like the sober *Kunnāš* of IBN SARĀBIYŪN or the comprehensive but relentlessly focused *Manṣūri* of ARRĀZĪ, not to speak of the two compendia of the aforementioned champions of systematical meticulousness ALMAĞŪSĪ and AZZAHRĀWĪ. If there is a third text that I would place in this particular subcategory of *kunnāš* that would be the *Hārūniyyah* attributed to MASĪḤ and to which a whole section is devoted in Part III of this dissertation as it contains a remarkable amount of materials that are genetically related to *Nat* III. In fact, MASĪḤ's original *Kunnāš* was criticised in the harshest terms by ALMAĞŪSĪ in the prologue to his *Kāmil* on account of the chaotic arrangement of its materials. If the *Hārūniyyah* edited by GIGANDET preserves, as I suggest there, the core structure of MASĪḤ's *Kunnāš*, that criticism is well deserved and by comparison *Natāʾiğ* is a model of orderliness.

All in all and terminological debates aside, it is probably best to concede that the *kunnāš* (like any other written manifestation) presents itself in a wide spectrum and that it shows great diversity as to the degree of its comprehensiveness and the systematic arrangement of its contents.¹ It is a useful working category, but it should not be essentialised to the point that its reification prevents from recognising (and therefore understanding) the diversity of forms subsumed into it.²

¹ This, of course, is not an exclusive feature of the *kunnāš* or of the Islamic tradition. Nor am I in the least original in my observation. It has long been written that “[i]n ancient Greece and Rome, there were multiple species of the genus “pharmaceutical handbook,” each with distinct characteristics” (KEYSER 2002: 378).

² In this regard, cf. the claim for “a non-essentialist definition of genre (there is no ideal type that sums up the essence of a genre) while redefining genres as intrinsically temporal structures, which should be studied in their evolving over time” in POMATA 2014: 3.

3.3 Some remarks on epistemic genres

There is no doubt that the concept of ‘genre’ (implicitly ‘literary genre’) has been profitably used for a long time now by scholars of the history of Islamicate science. However, one may have the impression that sometimes (even often) this concept is approached from a mainly taxonomical perspective as if its only utility were that it allows to *classify* any given text and to introduce thus some order in the mass of fragments, tracts, treatises, and multi-volume collections in which the object of study (science itself) has been transmitted. Having overall left behind the old cataloguers’ tendency to quite literally judge a book by its cover and to assign a genre on the sole basis of the title, much effort is invested—and reasonably so—in trying to define the imaginary frontiers that distinguish one genre from another.¹ There is some great work done, and much still to be done, in this ever-evolving project, and my own analysis relies largely on the results of that previous work.

On the other hand, the extremely interesting concept of *epistemic* genre as the “vehicle of a cognitive project” was introduced some years ago by POMATA and has been successfully applied to a variety of cultural contexts, from FRANCIS BACON’s reformulation of technical recipes to traditional Chinese medicine.² Typical examples of epistemic genres range, according to this definition, from the encyclopaedia to the aphorism, from the commentary or the essay to the medical recipe, “specifically those kinds of texts that are linked, in the eyes of their authors, to the practice of knowledge-making (however culturally defined).”³

My own use of the concept of ‘genre’ in the analysis both of *Natāʾiğ* as a text and of its different sections is admittedly eclectic. While it is rooted in tradi-

¹ Cf. PORMANN 2004: 24 on the difficulty to draw any clear boundaries between *ğawāmiğ*, *talhiş*, *şarh*, etc. On a side note, in strict application of the old criterion, IBN ĞANĀH’s *Talhiş* and any of IBN RUŞD’s homonymous treatises might have been classed under the same category and it will be the task of one generation to revert some of the unfortunate effects of that practice.

² Cf. POMATA 2013 (and previously POMATA 2011 [n.v.]), and particularly an expanded formulation of the original idea in POMATA 2014: 3, where it is emphasised that “by calling such genres “literary” we miss their distinctive and specific quality. We miss the fact that they are the vehicles of a cognitive project, and that they are shaped by that project”. For some concrete applications of this hermeneutical framework, cf. the analysis in PASTORINO 2020 of FRANCIS BACON’s “new genre of natural and experimental histories”; a revision of Chinese medical literature in HANSON and POMATA 2017, then HANSON 2022; or GLONING 2020 for the field of contemporary science communication. The latter author’s definition could be made likewise extensive to the Hippocratic collection or to ALʿILBĪRĪ himself: “Genres are products of communicative evolution, their development is steered or guided by their respective functions and available media among other factors. [...] Epistemic genres are tools that are used by scientists to produce, formulate, publish, and discuss their findings”.

³ POMATA 2014: 2.

tional practice, it is at the same time inspired by POMATA's reconceptualisation and I borrow from both trends whatever elements may help to get a better understanding of the object of my study. Given that the main goal of this dissertation is not theoretical elaboration but rather practical description, no innovative proposal should be expected from these chapters. Moreover, the discussion of 'genre' (either epistemic or otherwise) implies necessarily the examination of a wide spectrum of texts and cannot be based on partial considerations about one single testimony. This is not the time nor the place for such a survey. I should warn the reader, therefore, that throughout this dissertation I shall allude to 'genre' in two quite different senses for which the context will hopefully clarify any possible ambiguity.

On the one hand, *thematic genres* shall be regularly referred to by this name, eg the '*Ḥawāṣṣ* genre', meaning texts (mostly independent treatise but also sections within a pandect) that deal with the knowledge of the specific properties (*ḥawāṣṣ*) of things. By the same token, pharmacopoeical literature shall be alluded to as the '*Aqrābādīn* genre', but not the formulas or recipes themselves, which I consider here rather constitutive elements of the genre, just like quotations are the building bricks of *Ḥawāṣṣ*. A gloss or an explanation shall be appended to the first use of these labels but the reader will soon become used to the association of an Arabic name (usually the most typical book title within each category) with a given thematic genre.

On the other hand regular mention shall be made also of *morphological* (or *formal*) *genres*, which would essentially correspond to POMATA's epistemic genres. Thus, *Firdaws* is a '*kunnāš*' or 'pandect' (otherwise a 'medical encyclopaedia'), whereas ARRĀZĪ's *Ġudarī* and *Niqris* are 'specific monographs', and between these two extremes one ought to place (semi)specific treatises on obstetrics or on cosmetics, for instance. If the thematic and the formal criteria are combined, of course, *Firdaws* would intersect as many continua as thematic sections it contains.

In both cases a further specification must be introduced in the form of a qualification. Pandects (*kunnāš*) range from 'comprehensive' to exclusively 'therapeutic', but most of them show actually an idiosyncratic collection of contents that allows to distinguish virtually as many species of *kunnāš*. The same consideration applies to thematic genres. There is a type of 'medical organ/ailment-centred *Ḥawāṣṣ*' that contrasts strongly with the 'non-medical item-centred *Ḥawāṣṣ*'; the 'strict *Aġdiyāh*' deals almost exclusively with foodstuff, whereas the 'extended *Aġdiyāh*' may include much dietetic materials on clothing, bathing, etc, to the point that the boundary with the genre of *Hifdu ṣṣihḥah* (ie regimen) becomes almost impossible to draw.

The above digression (which actually spares the reader an actual excursus on genre typology) is a friendly warning with regard to the terminology that is to be found in the following chapters. The need to abridge the original draft of this dissertation and the wish to pack as much information as possible within this limited space make it impracticable to provide a proportionate justification for each terminological choice and every label.

An Andalusī kunnāš

From the above premises I would argue that as an epistemic genre the ninth-century *kunnāš* type represented by AṬṬABARĪ's and MASĪH's pandects was a powerful tool that allowed its authors to bring together a wealth of information from several different fields (or thematic genres) and to make it available, at a much lower cost, to a readership that did no longer need to resort to three, four, or five different books to access essentially the same knowledge. Except for the demanding scholar or the high-rank professional physician, the abridgement of a *Ḥayawān* treatise provided in *Firdaws* VI.IV.1–39 must have certainly met the needs of most readers, who could also find, in the same volume, analogous syntheses of therapeutics, pharmacognosy and trophognosy, pharmacopoeia, and even the lore of the specific properties, not to speak of cosmology and human physiology. Thus, a feature that was already the main appeal of the medical pandect as inherited from the Byzantine tradition (particularly PAUL OF AEGINA's *Pragmateia* and AHRUN's *Kunnāš*) was further enhanced by the incorporation of allied traditions such as zootherapeutics (*Ḥayawān*), the knowledge of the specific properties (*Ḥawāšš*), and occasionally also lithognomics (*Aḥḡār*).¹

At the turn of the 11th c. in Andalus a few privileged individuals could perhaps procure an edition of IBN ṢABDIRABBIH's remarkable dispensatory, a manuscript of IBN ALHAYṬAM's systematic monograph on the specific properties, and perhaps even a copy of IBN ALĠAZZĀR's exhaustive *Zād*, but only a modest pandect such as *Natāʾiḡ* could offer a digested summa of all these fields of knowledge—and some extras too—in one single volume of noticeably reduced size and price.²

¹ The latter is not represented in a separate section in *Firdaws* (although it contains a non-negligible quantity of stone-related materials) but a lengthy excerpt from PSEUDO-ARISTOTLE's *Aḥḡār* is included in the edited version of the *Hārūniyyah* that might stem from MASĪH's original pandect. Even if it were a later addition there, the *Hārūniyyah* still represents the materialisation of the comprehensive *kunnāš* through its inclusion of fragments of *Ḥayawān*, *Ḥawāšš*, and *Aḥḡār* in addition to natural philosophy, physiology, dietetics, therapeutics, and pharmacopoeia. The medical encyclopaedia is indeed described as “the comprehensive handbook on a wide-ranging variety of medical topics organised in ways that make it easy to find the required information” by PORMANN and SAVAGE-SMITH 2007:10.

² Limiting the terms of comparison here to Andalusī texts is, needless to say, a rhetorical device intended to showcase the immediate context of *Natāʾiḡ*. It is not unlikely that our imagi-

With the only known exception of AZZAHRAWĪ's *Taṣrīf* (which stands in a category of its own but yet does not include a specific section corresponding to the standard *Ḥawāṣṣ* genre, nor does it discuss the principles of natural philosophy) no other Andalusī author appears to have attempted to offer such a product. As a matter of fact, while most other medicine-related epistemic genres are fairly well documented in the local tradition (from case histories to aphorisms, specific monographs on a particular category of ailments and all-encompassing therapeutics, pharmacognosy and medical and non-medical *Ḥawāṣṣ*), Andalusī physicians do not seem to have found a utility to the primitive *kunnāṣ*, which makes *Natāʾiġ* all the more exceptional.¹

On sections and treatises

With regard to the dynamics of the evolution of genres, the concept of *autonomisation* is also relevant to the diachronical analysis of several of the sections and even lower taxa comprised in our text. According to POMATA “[a] new genre may originate from the branching out and autonomization of forms of writing that had originally coexisted within the same textual matrix”.² What once was a textual subgenre may separate from its original vehicle and gain a circulation of its own.

Now, as I shall try to show below in Chapter 7 when analysing several minimal manifestations of particular dietetic subgenres, the problem lies often in the determination of the chronological priority of one form over the other, that is whether the phenomenon under scrutiny ought to be interpreted as a case of autonomisation or rather of deautonomisation. The monthly dietetic calendar included in *Nat* IV might be seen as a sort of spin-off of larger calendars (either monthly or seasonal) but it might also represent the last remnants of an older simpler format that came to be incorporated, by aggregation to other materials, into the classical *Parapegmata* and *Azmina / Anwāʾ*.

The chapter *Nat* I.4 *On the shelf-life of drugs*, in turn, might be interpreted as a particular type of (semi)autonomisation. It seems that the indications regularly appended to each formula in the early *Aqrābādīn* (already in Galenic and pseudo-Galenic pharmacopoeical texts) were at some point collected, perhaps by IBN SARĀBIYŪN himself, and formatted as a separate chapter. The process

nary buyers might have preferred to purchase SĀBŪR's pharmacopoeia, ARRĀZĪ's *Ḥawāṣṣ*, and AHRUN's *Kunnāṣ*, respectively, if given the opportunity to choose.

¹ While they do not actually qualify to be considered representatives of the traditional *kunnāṣ*, ZUHR's *Nuġh* (at least as originally planned) and even IBN ZUHR's *Aġdiyāh* ought to be given some attention in a history of this genre in Andalus.

² Cf. POMATA 2014: 13, who echoes “la marche d'autonomisation” proposed some years earlier by NICLOUD 2007 [n.v.].

of autonomisation would become complete then when this chapter gained a circulation of its own, only to revert to a non-autonomous format when AZ-ZAHRĀWĪ or ALʿILBĪRĪ or a previous source combined that table of shelf-life dates with additional materials on simple drugs to compile a chapter within a different *kunnāš*. The potential recursiveness of this process is shown by the semi-independent circulation of AZ-ZAHRĀWĪ's segment on the shelf-life of drugs.

In fact, most sections of *Natāʾiġ* are paradigmatic examples of deautonomisation of originally independent treatises from different thematic genres. There is no doubt about this origin in the case of *Nat* II.2, *Nat* III, and *Nat* V. The suspicion is strong regarding *Nat* IV too, although it might be the result of active compilation from more than one source, which could be also the origin of *Nat* I and *Nat* II.1. Even in the case of those apparently "original" compilations, some of the segments included in those sections stem from autonomous texts (cf. especially *On stones* in *Nat* I or the trophognostic treatise within *Nat* IV).

Nat I Apotheconomy

Describing the initial section on drugstore-related matters as the most original part of *Natāʾiǧ* may not be saying much given that *Nat* II.2, III, and V are essentially derivative, verging indeed on skilful copy-and-paste. Such an enthusiastic affirmation may be unnecessarily risky too, as some unexpected parallel or precedent might surface that would turn scholarly euphoria into disappointment.² There are, however, some objective elements in the section that, regardless of the ultimate origin of the information gathered in it, point towards authorial intervention to an extent that seems to be matched only by the proem to (and perhaps also the body of) *Nat* II.1. The plan itself of APOTHECONOMY betokens an unmistakable wish to collect materials from several different thematic genres and, although sources and parallels can be provided for most of the elements, the section as a whole appears nonetheless to be unprecedented, and even discontinued, in the Islamicate tradition. The presence of geolectal markers in the form of exclusive Andalusī lexical items and geographical references adds to the idiosyncratic nature of the text.

As the only description of *Natāʾiǧ* available until now is rather limited in scope and it also occasionally mischaracterises the contents of this section, some of the highlights provided hereunder have a corrective (but by no means polemical) intention. The notes collected here, as elsewhere in Chapters 4–8, are a

² I had myself long considered *Nat* II.2, with all its archaic features and its frequent divergences from standard practice, as a quite fascinating representative of idiosyncratic therapeutics—until I came across the description of ZUHR's expanded version/commentary of IBN MASAWAYH's *Nuǧh*, which showed that ALʿILBĪRĪ had basically reproduced the entire treatise of the Syro-Iranian physician. As shall be seen below (see Chapter 6) this fact does not make THERAPEUTICS any less interesting, but it certainly advises against the abuse of the qualification “original” at least as far as any of the sections comprised in *Natāʾiǧ* is concerned.

non-exhaustive extract from an on-going research that must eventually crystallise in a commentary on *Nat I APOTHECONOMY*, but until then all observations (and especially all conclusions) must be considered provisional.

4.1 Contents: neither pharmacology, nor medicine

Even in the absence of a prologue and despite the somewhat unsystematic arrangement of the textual units at the higher level of organisation, *Nat I APOTHECONOMY* is clearly delimited in its contours and shows undeniable thematic coherence. No pharmacology or pharmacognosy is to be found here, let alone any pharmacological theory, and even for the most basic knowledge of the degrees of each simple drug the author refers the reader explicitly to the books of the *Mufradah* genre. The items described in *Nat I.3.1* are not dealt with as simple drugs *qua* substances of medical interest (not one single benefit is mentioned in any of the twenty-one entries in that segment) but rather as marketable commodities.¹ This is even more noticeable in the case of minerals in *Nat I.3.2*, where medical applications are regularly mentioned alongside allusions to their use by alchemists, dyers, goldsmiths, lustre-painters, etc—which sounds very much like a list of potential buyers for each item.

This feature is congruous with the tenor of the whole set of chapters compiled by the author for this section: a rudimentary deontology for apothecaries in which medicine is explicitly off limits to the professional (= *Apoth 1.1*); a list of the instruments (mostly vessels) that can be found in a drugstore but not necessarily at the physician's (= *Apoth 1.2*); an extensive catalogue of products that a drug-seller ought to be able to identify, test for their quality, and market to a diversified clientele (= *Apoth 1.3*); finally a table of expiration dates for the drugs, both simple and compound (= *Apoth 1.4*). The relation of all this matters to medicine is as obvious as it is indirect (or rather tangential; after all, it is the apothecaries that supply physicians with their drugs) and the true business of the author is providing some guidelines and useful information for those running a drugstore—thence the coinage of *apotheconomy* as the most suited label

¹ Leaving the obstinate non-distinction between pharmacognosy and pharmacology aside (even DIOSCORIDES' exhaustive *Materia medica* has been defined as a representative of pharmacotherapeutics rather than of pharmacology, cf. TOUWAIDE 2020a: 303 n. 4), it is hard to agree with the overstatement that *Nat I* is a text “farmacológic[o] tanto a nivel teórico como práctico”, nor with the assertion about the author with regard to these simple drugs “de los que menciona, aunque muy brevemente, su morfología botánica junto con sus propiedades y aplicaciones terapéuticas” (CARABAZA and GARCÍA 2009: 385). From such a description one would expect a text of the *Mufradah* type or even a small-scale *ʿumdah*, but from a genre perspective *Nat I.3.1* ought to be compared, both in format and in contents, to IBN MĀSAWAYH'S *ʿIib* and in any case it cannot even be considered medical in a proper sense.

for this section.¹

In view of the autonomous nature of the subsections within *Nat I*, the analysis of their structure and contents is best conducted on an individual basis.

4.1.1 *Apoth 1* — *Deontology*

The very first epigraph (*qawl*) of *Natāʿiğ* provides a quite detailed description of the professional praxis and expected ethical behaviour of the apothecary (*ṣaṭṭār*) that sells the drugs (*ṣuqqār*).²

Paraphrase

Drug-sellers must resemble the physician in their good deeds, looking after the sick and their health as well as taking pains for their sake and choosing the best drugs for them. Utmost caution is required when compounding drugs, syrups, and electuaries lest anything should fall into them, and any vessels that are used in this trade³ must be cleaned and kept well protected, washed, and unsoiled. Absolute cleanliness is likewise required concerning the apothecary's clothes, which must also be simple and unadorned.⁴

The preparation of drugs is described as a prerogative of apothecaries, who must not let anyone mix the syrups and electuaries, nor boil the robs, or extract the oils, waters, and juices. If they need to rely upon someone else for this work,

¹ As far as I know it is a new word for an actually old concept. It is inspired by the classical precedent of οἰκονομία and by the analogous contemporary coinage 'bibliotheconomy' (which in English is more often referred to as 'library science') and I resort to it in order to avoid the anachronistic connotations of 'pharmacy' and 'pharmaceutics', which are both nowadays usually understood in a more restricted sense related to drug production.

² The exact same phrase (namely «العطار الذي يبيع العقار») is repeated in the epilogue to the pharmacognostic section *Apoth 1.3*. Some remarks on the figure of the apothecary or drug-handler are to be found in Chapter 9, while the semantic range of Arabic *ṣuqqār* (that here apparently includes also compound preparations) has been previously considered above in Chapter 3. Mark the intentional rhyme in the chapter title, which has necessitated a rather irregular use of the singular and might also imply a vocalisation *ṣaqqār* (well attested by lexicographers alongside *ṣuqqār*).

³ The word chosen here by the author to refer to drug-handling is *ṣināṣah*, which like Greek τέχνη means not only 'art, craft' but also more generally 'trade, profession' (cf. also afterwards *ṣināṣatu l'ṣitr* 'perfume-making, perfumery' in the epigraph on tin). The same word was used in thirteenth-century Mamlūk Cairo according to ALṢAṬṬĀR ALHĀRŪNĪ, who further reports that drug-trade («*ṣināṣatu ṣṣaydalah*») was known in his time as "the trade of perfumes and syrups" («*ṣināṣatu l'ṣitr wal'aṣribah*»), cf. *Minhāğ* Proem. (Q 36-7); also CHIPMAN 2010: 130.

⁴ For this sense of simplicity conveyed by Arabic *muḥtaṣar* (which is not included in CORRIENTE, DAA 157b *{XṢR}), see DOZY, SDA I 376b s.r. √خصر, particularly the phrase «مختصر الملابس والمطعم» from IBN ALḤAṬĪB's *Iḥāṭah*. The literal meaning 'short' might not be, however, altogether incongruous here (especially with regard to the sleeves).

the assistant must be someone on which they trust or otherwise he must be present by their side as they proceed.¹ Nothing destined to be drunk or eaten should be ever cooked in copper pots.

The ethical code of drug-sellers states quite emphatically that they should not be greedy and rapacious («*raġġiban ġammāṣan lilmāl*»)² because, if they are, they shall fail to fulfil their professional duty, since good advice and rectitude are the key to livelihood and the reason why people may rely on them and confide in them. The boundaries with the art of medicine («*ṣināṣatu ṭṭibb*») are clearly established as apothecaries should not apply their mind to it at all, especially as far as purgatives are concerned—and if requested,³ they must shy way and protest: “I only know how to sell drugs”.

Apothecaries must be compassionate, well-natured, generous, and friendly, as well as clever and ingenious. They must rise above vileness and should never mingle with children and women, nor concur with ignorant physicians in eating people’s money in an illicit way. They are expected to give an answer even to the poorest of the sick⁴ and to prepare whichever drugs they have without regard

¹ This would be the *ġulām* (also *ḥādim*) sporadically alluded to in the context of drug-making in medical texts.

² Although *ġammāṣ* is not recorded in CORRIENTE, *DAA* 102–103 *{JM’} and DOZY only gives *ġammāṣu ṣaskar* ‘recruteur’ and *ġammāṣu ṣṣalaf* ‘fourrageur’ in *SDA* I 216b s.r. √جـ, the epithet *ġammāṣun lilmāl* is transparent in its derivation and depicts quite vividly the attitude of a covetous drug-monger. The phrase is attested elsewhere without a negative connotation by ADDAHABĪ (d. 1374) in his depictions of caliph ALMANṢŪR (cf. *Tahdīb* I 250₂₋₃) and of ṢALĀḤUDDĪN’s brother sultan SAYFUDDĪN MUḤAMMAD (cf. *Ṣibar* III 167₁₀), where it seems to refer simply to wealthiness. It features also in ADDARĀQUṬNĪ’s report on the Ḥanafī master ṢABDURRAḤMĀN ADDĀBĪ: «*wakāna mutraṣan ġammāṣan lilmāl*» (cf. MUḤYĪDDĪN ALḤANAFĪ, *Muḍīyyah* II 376₈).

³ The verb *istafā* (here non-agentive *ustufiya*) is borrowed from technical legal parlance, where it means to ask for a decision of Islamic law (that is a *fatwā*) regarding a question, and as such it is used in Q 4:127: «*وَسْتَغْتَفُونَكَ فِي الْبَسَاءِ*». Thus ALḤILBĪRĪ attests a semantic extension to a non-juridical but still professional context that is not recorded in dictionaries of Andalusī usage (cf. CORRIENTE, *DAA* 390 *{FTW} and DOZY, *SDA* II 241 s.r. √فتو). An analogous meaning of *aftā* ‘to provide medical advice’ is attested in Andalus by ALḤĀṢIMĪ in the proemium to *Maġālis*: «*liḥannī raʿaytuḥun yuḥtūna fi kulli ṣillah*» (K 15₁) and «*wahiya fi lfatwā, walam ārahū yuḥtū bihā aḥadan illā atāhu ṣākirān walifaḍliḥi nāṣirā*» (K 16₁₀₋₁₁, in reference to the sessions transmitted from his master ATTAYMĪ). Then the substantive *fatwā* is found with the same meaning in *Maġālis* I.1.46: «*farubbamā kāna lilḥakīmi fi fatwāhu waġhun ḥaṣṣiya ṣalayka, falā taṣtanqīshu*» (K 106₁₈₋₁₉). There is in fact a Qurʾānic precedent for a more general meaning ‘to ask, to interrogate’ in Q 37:149 «*فَأَسْأَلْتَهُمْ أَلْرَبُّكَ أَلْبَنَاتُ وَالَهُمُ الْبَنُونَ*», which IBN ṢAṬIYYAH (d. 1146) glosses as: «*walistiftāʿu: assuʿāl*» in *Muḥarrar* IV 488₈. In the jargon of traditional Islamic jurisprudence a *fatwā* usual comprises both the question (*suʿāl*) and the answer to it (*ġawāb*).

⁴ The context suggests that it is preferable to read here «*masākina lmarḍā*» as “the poor (amongst the) sick”, where *masākin* would be the characteristically western plural of *miskīn* (cf. CORRIENTE, *DAA* 257a *{SKN} II, where both *masākin* and *masākīn* are documented in Andalusī texts) rather than “the houses of the sick” (*masākīn* being in that case the plural of *maskan*).

for the price of the ingredients, nor must they ever deny the sick the drugs that they have.

With the sick they must behave as the physician does. They must not complicate information about drugs, because in making it easy on the sick they fulfil their duty in this world and in the other. The author affirms, in fact, that he knows nothing else that brings a person closer to god than this art (meaning medicine) and its adepts if it is practised licitly and according to its traditional ways—just like he does not know anything else that removes someone farther from god and makes the fire (ie hell) more certain that this very same art if practised in ways other than the canonical ones.

A rhetorical question closes the epigraph: since there is no animal more excellent before god than humans (just like animals are more excellent than plants), how can there be any hope for the hereafter of anyone that should cause this most excellent animal to perish either by sport, injustice, or rebellion? The same goes, then, for whoever causes its death by ignorance of the medical art.¹

Commentary

The subject of professional ethics (*Berufsethik*) with regard to physicians is covered quite extensively in Islamicate literature,² but not so much in relation to apothecaries.³ One of the very rare observations in this respect is precisely an

¹ It seems as if the discourse had drifted from drug-handling towards medicine, as the profession (*šināḥ*) on which these closing remarks focus (namely medicine) is no longer the same profession with which it opened (ie apotheconomy).

² Cf. ULLMANN 1970: 223–227 and the references gathered there. The core the Islamicate medical *Berufskunde* was inherited from the Greek tradition and is particularly related to the Hippocratic oath, but it is only in the Islamicate period that it developed into a microgenre of its own (cf. DIETRICH 1982: 8–9). A more exhaustive comparison of *Deontology* with parallel texts on medical ethics and treatises of the *Miḥnah* type must be conducted elsewhere; in the meantime, cf. AṬṬABARĪ, *Firdaws* Proem (§ 4₈–6₂) and from Indian sources *Firdaws* VII.IV.3 (§ 558₂₀–559₇); the paradigmatic *miḥnah* in ARRĀZĪ, *Alḥāwī* XXIII.11 (H XXIII.1 288–304); the references to ALMAĠŪSĪ, *Kāmil* and to IBN YŪSUF ALKAḤḤĀL's introduction in DIETRICH 1982: 62 (the latter he could read only in the German translation published by HIRSCHBERG, LIPPERT, and MITTWOCH 1905: 205, but an edited text was made available by ALWAFĀʿĪ in 1987); also IBN SULAYMĀN's guide for physicians, of which only a Hebrew translation (*Mūsar ḥārōpāʿīm*) is preserved, cf. ULLMANN 1970: 224; then ABULḤASAN AṬṬABARĪ, *Buqrāṭiyyah* I.35 (B 31r 20 – 32r 25). On the subject of “professional ethics” in the context of drug-handling, cf. CHIPMAN 2002 and also CHIPMAN 2010: 55–75 (most particularly the primary sources discussed on pages 59–63).

³ There is, indeed, an apparent trend in the Islamicate tradition to develop micro-deontologies for many different professions and crafts that would deserve further exploration. The prologue of MUḤAMMAD ALKĀTĪB ALBĀĠDĀDĪ's cookery book, for example, is followed by details on the cook's instruments, cooking instructions, and other practicalities, including a paragraph that opens with the standard formula «yanbaġi liṭṭabbāḥi an yakūna ḥādiqan ʿarīfan biqawanini ṭṭabūḥ», cf. *Ṭabūḥ* Proem (B 116–9). In the geponic genre a separate chapter usually explains how

explicit comparison drawn between our text and a partially parallel segment within IBN ʿABDŪN's *Hisbah*,¹ which could actually be extended to include similar chapters on apothecaries and drug-handlers in the *hisbah* genre. Now, a closer look to the texts shows a quite radical difference, both in contents and in focus, between ALʿILBĪRĪ's deontology and the *muhtasib*'s concern with the superintendence of professionals working in the market and on the streets.

The market supervisor is charged primarily—often exclusively—with the control of falsification and adulteration (*ǧiṣṣ*, also *tadlis* 'deceit, concealing [of a fraudulent product]'), and the epigraphs on drug-makers are usually a mere catalogue (more or less exhaustive depending on each author) of counterfeits, whereas forgery and fraud are not even mentioned in *Deontology*.² This concern is already manifest in mid-tenth-century Qurṭubah in IBN ARRAʿŪF's manual, in which Chapter 15 on overseeing drug-makers («*annaḍaru fi lʿaṭṭārīn*») emphatically forbids mixing fine products with others of lower quality, as well as Indian commodities with local ones, and then selling them to those that know no better.³ Very much the same applies in the beginning of the 13th c. in Malaqah to ASSAQATĪ's *Hisbah* too, which opens with a mention of "the almost unnumbered falsifications of the dishonest" drug-handlers and includes a much more comprehensive list of ingredients (and on occasion detailed instructions too) with which genuine items were usually tampered.⁴

Nor do eastern representatives of this genre reflect any other major concern but counterfeiting and manipulation of the goods. The harmful, and sometimes even lethal, consequences of this practice may be explicitly expounded on oc-

to choose the best workers and it goes back to Byzantine sources. In Andalus it is represented by IBN WĀFID, *Agricultura IV De saber escoger los labradores* (C 816–14); also IBN ALʿAWWĀM, *Filāḥah* I.X.6 (B I 532₃–534₂₂).

¹ Cf. GARCÍA 1995: 194.

² Much attention is given to this subject, however, in *Natāʿiḡ* I.3.1, where virtually every entry in the segment includes a brief list of similar substances and products for which the item in question can be mistaken and which ought to be interpreted, in my opinion, in connection to market fraud (more on this below).

³ Cf. IBN ARRAʿŪF, *Hisbah* [15] (Ch 35_{1–13}). It is worth noting that all four examples provided by IBN ARRAʿŪF (namely box-thorn juice, aloe, ben, and aloe-wood) are included in *Nat* I.3.1 and that interchangeable substances are mentioned there for all three of them. A similar stress is laid by IBN ARRAʿŪF on stopping drug-handlers from mixing fresh items with old ones, which can likewise be connected to *Nat* I.4 *On the shelf-life of drugs* and even more particularly with ALʿILBĪRĪ's requirement that the apothecary should be able to distinguish good drugs from bad ones, and fresh (*ḥadīṭ*) drugs from old (*qadīm*) ones.

⁴ Cf. ASSAQATĪ, *Hisbah* VI في العطارين والصيدالين (Ch–C 61₄–70₆). As shall be seen below, the testimony of this Malaqī catalogue of *similia* is an invaluable piece of external evidence related to the Andalusī market of herbs and spices as it is remarkably coincident with the corresponding entries in *Nat* I.3.1.

casation, as in the case of IBN ALʔUḤUWWAH, who also adds that professionals of this trade ought to be not only knowledgeable and experienced but also faithful and god-fearing:

Maʔālīm XXV (L 121₄–122₈)

الحسبة على العطارين والشماعين
اعلم أن هذا الباب من أهم الأشياء التي ينبغي للمحتسب الاعتناء بها والكشف عنها،
ويجب على المحتسب أن لا يُمكن أحدًا من بيع العقاقير وأصناف العتر إلا من له معرفة
وخبرة وتجربة؛ ومع ذلك يكون ثقةً أمينًا في دينه، عنده خوف من الله تعالى. فإن العقاقير
إنما تُشتري من العطارين مفردةً، ثم تُركن غالبًا — فقد يشتري الجاهل عقارًا من العقاقير
معتدًا على أنه هو المطلوب، ثم يبتاعه منه مجاهر آخر فيستعمله في الدواء متيقنًا منفعته
فيحصل له باستعماله عكس مطلوبه ويتضرر به. وهي أضرت على الناس من غيرها، لأن
العقاقير مختلفة الطباع والأدوية على قدر أمزجتها: فإذا أُضيف إليها غيرها، أضرها — فخذ
يعتبر المحتسب على العطارين ما يغشون به العقاقير.

A far better parallel to our text is found, however, not in *hisbah* manuals but in the vademecum of an actual apothecary, namely thirteenth-century ALʔAṬṬĀR ALHĀRŪNĪ's *Minhāǧu ddukkān*.¹ One of the most salient features of *Minhāǧ* is, in fact, that it is exceptionally apothecary-focused, a text genuinely “aimed at private pharmacists rather than at hospitals”.² There Chapter I, which bears a rubric most reminiscent of *Deontology*, contains a “moralizing exhortation” addressed by the author to his son and a call for devoutness and piety very similar to IBN ALʔUḤUWWAH's in its wording.³

Minhāǧ I (A 15₁₋₆ | Q 4₂₂₋₂₆)

الباب الأول — فيما ينبغي لمن استصلح نفسه أن يكون متقلاً بعمل هذه المركبات أن يكون
على غاية من الدين والثقة والتحرُّز والخوف من الله تعالى أولاً ومن الناس ثانياً.

¹ Very little is known about this Jewish apothecary from Mamluk Cairo other than his full name (Abulmunā Dāwud b. Abi Naṣr Alkūhin) and that the text of *Minhāǧ* was completed in 1260. A full monographic study is devoted to that dispensatory by CHIPMAN 2010 (cf. especially the detailed analysis on pages 47–75), but a critical edition of the treatise based on all available manuscript evidence is still needed.

² Cf. CHIPMAN 2012. Its collection of recipes, on the other hand, is almost entirely derivative and borrows extensively from ABILBAYĀN's *Dustūr*.

³ Cf. *Minhāǧ* I (A 15₁₋₁₆₁₉ | Q 4₂₂₋₆₅). This opening discourse on professional ethics (a section “on the qualities and character of the aspiring pharmacist” as described in CHIPMAN 2010: 18) appears to be an innovation in the genre, as nothing alike is included in earlier dispensatories, nor in the most immediate source of *Minhāǧ* (that is IBN ABILBAYĀN's *Dustūr*)—which makes some striking parallelisms with *Natāʔiǧ* all the more interesting and worth exploring in the future.

اعلم، أيها الولد المبارك، وفقك الله لطاعته وأرشدك إلى مرضاته، أن الله تعالى خلق للإنسان عقلاً وجعله كالسراج يُفَرِّق به بين الخير والشرّ، والحسن والقيح [...].

Back to *Deontology*, given that a full comparative analysis of the chapter would be out of place in this general survey, I shall simply highlight a few passages for which a wider context (but so far no identifiable sources) can be provided. Thus, the reprobation of greediness and the exhortation to act in a generous and open-handed manner has deep roots in the Helleno-Islamicate tradition and is voiced in one way or another in texts of all thematic genres, from medicine to *ḥisbah*. For ALḤILBĪRĪ the basic idea appears to be that, as the task of the apothecary (let alone that of the physician) is one of high moral responsibility, so do the reward and, accordingly, the punishment go beyond mere chrematistic gain and loss—which is not far, in a sense, from the concept of “god-given remuneration” sometimes ascribed to HIPPOCRATES.¹ Although such a criticism is most often addressed to physicians,² ALḤATṬĀR ALHĀRŪNĪ provides a close match in the context of apothecaries when he exhorts his son not to be like those who “take people’s money unlawfully”:³

Minhāḡ I (A 16₁₀₋₁₇ | Q 5₂₃₋₆₃)

واعلم، يا ولدي، أنه لا ذنب أعظم من ظلم الناس وأخذ أموالهم بغير حق — لا سبياً من كان ضعيفاً أو مسكيناً، ولا عقل له ولا أمر ولا نهي، كمثل مريض قد أشرفت نفسه على الهلاك فيستدعي طبيباً حاذقاً عالماً ديباً، متحزراً في أقواله، طالباً وجه الله تعالى وثوابه فيما يقصده من مداواته، فيكتب له وقرة تطمئن بها جوارحه على أنها يكون بها برؤه مع عناية الله تعالى، واتكل فيها على الصيدلاني (أعني العطار)، فقد رجع الأمر إليك، فلا إثم إن فترطت إلا عليك. فهل تستحسن أنت لو كنت مريضاً أن تُفترط في حقك، وأنت تعلم أن هذا التفريط مؤدٍ إلى إتلاف المال والروح، وأنت تعلم قدر العقاب من الله تعالى على هذين الذنبيين.

On the religious-moral level *Natāʿiḡ* I.1 and *Minhāḡ* I are remarkably similar and one may also suggest that ALḤILBĪRĪ like

¹ Cf. a discussion of the salary of physicians including an apparently pseudo-Hippocratic passage «*lākinnā aḡrahū salā llāhi ʿazza waḡalla*» in IBN RIḌWĀN, *Taṭarruq* 246–254 (D 35) and also the commentary thereon in DIETRICH 1982: 62–63.

² In eleventh-century Andalus, for instance, ALHĀŠIMĪ classifies contemporary physicians into three groups, one of which is: «*firqatun ʿamilūhā ḥudʿatan liʿaḡdī amwāli nnās, id laysa lahum bilḥaqqi maʿrifah*», cf. *Maḡālis* Proem (K 13₁₁₋₁₂).

³ Cf. the observation that the apothecary was often viewed as “a scoundrel with money on his mind” in CHIPMAN 2010: 178.

Al-Kühīn al-‘Aṭṭār regards carrying out one’s duties as a pharmacist properly as a religious obligation, on the same level as belief. To him, the profession of pharmacy means constantly to fulfill the injunction to love one’s neighbor as one’s self. Neglectfulness on the pharmacist’s part is potentially life-threatening, thus such neglect would be a sin.¹

Then, the supremacy of medicine over all other crafts and sciences on the basis that its object is the most noble of creatures (here ALṬILBĪRĪ resorts to a somewhat different formulation of the classical anthropocentric topos) is such a cliché as to make any reference superfluous. It may be interesting, nonetheless, to quote in this regard a late-tenth-century Andalusī text that has only recently been edited. In his treatise on dangerous ailments IBN ALKATTĀNĪ (born ca 951) borrows ARRĀZĪ’s description of medicine as “the most excellent grace from God” as a corollary to his argument:²

Šağarah [40] (C-V 22₂₀-23₃)

لأنّ الجسد، إذا استفاد بقدر فضيلة الأنفس وشرف أحوالها، كانت فضيلة الطبّ على سائر الصناعات؛ لأنّ الجسد، إذا استفاد مزاجه معتدلاً، أفاد بذلك النفس قوّةً على الفضائل — فعند ذلك يعمل بما يوجبه العقل لتصل إلى ثواب بارئها عزّ وجلّ. وغاية الطبّ غاية نافعة في الحيات وبعد الوفات، وهي استفادة الصّحة التي بها تنال للنّجاة في آخرتنا والمعيشة في حياتنا أيّام مدّتنا.

¹ CHIPMAN 2012 (the idea of the apothecary’s task as a “religious duty” had been already suggested in CHIPMAN 2010: 74). On a side note, while it is possible that the Christian love-thy-neighbour doctrine may have had some influence in the early Islamicate medical tradition (cf. DIETRICH 1982: 62–63, with perhaps some overemphasis on the magnitude of this influence) and it certainly did provide a religious justification for such an attitude in the case of Christian physicians, there is no denying that the same moral code was equally (and independently) supported by Jewish and Islamic ethics too.

² Cf. IBN ALKATTĀNĪ, *Šağarah* [40] (C-V 23₅), quoting from ARRĀZĪ’s *Muršid*, for which cf. «*Medicina tota est Dei et res uenerabilis*» in *Aphorismi V* (V 97r^b 16). Even closer to *Natāʾiṣ* is as passage in IBN SULAYMĀN, *Mūsar hārōpāʾim* [3] “Therefore he whose work is to heal human bodies, which are the greatest of created things, should examine and study very accurately the sicknesses thereof, and should do his work with mature consideration and circumspection so that no ir retrievable blunders are made” (J 182). For the traditional formulation of this idea, cf. for instance AṬṬABARĪ, *Firdaws Proem* (§ 4₁₋₃).

It is worth noting, nevertheless, that unlike *Minhāġ* and most of the physician-centred deontological texts, which are mainly or even exclusively concerned with moral issues, ALZILBĪRĪ's *Deontology* deals also with praxis-related matters such as store management and even clothing. The mention of the latter may have been inspired by similar recommendations traditionally addressed to medical practitioners:¹

ABULḤASAN AṬṬABARĪ, *Buqrāṭiyyah* I.35 (B 31v 3–5 | L 32r 23 – 32v)

ويكون نظيف الثياب، طيب الرائحة، حسن النظافة على مقدار حالته، لا يكشف رأسه
ولا يطول شعره ولا يُرطّله، ولا يُذتل سراويله، ولا يُرخي تكّته، ولا يلبس شيئاً مشهوراً
من الثياب المشهورة.

الرائحة [الريحة | حالته | حال | تكّته] ثلته | المشهورة] - L.

In sum, *Deontology* appears to be an original reworking of traditional materials and it mirrors quite closely (and maybe intentionally) the standard deontological descriptions of the physician, which were also made extensive to other professions. The parallelism goes so far in fact, especially towards the end of the epigraph, that some of the attributions of the apothecary as described by the author would seem to encroach on medicine, yet both professions are explicitly and consistently distinguished from each other throughout the whole of APOTHECONOMY.

¹ For the qualification *muṣahhar* 'orné d'un bord d'une autre couleur' applied to clothes (as a sign of social distinction), cf. the references in DOZY, *SDA* I 795b–796a s.r. شهر.

4.1.2 *Apoth 2 — On instruments*

Immediately after the professional code of conduct there follows a short epigraph (*dīkr*) in which concise descriptions of the best-suited implements for each drugstore-related task are provided. In most cases information is limited to the material of which the tools should be made, with no explicit justification for the choice.¹

Paraphrase

Cooking pots (*qīdar*) may be made of stone, earth, or pot-stone (*birām*);² filtering ladles (*mağārifu ttasfīyah*), of cedar or tamarisk wood;³ jars and drinking cups, of glass or silver.⁴

¹ While mixing water («*miyāhu lhīl*»), which must be fresh and sweet) can hardly be considered a tool in any regard, the inclusion of cloths and bandages, as well as vessels, within a general category of ‘instruments’ is also documented in some Middle English texts, cf. NORRI 2016: 3–4.

² Cf. KĀS 2010: 420–421 for a refutation of the previous identification of *birām* with serpentine and for an alternative interpretation as the plural of *burmah* ‘pot’, which was actually already suggested by RUSKA 1937: 61 for *hağaru birām* ‘Topfstein’ (cf. also Syriac ܒܪܝܡ in PAYNE SMITH, *Thesaurus* 617, who translates it as ‘olla lapidea’ and suggests a Persian origin; the Syriac word is assumed to be the origin of Arabic *burmah* in BROCKELMANN–SOKOLOFF, *Lexicon* 131b). There are a few attestations of *birām* in the Arabic corpus that predate AṬṬABARĪ, *Firdaws* 616^{6–7}, as for instance the recipes copied by ATTAMĪMĪ from the *Book of perfumes* for caliph ALMUṬTAŠIM (d. 849) in *Ṭib* III.28 (Q 98^{10–11}) and from IBN MĀSAWAYH in *Ṭib* III.59 (Q 123^{13–14}); cf. also *Ṭib* III.79 (Q 138⁷). Further attestations are found in ALKINDĪ, *Iḥtiyārāt* 104r 6; ATTAMĪMĪ, *Muršid* XI (P 16r 8); ABULḤASAN AṬṬABARĪ, *Buqrāṭīyyah* II.1 (B 44r 16), IV.46 (B 152v 24); and most particularly ALḤAṬṬĀR ALHĀRŪNĪ, who appears to use *birām* as an adjective, eg in the phrase «*fī qīdrīn birāmin aw bayrūtī*» in *Minhāğ* II.119|120|125 (A 49²⁰, 50³, 51⁹ | Q 34^{11|20}, 35^{22–23}) and accordingly «*ilā lqīdari lbirāmi awi lbayrūtī*» in *Minhāğ* III.10 (A 58¹⁰ | Q 40^{14–15}). A special connection of the potstone with the Iranian region of Ṭūs is reported by AZZAMAḤŠARĪ in *Abrār* VI [27] (M I 173^{4–5}). In Andalus, besides *burmah* an adjective *burmī* (cf. CORRIENTE, *LDIQ* 27 *BRM for *qudayr burmī* in IBN QUZMĀN) and also a profession name *barrām* ‘potter’ are documented, cf. CORRIENTE, *LAPA* 14b *brm and also *DAA* 49a *{BRM}.

³ When intended for solving or boiling, in turn, ladles are elsewhere required to be made of iron, cf. «*mağrafatu ḥadīd*» ALKINDĪ, *Iḥtiyārāt* 96v 9 or in IBN BUḤTĪŠŪṢĪ, *Ḥayawān* X.7 (G 262⁴); likewise «*caço de hierro mağráfāt al ḥadīd*» and «*cuchara grande de hierro mağráfā quībīra min ḥadīd*» in *Vocabulista arávigo* 133a 8–9 and 162a 1 (= CORRIENTE, *LAPA* 145b *grf).

⁴ A plural form *kūs* (vocalised thus in P) is used here for ‘drinking glasses, cups’, for which a parallel «*kuʿs*» is documented in *Vocabulista in arabico* 291⁴. The most common plural in Andalusī Arabic appears nonetheless to have been rather *akwās* (cf. CORRIENTE, *DAA* 452a *{Kʿs}), while Moroccan Arabic has *kīsān* (cf. HARRELL, *DMA* 60b s.v. *kas*); yet a possible analogical influence of *raʿs* : *ruʿs* (*rās* : *rūs*) can be presumed. The collocation of «*قُدْر*» (spelled thus in the manuscript) alongside jars and drinking glasses is certainly striking, as nowhere is a meaning other than ‘cooking pot’ registered for this word. In this context *qadaḥ* would seem to make better sense, yet final *ح* is rarely (if ever) misread as *ر* in old style (and *qarʿah* ‘bottle’ can be ruled out on the same grounds). Perhaps «*قُدْر*» here (the vocalisation *qīdr* of the manuscript is not

A more detailed subclassification is introduced for containers: vessels for ointments must be made of copper and lead; those for collyria, of glass; cold oils ought to be preserved in thick earthenware and stone-made containers, whereas hot oils should be kept in glass.

In the case of sieves and mortars, the instructions focus rather in their use: nothing oily must be sifted in sieves of hair and silk; mortars must be immediately washed and dried lest they rust.¹

Commentary

References to instruments and vessels (most frequently with an explicit mention of the material of which they are made) are ubiquitous in the medical corpus and they are usually encapsulated in a simple adnominal element² (although they may sporadically expand into a whole sentence),³ but nowhere else does this information take the form of a specific chapter.

necessarily correct) reflects a plural of *qadarah*, which is defined as a 'small bottle' («*alqārūratu ṣṣaġīrah*») in IBN MANḌŪR, *Lisān* V 80b 13.

¹ From which it must be inferred that ALḌILBĪRĪ refers to metal mortars (cf. the passage from ABULḤASAN AṬṬABARĪ's *Buqrāṭīyyah* quoted below, in which iron and copper are mentioned), unlike the stone mortars mentioned by ATTAMĪMĪ in *Ṭib* III.100: «*fi mihrāsi ḥiġāratin aw fi ġāwūn*» (Q 155, recipe for an apple juice from IBN ABĪ YAṢŪB) and *Ṭib* III.191: «*fi mihrāsin naḍīfin min ḥiġārah*» (Q 204₉₋₁₀), and also different from the wooden ones («*mahārīsu lṣūd*») that AṬṬĪĠNARĪ recommends for grinding saffron in *Zuhrah* LX (G 488₁₂₋₁₃).

² In Greek the specification of the material is reflected syntactically most often by an adjective (cf. «*ἐν καινῇ χύτρᾳ κεραμεῖᾳ*» in *Mat. med.* I 144₁₅, «*καὶ ἀποτίθεται ἐν ὀστρακίνῳ ἀγγείῳ*» in *Mat. med.* II 6₇₋₈) and occasionally the substantive can be even dropped (cf. «*καὶ βάλῶν εἰς χαλκόν*» in *Mat. med.* I 52₂); see additional examples in the quote below. In Arabic this material specification is most commonly expressed through annexation (eg *mihrāsu nuḥās*) or through a *min*-prepositional phrase (eg *mihrāsun min nuḥās*).

³ Cf. ABULḤASAN AṬṬABARĪ, *Buqrāṭīyyah* III.25 on mortars (here *hāwāwūn*; mark also *mis* for *nuḥās*): «*waḡḡwadu lhāwāwīni llati tustaṣmalu fi ḍimādi hādīhi lṣillah waḡi taḥrīki ḥuqanīhā: mā kāna ḥadīda awi lmis*» (B 93r 24–25); or MARCELLUS, *De medicamentis* XIII.20: «*Quod dentifricium necnon et alia omnia supra dicta in pyxidibus ligneis aut corneis debent recondi*» (N–L 230₁₀₋₁₂). In view of these and other similar examples, *On instruments* may represent a convenient compilation of instructions gleaned from several medical texts and it would perhaps parallel *Nat* I.4 *On the shelf-life of drugs*, which was also probably compiled from scattered remarks on the expiration date of several compound drugs.

The remarks included by DIOSCORIDES' in his prologue may have served as an inspiration or as a model, but certainly not as a source. They are, moreover, limited exclusively to containers:

Materia medica 1 (WI 5₅₋₁₃)

ἀποτίθεσθαι δὲ καὶ ἀνθη καὶ ὄσα εὐ-
ώδη τυγχάνει ἐν κιβωτίοις φιλυρίνοις
ἀνοτίστοις, ἔστι δ' ὅτε καὶ ἐν χάρταις
ἢ φύλλοις χρησίμως περιδεῖται πρὸς
συμμονήν τῶν σπερμάτων. πρὸς δὲ τὰ
ὕγρα φάρμακα ἀρμόσει ὕλη πάσα ἐξ
ἀργύρου ἢ ὑάλου ἢ κεράτων γεγενη-
μένη, καὶ ὀστρακίνη δὲ ἢ μὴ ἀραιὰ εὐ-
θετος, ξυλίνων δὲ ὄσα ἐκ πύξου κατα-
σκευάζεται. τὰ δὲ χαλκὰ ἀγγεῖα ἀρ-
μόσει πρὸς τὰ ὀφθαλμικὰ ὑγρά καὶ
ὄσα δι' ὄξους ἢ πίσης ὑγρὰς ἢ κε-
δρίας σκευάζεται· στέατα δὲ καὶ μυ-
ελὸς ἐν κασιτερίνοις ἀποτίθεσθαι.

Ḥaṣāʾiṣ 1 (P 2v 10–15 | T 11₅₋₁₄)

وليخزن الزهر وكلّ ذي قضبان من الأدوية
في صناديق الخشب الذي يُقال له "فيلورا"،
وليكن غير نديّ؛ ورتباً كان شدّها في
القراطيس نافعاً في بقاء بزورها.
وأما الأدوية الرطبة، فإنّه يصلح لها كلّ عنصرٍ
متكاتف، مثل ما يُبيأ من الفضة ومن الزجاج
ومن القرون. وقد يصلح أيضاً لهذه الأدوية
من الخزف ما لم يكن متخلخلاً؛ ومن أواني
الخشب ما يُعمل من الخشب الذي يُقال له
"بكسيس". وأما الأدوية الرطبة التي تُتخذ
للعين، فإنّه يصلح لها من الأواني ما يُعمل
من نحاس، ويصلح أيضاً للأدوية التي تقع
فيها خلّ أو زفت رطب أو قطران.
وينبغي أن يُخزن المتخ والشحم في أواني متخذة
من الأنك.

وليخزن [وليخزن P (P²) | فيلورا] قَبْلُورًا P,
هلورا T | شدّها [شرکا T | نافعاً] نافع P | بزورها
بزرها T | لها ... لهذه [لهذه T | بكسيس] فكسس
.T

As in the case of the preceding deontological section, analogous catalogues of implements are well documented and have been analysed in the fields of alchemy and agriculture,¹ but little attention has been paid, with the obvious exception of surgery, to the instruments of daily use in the medical and paramedical arts.²

¹ The traditional tool set of the alchemist has been fairly well known since WIEDEMANN's groundbreaking survey and RUSKA's several papers on the subject (cf. WIEDEMANN 1909; RUSKA 1923: 137–139, 1937: 54–63). For a commented list of the tools mentioned in Andalusī geoponic literature, cf. GUARDIOLA 1990 and 1992.

² The "pharmacological apparatus" mentioned in IBN ATTILMĪD's *Aqrābādīn* and in SĀBŪR B. SAHL's lesser dispensatory is summarily listed and translated, without further comment, in their respective editions by KAHL 2007: 34–36 and 2009: 15–16, respectively. However, the field of what could be called in modern terms "quality control or inventory management" (CHIPMAN

On the lexical level, at least one item in the list (namely *banānīs*) is unmistakably western and perhaps the same geolectal origin might be ascribed to the variant *baqš* 'box; boxwood' (*Buxus sempervirens* L.),¹ while for some of the implements this might be one of the earliest written attestations in Andalus.² There is furthermore some information to be gleaned for the history of pottery and metalwork techniques from the mention of such items as lustred (*mulawwalh*) *zubdī* porcelain or silver-coated iron. Some of these mentions of *realia* must be combined with the abundant evidence provided by *Apoth* 3.2 *On stones* and can—or rather should—be checked not only against the written corpus³ but also against archaeological evidence from a words-cum-objects perspective.⁴

2010: 62) in the Islamicate tradition remains underexplored.

¹ For both *banānīs* and *baqš*, see the analysis of geolectal markers in Chapter 9.

² That may be the case for *zubdī* 'cream-coloured [porcelain]', which is not included in CORRIENTE, *DAA* 225b *{ZBD} (where only botanical meanings are recorded for *zubdī* and *zubdiyyah*). All the references to *zubdiyyah* gathered by DOZY in *SDA* I 578b s.r. $\sqrt{\text{دبذ}}$ are of eastern origin, except perhaps for a gloss on manuscript R of IBN ĠANĀH'S *Uṣūl* s.r. $\sqrt{\text{دبذ}}$ in which Hebrew קערה is equated to Arabic «*qaṣṣah wazubdiyyah*» (N 640 n. 38). In a pharmacopoeical context, cf. SĀBŪR B. SAHL, *Ṣaḍudī* XVI [251]: «*zubdiyyatun fāriḡah*» "an empty shallow bowl" (K 104₃₋₄ = English text 213). On the other hand, the widely attested *sukruḡah* / *sukraḡah* (of Persian origin, cf. STEINGASS, *CPED* 688 s.vv. $\sqrt{\text{سكروچ}}$ *sukraḡah* and $\sqrt{\text{سكرو}}$ *sukra* / *sukara* / *sukkara*; also VULLERS, *LPLE* II 309b s.vv. $\sqrt{\text{سكروچ}}$ and $\sqrt{\text{سكرو}}$ / $\sqrt{\text{سكرو}}$ / $\sqrt{\text{سكرو}}$) may be missing from *DAA* 256b by mere chance, but no western reference is registered in DOZY, *SDA* I 668b s.v. $\sqrt{\text{سكرو}}$ either. Even beyond the Andalusī-Maḡribī area the *maṣḍar* $\sqrt{\text{مضرب}}$ here seems to predate the first lexicographic record of $\sqrt{\text{درب}}$ as a verb (*ḍariba bihi* = *laṣiqa*) in ALFĪRŪZĀBĀDĪ, *Qāmūs* 111a 8–9 (thence AZZABĪDĪ, *Tāǧ* III 298a 6–7), which is missing from IBN MANDŪR'S *Lisān*.

³ The instructions for the preparation of a syrup involve filtering the mixture with a linen cloth in IBN ABILBAYĀN, *Dustūr* V.10 (S 488); linen cloths are also required for fastening the limbs during bloodletting in IBN ALĠAZZĀR, *Zād* II.15 (B–K 330₁ | T 174₁₄₋₁₅) or for wrapping up the tongue against nosebleeds in ABULḤASAN AṬṬABARĪ, *Buqrātīyyah* VI.35 (B 185v 1). The bindings for bone-setting ought to be likewise made of linen according to IBN SĪNĀ, *Qānūn* IV.v.2.7 (B III 201₂₈₋₂₉). As for trays, a glass tray («*sukruḡatu zuǧāǧīn lahā ṭabaq*») is used for the preparation of a fragrance (*ṣamūm*) named «*زماور د*» (cf. *bazmāvard* in VULLERS, *LPLE* I 235b and STEINGASS, *CPED* 183) in ATTAMĪMĪ, *Ṭīb* III.183 (Q 198₁₂₋₁₃, a recipe borrowed from IBN ALṢABBĀS' book).

⁴ Such a necessary combination of philology and archaeological evidence is advocated by ANDORLINI 2012: 245 and can yield interesting results. To give just two examples: small flasks made of glass like those recommended by ALḠILBĪRĪ are "perhaps the most consistently encountered glass containers in the Islamic world" (CARBONI 2001: 106) and the assumption that they actually were containers for collyria seems to be substantiated by such findings as a flask from Sinai that still retained some *kuhl* and was complemented with a small copper rod (SHINDO 1993: 302–304, figures 7–9). In Andalus, a small tubular receptacle in green blown glass from the 13th century found in Hiṣn Yakka (contemporary Yecla, Murcia) may well represent the typical *unguentarium* also described by our author (RUIZ 2010: 15).

4.1.3 *Apoth 3* — *On simple drugs*

The same concise (almost laconic) style displayed in *Deontology* and then in *On instruments* is maintained throughout the anepigraphic subsection on simple drugs. The overall structure of the text (which comprises two, perhaps originally three, subdivisions and shows at least one substantial lacuna) has been already analysed and the overview that follows shall focus on the actual contents.

*Apoth 3*₁ — “*On aromatics*”

In the text transmitted by P the segment on simple drugs opens with a series of nineteen simple aromatic substances (one of them, namely *algalia bodies*, can be rather a compound product) plus an additional two items (*balsam oil* and *naphtha*) that may have originally belonged to a different subsection since, as has been previously shown, at least one folio is missing from the manuscript:¹

1 musk	7 nutmeg	13 aloe	19 <i>flemingia</i> (<i>wars</i>)
2 ambergris	8 cubeb	14 asafoetida	
3 camphor	9 sandalwood	15 tincar	
4 ben	10 cinnamon	16 rhubarb	
5 agarwood	11 spikenard	17 <i>algalia bodies</i>	* ₂₀ balsam oil
6 clove	12 box-thorn juice	18 saffron	* ₂₁ naphtha

¹ Of the names chosen here for the commentary of the Arabic text only a few require some justification. My choice of ‘box-thorn juice’ is an attempt to reflect the original *ḥawlān* that may be essentially identical to but is nonetheless lexically different from the usual *ḥuḍaḍ* (≡ λύχιον, both the plant and its sap after elaboration), cf. the commentary in BOS, KĀS, LÜBKE, and MENSCHING 2020: 923 to IBN ĠANĀḤ, *Talḥiṣ* [786]. Following the general criterion of adhering to traditional nomenclature in the absence of better options, ‘tincar’ is preferred here to ‘borax’ so that the original distinction between *tinkār* (which in the pharmacognostic corpus usually corresponds to χρυσόκολλα) and *bawraq* can be maintained also in English; cf. in any case KĀS 2010: 345–349 for *tinkār*, and KĀS 2010: 325–337 for *bawraq*. Then, ‘*algalia*’ / ‘*galia*’ has some marginal currency in Latinate English (cf. מליח translated twice as “galia moschata” in GOTTHEIL 1931: 421, 430). Fortunately ‘naphtha’ has in English as wide a semantic range as Arabic *nift* / *naft*, so that finding this substance described as a compound shall not shock a contemporary reader. On the other hand, for Arabic *wars* I follow BOS, KĀS, LÜBKE, and MENSCHING 2020 in their choice of ‘flemingia’ as an unambiguous and quite convenient term that happens to be also botanically accurate.

If the first half of the catalogue is considered, the basic criterion for inclusion in the series would seem to be a fragrant quality of the items, which can be labelled as aromatics (Arabic *afāwih*).¹ However, *Apoth* 3.1 includes also a few items (such as aloe, box-thorn juice, and rhubarb) that are not usually (or ever) mentioned amongst the ingredients of perfumery and even some that are quite the opposite of sweet-smelling (that would be the case of asafoetida and tincar). That these substances cluster in the second half of the extant sequence might reflect the author’s compositional strategy (following, perhaps, the traditional order found in perfumery books and then adding several other items not found in that genre), but the presence of saffron and flemingia towards what is now the end of the series suggests a more eclectic work of compilation.

In any case, a general rubric *On aromatics* for the whole subsection seems unwarranted and by the same token *On herbs* should be disregarded given that the sequence contains at least one substance of animal origin (musk)² and another one that is either mineral or artificial (tincar, which actually has its own entry also in the following subsection *On stones*). As discussed above, I am currently unable to find a satisfactory label in English that might encompass all these items,³ and even the provisional title *On simple drugs* chosen here for the whole segment is rather misleading, since neither the items comprised in it are

¹ In the Islamicate tradition some authors distinguish between essential sources or principles (*uṣūlu ṭīb* or simply *uṣūl*) and generic aromatics (*afāwih*). According to IBN MĀSAWAYH, for instance, only musk, ambergris, wood, camphor, and saffron are to be considered *uṣūl*, whereas the remaining twenty-four species in his catalogue he classes as *afāwih* (cf. IBN MĀSAWAYH, *Ṭīb* 94–10). In Qayrawān IBN ALĠAZZĀR is more inclusive with regard to essential aromatics, which he calls also *ummahāt* and classifies into hot (musk, ambergris, wood, saffron) and cold (camphor, sandalwood, roses, and tree-moss) in his own *Ṭīb* 38_{6–10}. In a more medicine-focused context, in turn, less specific taxonomic labels are prevalent and all these fragrant substances are comprised in one single all-encompassing category in AṬṬABARĪ, *Firdaws* VI.I.15 في أفأويه الطيب (S 397_{12–398}); also in AZZAHARĀWĪ, *Taṣrīf* XIX.A.1 في ذكر عناصر الطيب (S II 38_{27–39}), where the term *afāwih* is used as a strict synonym for the exact same items in the following chapter *Taṣrīf* XIX.A.2 في تجنيس هذه الأفأويه وقواها ومنافعها وجيدها من رديئها (S II 39_{2–41}).

² Also ambergris according to the tradition that considers it to be a waxy blackish substance expectorated by some sea beast (nowadays identified as the sperm whale or cachalot, *Physeter macrocephalus* L., cf. particularly RIDDLE 1964 and DANNENFELDT 1982) and washed ashore by the waves. That ambergris was the excrements of some sea beast is only one of the three then-current explanations for the origin of ambergris recorded by IBN MĀSAWAYH in *Ṭīb* I.2 (S 12_{12–13} | L 34v 2–4 | P 16v 4–6) and it is the one favoured by IBN ḤIMRĀN, cf. IBN SAMAGŪN, *Ġāmiʿ* 1–1 عنبر (S III 121_{7–9}), and also IBN ALĠAZZĀR, *Istimād* II.17 (S 49_{14–15}). In early Andalus a curious hybrid explanation is noted down by IBN ĠULĠUL, who defines ambergris as the excrement (*raġiʿ*) of a sea beast that grazes on the ambergris-herb (*ḥašīṣatu lʿanbar*), cf. *Tāminah* [34] (G 18_{4–7}).

³ Other than “Some twenty-odd things that you can find at the apothecary’s that are neither stones (except for tincar, which can be either mineral or artificial) nor compound medicines (except for naphtha, which is indeed a compound)”.

exclusively simple, nor are any medical uses mentioned for any of these substances.

As for the contents of *Apoth* 3.1, the text is quite well organised at the micro-level and the pattern of the entries is remarkably uniform. It consists of:

NAME — Invariably repeated after the rubric. Only occasionally an identification or a synonym are provided. Thus, musk is defined as the blood of the gazelle or alternatively as its pod (*naḡḡah*), while naphtha is described as “an oil made of frankincense, sandarac, and sulphur”. Synonyms are registered only for cubeb (which is said to go also by the name *ḡabbu lḡarūs* ‘bride’s-seed’) and for nutmeg (which is known as *ḡawzu ṡṡīb* ‘perfume-nut’).

SPECIES — How many varieties of the item there are and which they are, the classification being telegraphic in style and mostly geographic or chromatic in criterion. Varieties are consistently referred to as *aḡnāf* except for ben, for which *anwāf* is used.

QUALITY TEST — How to distinguish a fine, pure, item from lower or tampered ones. The standard formula involves quite characteristically the word *ḡalāmah* followed by a qualification (*alḡālīḡ/attḡayyib/alfādīl/alḡayyid*) but never *imtiḡān* or *iḡtibār*, which are however the most frequently used terms in parallel texts on drugstore commodities.

SIMILIA — A catalogue of the substances that most closely resemble the item in question. These *aḡbāh* or lookalikes are here typically introduced by the formula *wayuḡbiḡu*.

In the particular case of musk and ambergris a way of preparation is also specified and both are said to be dissolved with some oil, probably for the confection of perfumes or as an ingredient of medical drugs, but the text is silent regarding the exact use of all these substances.

Commentary

There is not much to discuss in this cursory survey as far as nomenclature is concerned, nor with regard to the sparse synonymy that only applies, as previously noted, to cubeb (*Piper cubeba* L.f.) and nutmeg (the fruit of *Myristica fragrans* Houtt.).¹ The identification proposed by ALZILBIRĪ for musk and especially for naphtha are, in turn, more telling. The two alternative explanations provided for the quiddity of musk (namely that it is either gazelle blood or its pod or follicle [*nafiḡah*, perhaps a misreading of *nāfiḡah*]) are both well documented since the earliest texts in the corpus and their inclusion here may reflect that the author (or his source) is not badly educated in his trade.²

From the description of naphtha (*nift* / *naft*), on the other hand, it is obvious that he does not have in mind the substance usually designated by this name in the Helleno-Islamicate tradition (that is $\nu\alpha\phi\theta\alpha \equiv$ نפט) but rather an artificial preparation.³ Even if naphtha could be distilled in order to obtain a white variety, in the medico-pharmacognostic tradition it is presented almost

¹ For *habbu lʿarūs* ‘bride’s seed’ as synonym of *kubāb* (itself a borrowing from Persian *kabāb-i čini*, cf. VULLERS, *LPLE* II 789a), cf. IBN ʿIMRĀN *apud* IBN SAMAĠŪN, *Ġāmiʿ* كـ 31 كابة (S II 110₇), also *Ġāmiʿ* 61 حبّ العروس (S I 242₁₀); IBN ALĠAZZĀR, *Istimād* 1:33 كابة (S 19₁₆), also in his *Buḡyah* according to IBN ĠANĀḤ, *Talḥiṣ* [490]. In Andalus, for IBN ALHAYṬAM ALQURṬUBĪ “bride’s-seed” is a synonym of the greater cubeb (cf. IBN SAMAĠŪN, *Ġāmiʿ* II 110₉₋₁₀), and the same opinion seems to have been held by IBN ʿABDŪN (cf. IBN SAMAĠŪN, *Ġāmiʿ* I 242₁₃); no distinction is made, in turn, in IBN ĠULĠUL, *Tāminah* [11] (G 10₁₁). This synonymy is almost universally mentioned by later Andalusī authors, cf. references in DIETRICH 1988: II 394 n. 5; also BOS, KĀS, LÜBKE, and MENSCHING 2020: 660. As to *ḡawzu ṭṭib* ‘perfume-nut’ for nutmeg, cf. already AR-RĀZĪ, *Alḥāwī* XXII 86a 1, whence IBN ĠANĀḤ, *Talḥiṣ* [192]; AZZAHRĀWĪ, *Taṣrīf* XXIX.A s.v. جوز بو (S II 420₂₅₋₁₆); but no synonym had been recorded in IBN ĠULĠUL, *Tāminah* [10] (G 10₉₋₁₁).

² Musk is identified as blood from the musk-gazelle’s navel by IBN KAYSĀN, *Muḥtaṣar* 189₆–190₂ (but not by IBN MĀSAWAYH in *Ṭib*). As a substance that collects in the pod (*nāfiḡah*) of an eastern gazelle-like animal, in turn, in an oft-cited passage in ALMASʿŪDĪ, *Muriḡ* I 158₁₃–159₂₂, and also in IBN ALĠAZZĀR, *Istimād* 2:2 مسك (S 40₁₀₋₁₂). As the animal’s navel (*surrah*), on the other hand, by IBN ʿIMRĀN *apud* IBN SAMAĠŪN, *Ġāmiʿ* 1 مسك (S II 276₂₀–277₇); and as the pod itself by IBN ĠULĠUL, *Tāminah* [33] (G 17₉₋₁₃). For the related legal question on the uncleanness of this product, cf. an interesting reference in IBN ʿABDIRABBĪH, *Ṣiqd* VIII 48₈₋₉.

³ Cf. DIOSCORIDES, *Mat. med.* 1:73 $\nu\alpha\phi\theta\alpha$ (W I 73₃₋₇) \equiv *Ḥaṣāʾiṣ* 1:73 نפט (P 19r 14–23 | T 77₁₂–78₁₀) and, as a convenient collection of passages, IBN SAMAĠŪN, *Ġāmiʿ* ن 11 نפט (S III 41₂–43₂) and IBN ALBAYṬĀR, *Ġāmiʿ* ن 29 نפט (B IV 182₁₅₋₂₅). For the parallel Syriac ܢܦܬܐ , cf. PAYNE SMITH, *The-saurus* 2411; and also BROCKELMANN–SOKOLOFF, *Lexicon* 930a, where an origin for the word is found in Akkadian *napṭu*. The best survey of the presence of naphtha in the Islamicate tradition is provided by KĀS 2010: 1087–1094. It is worth noting here that according to IBN ALḤAṢṢĀʿ naphtha (which he describes as a moisture flowing from the ground) was actually unknown in the west, cf. *Mufid* [816] نפט (C–R 88₆). This may explain why in an essentially non-bookish context such as the one reflected by *Nat* I.3 naphtha refers exclusively to the product actually available in the Andalusī market whereas elsewhere (particularly in *Nat* II.2 and in *Nat* III) the same word represents an item (namely natural naphtha) inherited from the written tradition.

everywhere as a natural product. The naphtha described by ALʿILBĪRĪ, on the contrary, is a mixture of frankincense (*kundur* ≡ λίβανος, the resin of several species of *Boswellia*, particularly of *Boswellia sacra* Flueck.), sandarac (*sandarūs*, another well-known resin),¹ and sulphur.²

Then, turning to the second segment of the entries (ie the catalogue of varieties of each item), one of the most remarkable features of the subsection (which is shared also with *On stones*) becomes manifest: ALʿILBĪRĪ's classification is well-informed and at the same time quite often at variance with most perfumistic and also pharmacognostic sources. Even if *Nat* 1.3.1 is by no means exhaustive when compared to earlier catalogues of aromatic substances (here “only” three kinds of musk, camphor, and agarwood are distinguished, and “just” five different colours of ambergris are alluded to), its author most certainly knows his stock. In addition to such standard items as Tibetan musk or Qumārī wood, he is in a position to name the three traditional but often mistransmitted origins of camphor imported from south-eastern Asia, namely Sarbuzī, Rabāḥī, and Fansūrī.³ Furthermore, he also lists such odd varieties as the “pistachio amber-

¹ A borrowing from Syriac ܘܨܝܢܘܘܬ (itself an unexplained development of ܘܨܝܢܘܬ ≡ σανδαράχη, cf. PAYNE SMITH, *Thesaurus* 2674 and BROCKELMANN-SOKOLOFF, *Lexicon* 1022–1023), Arabic *sandarūs* is given by IBN ʿULĠŪL, *Tafsīr* 1:20 (G 137 | D 1812) as the equivalent of DIOSCORIDES' κάγκαμον, which had been left untranslated by IŞTIFAN in *Ḥašāʾiṣ* 1:21 قنقمو (P 7v 22 – 8r 3 | T 315–324) ≡ *Mat. med.* 1:24 (W I 288–17). This identification had been reported already by ABŪ ʿUMAR and ḤUBAYŞ according to a gloss on the right margin of *Ḥašāʾiṣ* P 7v. A disagreement between ḤUNAYN, who identified κάγκαμον as *sandarūs* and the Arabic translator of PAUL OF AEGINA, who appears to have rendered it as lacquer (*lakk*) is echoed there in a second marginal note at the bottom of the folio. If Greek κάγκαμον referred to a myrrh-like gum imported from Arabia according to DIOSCORIDES («δάκρυδόν ἐστὶ Ἀραβικοῦ ξύλου, σμύρνη ποσῶς ἑοικὸς»), in the west *sandarūs* was mainly the name of the resin of the cypress-like *Tetraclinis articulata* (Vahl) Mast., the sandarac tree, native to north-western Africa. Some eastern imports must have been known by the same name, however, as reported by IBN ŠĀLIḤ 1813, who distinguishes between Hindī and Sabtī (ie from Saptah/Ceuta) sandarac. An identification of *sandarūs* with a variety of *kārubā* had also reached Andalus through CLEOPATRA's *Cosmetica*, cf. IBN SAMAGŪN, *Ġāmīf* كجربا 43–ك (S II 15121–1521); abridged in IBN ʿANĀḤ, *Talḥiṣ* [462].

² The closest parallel for ALʿILBĪRĪ's artificial naphtha is a fourteenth-century recipe noted down by ALQALALŪSĪ in *Tuḥaf* II.v.20 صفة النفط (M 6017–21), which contains sulphur and frankincense but no sandarac; nevertheless sandarac enters there the formulas for two products that burn over the surface of water, cf. *Tuḥaf* II.v.22–23 (M 616–624). The mention of sulphur (*kibrūt*) in the preparation of this naphtha is of special relevance, for it lends more strength to the emendation of «النفوط» as «النفوط» in the entry for sulphur in *Apoth* 3.2 (see below).

³ The first one, Sarbuzī (from the Indian island of Sarbuzah, cf. ALḤAMAWĪ, *Buldān* III 206b 2–3) is exceptionally well preserved in P, which reads «الشريذي». For the second variety of camphor P shows an ambiguous reading «الرّاجي» and the corpus is indeed divided between *Rabāḥī* and *Rayāḥī*, with a clearly higher frequency of the former, cf. IBN MĀSAWAYH, *Ṭib* (S 1411 | L 36r 6); ALKINDĪ, *Ṣiṭr* 509, 5417, 557; ATTAMĪMĪ, *Ṭib* 783, 816, 862, 909, 915, 16518; IBN ALĠAZZĀR, *Istimād* S 10310–11 (but «رابع» in M 43r 24–25) ≡ «*rabai*» in *Fiducia* M 114rb 8–12; IBN SĪNĀ, *Qānūn*

gris” (which is virtually unattested),¹ Ḥaḍramī aloe,² and Baṣrī box-thorn juice. There is, moreover, a possible mention of Genovese («جنوي») saffron that shall be analysed separately, as its presence here would pose an important problem of chronology (see Chapter 9).

This combination of diversity and occasional divergence from standard bookish lore is not restricted to the items catalogued here in *Apoth* 1.3.1 but surfaces again in the discussion of minerals, and as I shall suggest below, at least some of these qualifications would seem to be reflections of the real market rather than mere epithets inherited from written sources.

On the other hand, information on available varieties is followed in each entry by the quality assessment, which relates, no doubt, to the requirement voiced later in this section that the apothecary should be able to distinguish good products from bad ones. The key word in this segment of the entries is *ṣalāmāh* ‘that by which one knows’ (ie a characteristic or distinguishing feature), which parallels, but does not exactly coincide with, the much more frequent terms ‘test’ (*imtiḥān* or *iḥtibār*) and also ‘selection’ (*iḥtiyār*). A precedent for this technical formula can be located in the early corpus, but its systematic use throughout this segment is quite particular to *Natāʾiḡ*.³ It seems, in-

I 336₂₇; ALḤĀZIN, *Muḥtaṣar* 8r 5; ANNUWAYRĪ, *Nihāyah* XI 196₆. According to IBN ṢIMRĀN the *nisbah* would be eponymic (cf. IBN SAMAGŪN, *Ġāmīʿ* II 148_{9-149₁₁}; also *Ṣumdah* 263₁₇₋₁₉), a datum that is of little help, whereas the etymology for *riyāḥī* provided in *Mahẓanu lʾadwīyah* 723 (quoted by ZARYĀB 1991: 515) may be an *ad hoc* invention. A derivation from *rabāḥ* (interpreted by some as the name of an animal resembling the wild cat, probably through a confusion with civet [*zabādah*]; by others as a place-name in India) is recorded by IBN MANḌŪR, *Lisān* II 444b 9–25 s.r. ریح (cf. also ALḤAMAWĪ, *Buldān* III 23b 13–29 s.v. ریح). With regard to the third and last variety of camphor, Faṣṣūrī camphor, there is only minimal variation in its transmission (except for the occasional misreadings فيصوري and فيصوري in some manuscripts, cf. KAHL 2007: 178 n. 1) and we have a precious attestation from the Cairo Genizah in a private document from Aden, dated ca 1180, in which “Faṣṣ[ūrī] camphor” is mentioned as being sold in the Maḡrib (cf. GOITEIN and FRIEDMAN 2008: 505).

¹ The form in *b-* «*bastaqī*» transmitted by P (where it is fully vocalised) is admittedly exceptional with regard to standard *fustuqī* (for Andalus, cf. CORRIENTE, *DAA* 398b *{FSTQ}), but a reflex /*b-*/ of etymological /*p-*/ (cf. MACKENZIE, *CPD* 69 *pistag* ‘pistachio nut’ for Middle Persian) should not be too readily discarded either in the east or in Andalus, where the word may have further been subjected, at least in some early phase, to the influence of a descendant of Latin *pistacia* (itself from Greek πιστάκιον, cf. VON WARTBURG, *FEW* VIII 597 *pistacium*). Even if the form found in the manuscript were the product of a clerical misreading of فيستقي the qualification would not be any less exceptional as the name of a variety of ambergris, as it is only exceptionally mentioned, cf. precisely in Andalus *fanbar fustuqī* in a recipe in IBN WĀFID, *Wisād* XXIII.50 (A 319₂). The adjective *fustuqī* itself, on the contrary, is fairly well represented in the corpus, cf. a Kirmānī pistachio-like variety of tutty in IBN SĪNĀ, *Qānūn* II.2.II.22.5 (B I 448₂); also one of the hues of green rubies in ALBĪRŪNĪ, *Ġawāhir* 78₄₋₅.

² Cf. an interesting instance in an actual recipe in ALḤĀŠIMĪ, *Maḡālis* I.I.16 (K 33₁₈)—incidentally, an even rarer Syrian (*Ṣāmī*) aloe enters a recipe in *Maḡālis* I.I.21 (K 49₁₉)

deed, that the plethora of different quality control tests available and the insistence and punctiliousness with which they are described not only in perfumery books but also in *ḥisbah* manuals is to be interpreted as the reflection of a major concern with widespread fraud amongst merchants and drug-sellers. Now, with very few exceptions, the methods endorsed here by the author are totally unrelated to usual tests—beyond, of course, a shared use of the senses (smell and taste) or of fire, the specific application of which to each item is, in turn, for the most part idiosyncratic.¹

Probably in relation to this quality test, the final segment that closes each entry comprises a number of *similia* or lookalikes that are in general given as much attention as the test itself and almost in every case much more than classification. Although a certain pharmacognostic function cannot be totally disregarded (comparing a given item to a better-known one is a common strategy in all fields of knowledge),² it is my current persuasion that the emphasis on these similar items reflects also a professional concern with adulteration and falsification—that *sordida ars* that for an apothecary was far more of a troubling issue than for the market supervisor.

The prevalence of tampering and counterfeiting is by no means an innovation of Islamicate age, nor has it any precise geographical or cultural origin.³ An explicit link between adulteration (δολιζω ≡ *ḡašša*) and the mutual resemblance of the substances involved in the process is found already, for example, in DIOSCORIDES' entry on Κελτικὴ νάρδος (the endemic valerian spikenard or Alpine valerian, *Valeriana celtica* L.), which some people adulterated with a sim-

³ The exact phrase «*Ṣalāmatu lḡayyidi minhū*» is used already by IBN MĀSAWAYH, not in his treatise on perfumery but in his description of ruby (*yāqūt*) in *Ġawāhir* 456–7. It is also sporadically used by ADDIMASQĪ likewise with regard to minerals, as for instance in the test for fine gold in *Tiḡārah* L 14v 4–5 | Q 8₁ | R 5r 8–9, and for silver in *Tiḡārah* L 15r 5–6 | Q 8_{11–12} | R 5v 1–2.

¹ An analogous use of *ḥisbah* literature as a term of comparison for apotheconomy-related matters is made by CHIPMAN 2010: 96–101, who further includes a statistical analysis of some parallelisms. That comparison is made extensive by the author to other aspects of the craft too (cf. CHIPMAN 2010: 155–161).

² A rhetorical or poetical function, on the other hand, as a source for comparison and metaphor, can be safely dismissed as irrelevant in this context.

³ Perfume makers were held in low public esteem already in Graeco-Roman Antiquity (cf. BRUN 2000: 277) and much of the lore transmitted and practised in non-spiritual alchemy may be described as an attempt to perfect the craft of imitation. In this light, the attention given by ALKINDĪ to counterfeits in *Sitr* is probably misconstrued by GARBERS, whose remark thereon is more of a boutade typical of the Eurocentric and positivistic Orientalism of his age than an actual scholarly appraisal: “Bereits die Tatsache, daß ein Gelehrter und Philosoph vom range Kindis sein Wissen und seine Kenntnisse auch in den Dienst der Imitation und Verfälschung gangbarer wertvoller Drogen stellt, läßt den Orient in voller Deutlichkeit in Erscheinung treten” (GARBERS 1948: 2).

ilar (ἐμφορής ≡ *šabīhah*) herb that was usually plucked with it:¹

<i>Materia medica</i> 1:8 Κελτικὴ νάρδος	Ḥašāʾiṣ 1:6 نَارْدِينِ قَلِيطِيّ
WI 13 ₉	P 4r 16 T 17 ₁₆
δολίζεται δὲ συναποτιλλομένης αὐτῇ	وقد يُعْشَّ بعشبة تُقْلَعُ معهُ شَبِيهَةٌ بِهِ.
πόας ἐμφοροῦς.	

As far as my current survey of the corpus reaches, the catalogue of lookalikes transmitted by ALʿILBIRĪ appears not to be inherited from the literary tradition, as no single source or combination of sources comes even close to the total sum of items listed by him. Some of these *similia* coincide with those mentioned by DIOSCORIDES,² but in this particular case, in view of the concurrent testimony of *hisbah* manuals,³ this coincidence might be interpreted as a genuine indicator of inherited practices in the Mediterranean region and as proof that the author’s knowledge is rooted, if not in actual practice, at least in direct personal experience on the ground. This is most evident in the case those items (the actual majority) for which no precedent can be found in the corpus of translations (eg musk, ambergris, camphor, algalia bodies, flemingia, etc). Those epistemic

¹ As an illustration of the prevalence of fraud in the ancient drug-trade, just in the first book of *Materia medica* (which actually contains the majority of aromatics) adulteration, reflected by the pertinent forms of the verb δολίζω, is mentioned and described in some detail for 1:7 νάρδος, 1:11 φοῦ, 1:15 ἄμωμόν, 1:16 κόστος, 1:19 βάλσαμον, 1:26 κρόκος, 1:64 σμύρνα, 1:66 στύραξ, 1:67 βδέλλιον, 1:68 λίβανος, 1:70 σχίνος, 1:73 ἄσφαλτος, and 1:100 λύκιον. This practice was by no means restricted to herbs and products of plant origin but included also tampering mineral commodities, cf. *Mat. med.* 5:75 πομφόλυξ, 5:77 χαλκοῦ ἄνθος, 5:79 ἰὸς ξυστός, 5:112 ἄνθος ἄλός, and 5:126 αἰματίτης λίθος.

² Following the order of the entries in *Natāʾiṣ*, the mention of galls as one of the lookalikes of box-thorn juice has a precedent in cattle gall (βοείας χολῆ) in *Materia medica* 1:100 λύκιον (WI 92₁); Arabic gum for aloe, in gum (κόμμι) in *MM* 3:22 ἄλόη (W II 29₂); sagapenum for asafoetida, in the same product (σαγάπηνον) in *MM* 3:80 σίλφιον (W II 95₅).

³ It is worth noting that the highest number of coincidences is yielded by ASSAQAṬĪ’s *Hisbah* VI (Ch–C 62₁₁–63₃, 69_{14–15}), cf. the treated blood of squabs and vultures for musk, the roots of *ratam* ‘broom’ (in this context probably the rush broom, *Spartium junceum* L., DIOSCORIDES’ σπαρτίον) treated with quicklime for agarwood, *lādan* ‘labdanum’ (in Andalus the resin of *Cistus ladanifer* L. and several other species) for ambergris, Chinese rhubarb for Syrian rhubarb, cotton-seed oil for balsam oil, cattle gall for *ḥuḍaḍ* but burnt pomegranates for *ḥawlān* (cf. «*ar-rumānu lmasqūt*» in *Natāʾiṣ*); ASSAQAṬĪ does not seem to be referring to one single product by these two different names), and *ḥusfir* ‘safflower’ (*Carthamus tinctorius* L.) for saffron. Add the falsification of Cretan epithymum with the Andalusī variety mentioned by ASSAQAṬĪ as a parallel for the analogous fraud implied by ALʿILBIRĪ’s remark on spikenard. Some other items can be traced back to eastern sources: AŠŠAYZARĪ, *Nihāyah* XVIII mentions the use of both “treated *šādūrān*” («الشادوران المدبر») and “the wax and twigs of *šādūrān*” («شمع الشادوران وعيدانه») in the adulteration of algalia (A 53₉, 54_{1–2}), and also cotton-seed oil amongst the ingredients with which to falsify balsam oil (A 54₁).

roots can be located even more precisely in Andalus thanks to an exceptional reference to mount Šulayr (on which a spikenard [*sunbul*] grew, according to the author, that resembled the reputed Indian species)¹ and to several lexical hints that are discussed elsewhere as geolectal markers (see Chapter 9).

In sum, against what has previously been written about it, *Nat* 1.3.1 does not contain any reference whatsoever to medical uses but is on the contrary entirely apothecary-oriented. The data recorded in it lends itself, despite its terseness, to a most exciting—yet not always rewarding—exercise of source criticism that necessitates the scrutiny of a wide spectrum of genres, from texts on aromatics and perfumery to specific chapters within medical *kanānīš*. While most of it mirrors common knowledge widely divulged across the Islamicate geography, some pieces of information are only marginally attested elsewhere and the section as a whole cannot be proved to derive from any particular pre-existing text. How this apparent originality might be interpreted is a question for which only a thorough analysis of the contents might provide some clues.

¹ For the identification of this oronym, see Chapter 9. It is worth quoting here a passage in AS-SAQAṬĪ, *Hisbah* VI in which such eastern herbs as ginger, spikenard, and cinnamon are said to be tampered or substituted for with their local homologues: «*bilmawǧūdi šabihan lahū biǧībāli lʾandalus, wakaḏālika ssunbuli walqirfah*» (Ch-C 613–14); cf. also the aforementioned passage in IBN ARRAṬŪF, *Hisbah* [15] (Ch 35–13).

Apoth 3.2 — On stones

Most of the considerations made above with regard to the preceding subsection are equally pertinent—in fact even more so—concerning *On stones*, in which a total of some three score mineral substances are catalogued and described from a mainly, but in this case not exclusively, apothecary perspective.¹ Unlike in *Apoth 3.1*, here a general inscription «*alqawlu šalā lʾaḥḡār*» introduces a long series of epigraphs, each one of which is signalled by a rubric that reads also invariably «*alqawlu šalā —*». The exact hierarchy of the entries is nonetheless sketchy and the general plan of the treatise can only be deduced when it is considered in its entirety. Thus, no title is provided for the series of eighteen lemmata (= *Apoth 3.2A*) that opens this segment:²

1 gold	6 quicksilver	11 glass	16 malachite
2 silver	7 sal-ammoniac	12 magnesia	17 tutty
3 copper	8 arsenic	13 marcasite	18 antimony
4 iron	9 sulphur	14 haematite	
5 lead (and tin)	10 talc	15 lazuli	

Then fourteen entries are explicitly subsumed under a common epigraph *On precious solid stones* (= *Apoth 3.2B*). The number of items included there is actually higher, since to the lemma on the balas ruby a brief digression is appended that mentions an additional five hand-made stones, some of which can be loosely described as glass-like products:³

¹ As is well known, in the Islamicate tradition the concept *ḥaḡar* encompasses much more than is commonly referred to as 'stone' in contemporary parlance. In *Natāʾiḡ*, where only the tiniest bits of mineralogical theory are to be found, *aḥḡār* corresponds loosely to *maʿādin* in more sophisticated or simply less practice-oriented texts.

² The same caveat previously introduced for non-mineral simple drugs applies, a fortiori, to the mineral substances under survey here. The English names assigned to these items are intended more as a convenient (and for the most part time-honoured) reference than as a true scientific nomenclature. Besides, I do not engage (out of both scepticism and incompetence) in the debate about the mineralogical identification of any of these "stones", for which the reader is referred in all cases to KĀS 2010.

³ For *ḥaḡaru lʾadrak*, cf. ALKINDĪ's description of *adrak* as a "melted and dyed glass that resembles ruby", *apud* ALBĪRŪNĪ, *Ġawāhir* 227₅ (analysed by KĀS 2010: 652, who adds a further mention of *adrak* by ĠĀBĪR). With regard to the "blue Sulaymānī", the practice of naming a precious gem after the mines in which it was first found or after a nearby village is reported by ALBĪRŪNĪ, *Ġawāhir* 83₉₋₁₂, where an identical *nisbah* "Sulaymānī" is mentioned for *laʾl Badaḡšī*, which is the ruby-like stone *par excellence*. As for *almīnā lʾaḡḡar* 'green enamel', as pointed out by KĀS 2010: 1071 *mīnā* is virtually ignored in pharmacognostic texts and the only major author that mentions it appears to be ALBĪRŪNĪ, whose entry in *Ṣaydanah* 27–27 *أبيض* (S 150₈₋₉; the reference provided by KĀS to page 203₄ must be corrected) is especially interesting as it clearly im-

1 ruby	5 carnelian	9 emery	13 magnet stone
2 emerald	6 coral	10 alabaster ²	14 diamond
3 pearl	7 garnet (<i>biḡādī</i>)	11 onyx	
4 balas	8 <i>zahri</i> ² stone	12 jet (<i>sabaḡ</i>)	

A stop is put by the author to the enumeration of mineral stones at P 13v 14, where he makes explicit his intention to limit his exposition to those stones that are well-known and may be of commercial interest for the apothecary. After that a new subepigraph 3.2c *On alums and salts* includes six different entries, in some of which more than one item is actually alluded to (especially in the epigraph on vitriols):

1 vitriol	2 alkali	3 borax	4 natron	5 table salt	6 saltpetre
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The section ends with 3.2D *On artificially made stones*, which adds fourteen new mineral items to the lithognomic stock of the treatise:

1 cadmia	5 iron saffron	9 litharge	13 marble
2 verdigris	6 iron dross	10 cinnabar	14 eggshell
3 burnt copper	7 iron rust	11 calx	tincar
4 copper flakes	8 iron flakes	12 gypsum	

plies that *mīnā* is a manufactured product. He actually classes *mīnā* as a kind of glass (*zuḡāḡ*) in *Ġawāhir* 224₁₄–225₁₇ and even mentions green *mīnā* when discussing the varieties of *laʿl* *Badaḡšī* in *Ġawāhir* 86_{4–6}. Green *mīnā* features also as the material of which mirrors are made in ALQAZWĪNĪ, *Ṣaḡāʾītib* II.3 (W 99_{24–26}). Cf. furthermore the extremely informative lemma *مينا* in VULLERS, *LPLE* II 1258b–1259a (which is not cited by KĀS), where one of his native lexicographic sources defines *mīnā* as ‘particulae vitri varii coloris et lapidibus pretiosis similes, quibus in balneis, al. exornandis utuntur’, and most especially the metonymical use of *mīnā-ye rang* as ‘color viridis [سبز رنگ]’. Incidentally, there may be some circular reasoning in the etymological debate around Syriac *ܡܝܢܐ* and dismissing a connection to Persian *mīnā* because the phrase must mean ‘chalices [or goblets] of tin’ (cf. KĀS 2010: 1071) finds an analogous counterargument in the proposal to understand it as ‘chalices of glass’ precisely because a Persian etymon *mīnā* is assumed for the word (cf. PAYNE SMITH, *Thesaurus* 1993 s.v. *ܡܝܢܐ*); the question is left open in BROCKELMANN, *Lexicon* 373b and still in BROCKELMANN–SOKOLOFF, *Lexicon* 703a.

Commentary

Contrariwise to what its modest length might suggest, the compact lithognomic section included in *Natāʾiğ* is extremely rich in information. Much of it is actually “new” in the sense that either it is not to be found in the standard accounts transmitted in the *Ahğār* genre or it is only paralleled by a few chronologically late and mostly unexplored works on practical alchemy and allied crafts. Nowhere in the whole compilation is the frequency of rarities and even *hapax legomena* so high, and maybe no other segment of *Natāʾiğ* is more deserving of an in-depth analysis than *On stones*. The task is, moreover, greatly facilitated by the availability of a number of editions of some of the major works in the genre and, above all, by a superb and quite exhaustive concordance of minerals in the Arabo-Islamicate pharmacognostic tradition.¹

There remains, however, much to be done in this field (especially as far as the western tradition is concerned), which makes the remarks hereunder all the more provisional. Once again, the focus of this summary is not put on mineralogical identification, nor in exact source identification (a task that has so far yielded meagre results)² but rather on such features as may reflect some particularity or even originality on the part of the author. Accordingly, attention is drawn to local references and to any other possible hints to *realia*.

Mineralogical catalogue and locality

The subclassification of minerals transmitted in the text is overall standard (female and male iron, red and yellow arsenic, mineral and artificial glass, five species of marcasite, several chromatic varieties of ruby, etc)³ but there are some remarkable divergences that need to be explored in the future. Thus, for copper

¹ The concordance (which excludes intentionally most non-pharmacognostic genres, especially alchemy and also early representatives of *Ahğār* with a leaning towards astrology and talismatics) is, of course, KĀS 2010, which is extensively referred to throughout this dissertation and which has been, from the beginning of my research, a model of scholarly meticulousity and wide-ranging inquisitiveness. To that everlasting monument one should still add the edition, translation, and analysis of ALMAQRIZI’s treatise on minerals in KĀS 2015. Primary and secondary literature on the subject is exhaustively covered in those two monographs.

² Even in the case of the only explicit quote in the whole subsection, namely ARISTOTLE on the carnelian stone (*ṣaqīq*), no matching passage could be located in any of the extant versions (either Arabic or Latin) of PSEUDO-ARISTOTLE’s *Ahğār*, whereas the first half of the entry does echo *Ahğār* [5] (P 103₁₋₆ | T 114_{10-115₄}). As can be seen in the upper layer of the critical apparatus, however, the pseudo-Aristotelian *Ahğār* seems to have been quoted silently, and perhaps also indirectly, more than once (cf. particularly the entries on the ruby [*yāqūt*] and onyx [*ğazʿ*]).

³ ALʿILBĪRĪ’s classification and nomenclature of the species of lead (*usrub* opposed to *ānuk* / *qazdīr*) is standard and at the same time idiosyncratic, but this can also be said of almost any other author in the Arabo-Islamicate tradition, cf. KĀS 2010: 223–226 (*usrub*), 293–296 (*ānuk*), 582–586 (*raṣāṣ*), 901–903 (*qalaṣī*). Very much the same observation applies to vitriols.

the most usual classification in the Helleno-Islamicate tradition is based on a chromatic criterion and geographical origin is only seldom mentioned (with the notable exception of copper from Cyprus, *χαλκός Κύπριος* ≡ *nuḥasun qubrusī*). A close parallel for ALʿILBĪRĪ’s listing of Sūsī, Persian, and Roman copper is found only in as late a source as ŠAMSUDDĪN ADDIMAŠQĪ (d. 1327) and, moreover, no *nisbah* in this triad has a straightforward identification.¹

Here as elsewhere, some geographical ascriptions are no doubt inherited from written sources and do not necessarily reflect the reality of the market (at least not of the Andalusī market), but the significant presence of local products is undeniable. For tutty, alongside the Indian, sea-borne (*baḥrī*), and Marāzibī varieties, Andalusī tutty is also mentioned, which is then further specified with a geographic qualification *Baṭarnīyyah* ‘from Baṭarnah/Paterna’. An Andalusī antimony (*itmīd*) is mentioned too, which after being treated can even match the reputed Aṣbahānī antimony in colour and price.² Even some of the stones that might be most suspect of bookishness, such as the exotic garnet or *biḡādī*, were actually mined in Andalus—or, to be more realistic, the Arabic names learnt from the eastern (and mostly written) tradition were assigned to local stones that matched those received descriptions.³

On the other hand, if the description provided for the *bārūd* salt is perfectly compatible with its identification as saltpetre and therefore as a faint echo of λίθος Ἄσσιος, the mention of its burning in fire and blackening the tongue seems to prefigure the later development of the meaning ‘gunpowder’ (which would then be paralleled by the peculiar use of naphtha discussed above).⁴

¹ Cf. ŠAMSUDDĪN ADDIMAŠQĪ, *Nuḥbah* II.1.5 (M 46₇), where Roman whitish red copper, Cyprian (*qubrusī*) red copper, and Sūsī deep red copper are mentioned. The identification of the origin of Sūsī copper depends essentially on which of the cities or regions known as Sūṣah and Sūs is intended in each case (see Chapter 9). Roman copper may be an echo of the ancient Κορινθιακός χαλκός as shown by Syriac lexicographers, cf. *ܢܘܚܫܘܢܩܘܒܪܘܫܝܐ* explained as «*nuḥasun qūrīntāniyyun aw rūmī*» and described as an alloy of silver, gold, and copper in equal parts, in BAR ʿALĪ, *Glosses* II 46₁₄₋₁₅ ≡ BAR BAHLŪL, *Lexicon* 1238₁₅₋₁₆ (BAR BAHLŪL further enters *ܢܘܚܫܘܢܩܘܒܪܘܫܝܐ* and glosses it as *nuḥasun rūmī*, which is said to consist of gold and silver, in *Lexicon* 1745₁₅). In view of the first documentation of “Roman copper” by Syriac lexicographers, KĀS 2010: 1080 suggests the possibility that this denomination may have been actually introduced by them. The question remains open, nonetheless, as to how this otherwise scarcely attested *nisbah* came to ALʿILBĪRĪ’s knowledge—if, that is, this Roman copper is not rather an allusion to a metal imported contemporarily from some Christian region. Finally, “Persian” copper in *Natāʾiq* may well be a ghost-item born from a misreading of *qubrusī* (unpointed *قبرسي*) as, for instance, in the direct and indirect transmission of a passage in ARRĀZĪ, *Ḥawāṣṣ* 2-*نحاس* for which at least one manuscript reads «*fārisī*» (I 84r 18) and this reading is actually received by ALBALADĪ, *Ḥabālā* 297₃.

² On this two Andalusī references, see Chapter 9.

³ Cf. a report in ALBAKRĪ, *Masālik* II 385₁₁₋₁₂ about *ḥaḡaru lbiḡādī* being found near the city of Alʿuṣbūnah (present-day Lisbon) on a mountain on which it shone at night like lamps.

Still within the context of subclassification, the mention of a *burkānī* sulphur alongside the mineral variety of this mineral is certainly not without interest both in that it differs from the most usual chromatic classification of the species of sulphur and in the rarity of the word *burkānī* ‘volcanic’ itself, particularly as a qualification of sulphur.¹

A few words in this subsection still remain to be satisfactorily explained or even interpreted.²

⁴ For the assimilation of *bārūd* to the λίθος ἄσσιος inherited from the Greek tradition, cf. ALĠĀFIQĪ, *Mufradah* بَارُود 70-ب (M 96r 19 – 96v 21), then *Mufradah* ح-II s.vv. حجر الأردن (M 211v 8) and حجر أسبيوس (M 211v 9). The name of the stone had been left untranslated by IŞTIFAN in *Ḥaṣāʾiṣ* 5:48* أسبيوس (P 128v 2–12 | T 432₁₋₁₀) ≡ DIOSCORIDES, *Mat. med.* 5:124 ἄσσιος λίθος (W III 92₁₋₂₂); cf. also KĀS 2010: 250–254 (*ḥaḡaru assiyūs*). Let it be noted that the earliest documentation for *bārūd* registered in KĀS 2010: 306–308 is found in the hard-to-locate *Hārūniyyah* and in twelfth-century ALĠĀFIQĪ’s *Mufradah*, yet *ḥaḡaru lʿabridah* (from the same lexematic root √brd) is given already by IBN ĠULĠUL as the equivalent of λίθος ἄσσιος in *Tafsīr* 5:73 (G 103₅₋₆, which the editor alters unnecessarily to read «بارود»). Also in Andalus and in a strictly medical context *bārūd* is mentioned in the 11th c. by ALḤĀSIMĪ in *Maḡālīs* I.1.15|18 (K 32₈, 38₁₄); in the east even earlier, cf. ABULḤASAN AṬṬABARĪ, *Buqrāṭiyyah* VIII.16 (B 262v 6). Even after being resignified as ‘gunpowder’ *bārūd* did not lose its original meaning, cf. late Garnāṭī Arabic «pólvara *bārūd*» and also «salitre sudor de tierra *malh al barúd*» in PEDRO DE ALCALÁ’s *Vocabulista arávigo* 352b 13 and 391b 6, respectively (= *LAPA* 13b *brd). Syriac ܐܘܪܘܕ is considered of Persian origin in MARGOLIOUTH, *STS* 42a and BROCKELMANN–SOKOLOFF, *Lexicon* 114b; but no autochthonous etymology is found for *bārūd* in VULLERS, *DPLE* I 170b.

¹ The colour-based taxonomy of sulphur is prevalent from the earliest texts and in its most complete version four different varieties are distinguished (namely red, yellow, black, and white), cf. KĀS 2010: 917–920, and add especially ĠĀBIR B. ḤAYYĀN, *Ḥawāṣṣ* 22v 11–12, 78v 12–15, 118r 2–3. Roman/Cyprian sulphur was, however, mentioned by MASĪḤ (cf. IBN ĠANĀḤ, *Talḥiṣ* [471]) and IBN ALḤĀŞŞĀʿ provides an invaluable clue for the identification of *burkānī* sulphur when he glosses this mineral as “well-known, it is imported from Sicily and also from other eastern places”, cf. *Mufīd* [605] (C–R 65₈); which links the *nisbah* adjective *burkānī* to Mount Etna, the “mountain of the volcano” (*Ġabalu lburkān*) as it was styled in the Islamicate tradition, cf. its mention by IBN ʿIMRĀN as one of the origins of the pumice-stone (*qaysūr/qaysūr* ≡ κίσηρις, cf. KĀS 2010: 912–917) *apud* IBN SAMĀĠŪN, *Ġāmiʿ* قيشور 27-ق (S IV 44₇); also ALMASʿŪDĪ, *Zamān* 43₂₀–44₄. The circulation of a mineral product imported from Sicily and marketed as *alḥaḡaru alburkānī* is attested by IBN ALḤĀŞŞĀʿ, who criticises those that considered it to be the pumice-stone, which he affirms that it is not despite its resemblance and its similar use, cf. *Mufīd* [1030] قيشور (C–R 111₁₋₃). This popular identification of the pumice-stone with the volcanic stone was, indeed, already prevalent in IBN ĠANĀḤ’s time (cf. *Talḥiṣ* [872]). Mark that *burkānī* sulphur is otherwise documented only in fourteenth-century ALQALALŪSĪ, *Tuḥaf* 62₉ as the first ingredient of the recipe for the oil of eggs.

² Philological and mineralogical cruces include most notably: pearls (with a subclassification that bears no resemblance to the almost universally shared information on this major gem), one of the crafts referred to in the epigraph on sulphur (see below), the identification of the *zuharī* (*zahrī/zuhriʿ*?) stone, the apparent mention of alabaster under a mutilated name, the “buffalo stone” (*ḥaḡaru lġāmūsʿ*? the context does not seem to support an emendation as **ḥalqūṣ* that would be, nevertheless, palaeographically unproblematic), etc.

Metallurgical recipes

Instructions on how to obtain burnt copper, πομφόλυξ, verdigris, white lead, etc were incorporated into the pharmacognostic corpus already by DIOSCORIDES, who appears to have been particularly well acquainted with metallurgical techniques since he provides accurate accounts for virtually every metallic (and several non-metallic) item in *Materia medica* 5. On the other hand, glimpses into practical alchemy were available in the Islamicate period also through the pseudo-Aristotelian *Aḥḡār*. Some of the recipes transmitted in those two texts are in fact echoed here in *On stones*,¹ but despite these precedents, no author in the *Mufradah* genre and very few within the tradition of *Aḥḡār* literature gives as much attention to this practical aspect of stone-lore as ALʿILBĪRĪ does.

To limit this preview to primary operations (typically introduced by *yusnaʿu*), the author notes down instructions on how to produce: verdigris by hanging copper sheets over vinegar; steel (*alhindī*) by melting iron with arsenic, glass, and magnesia until it becomes yellow; white lead or ceruse (*isfidāǧ*) by applying to lead the exact same procedure as to copper for verdigris; red minium (*zar-qūn*) by heating finely powdered white lead in the furnaces of glass-makers, and the same operation can be applied to litharge in order to obtain a virtually identical minium; cinnabar (*zunǧufūr*) by mixing quicksilver and red sulphur that has been previously “killed” in vitriol, then distilling this mixture in the aludel; the “pomegranate seed” by taking three parts of arsenic and one part of volcanic sulphur, then melting the mixture in a pot. Instructions for the fabrication of sal-ammoniac and for the composition of glass are described in even greater detail, and a minimal recipe is also recorded on how to dye copper with Andalusī tutty (which is explicitly affirmed to be an alchemical operation). Besides, a whole subsection is devoted to artificially made stones (= *Apoth* 3.2.D), where instructions for the preparation of iron saffron and also iron rust are included.

Parallels can be identified for most of these recipes, to be sure, and in Andalus AZZAHRĀWĪ compiles a specific and quite exhaustive chapter on the treatment of mineral drugs that shows several interesting coincidences with our text.² Unlike in *Taṣrif* and its eastern models, however, the focus in *Natāʾiǧ* is unmistak-

¹ Amongst the most evident ones, hanging copper sheets over vinegar in order to obtain verdigris reproduces DIOSCORIDES, *Haṣāʾiṣ* 5:6* نجار (P 119v 19–21 | T 406₃₋₅) ≡ *Mat. med.* 5:79 ἰδς ξυστός (W III 49₉₋₁₁); or the distillation of quicksilver and red sulphur resulting in red cinnabar (*zunǧufūr* ≡ κιννάβαρι already in GALEN, cf. a wealth of information collected and analysed in KĀS 2010: 677–683), which echoes PSEUDO-ARISTOTLE, *Aḥḡār* [69] (P 124₁₇₋₁₈ | T 165₂₋₃). Also the operation to improve an imperfect red ruby is borrowed literally from *Aḥḡār* [3] (P 99₁₀₋₁₂ | T 105₅₋₆). See the apparatus of sources and *similia* for additional examples of bookish recipes.

² Cf. AZZAHRĀWĪ, *Taṣrif* XXVIII.I (S II 376₉–386₃₀ + 405₁₅–407₂, showing the most unbelievable discontinuity in the copy of the text). The chapter deals with washing, burning, and preparing minerals within the frame of a separate book (*maqālah*) in which two additional chapters

ably non-medical. The author is nowhere concerned about how to *treat* these derivative items for medical use (what in traditional terminology is known as their *islāh*) but rather about how to *produce* them from primary minerals. It is no wonder, therefore, that some remarkably close affinities should be detected with treatises and handbooks on practical crafts, most of which are quite late and unfortunately underexplored—which makes the potential contribution of *Natāʾiğ* to our knowledge of the history of these epistemic traditions all the more promising.

Crafts and marketing

The discourse on minerals contains repeated allusions to a number of professions in which minerals play a major rôle, most often in the form of brief sentences stating that an item is used in (*fi*) such and such craft or by (*šinda*) such and such professionals. These disciplines and professionals include alchemy,¹ gold- and silversmiths (*aşşāğah*),² dyeing (*şbj*),³ lustre-painting (*talwih*),⁴ and pottery (*šināʿatu lfaḥḥār*).⁵ In addition to these professionalised occupations, further references are made to cosmetics (*zīnah*)⁶ and to perfumery (*šināʿatu*

transmit also the same information with regard to drugs of plant and of animal origin. The most notable parallels with *On stones* are all signalled in the apparatus of *similia*.

¹ A use by alchemists («*ahlu lkīmiyāʿ*») is mentioned for burnt copper (*ḥarqūs*), verdigris, iron saffron, minium or red lead (*zarqūn*), quicksilver, sal ammoniac, arsenic, sulphur, vitriol, salts made of hair urine and ashes, copper filings, iron dross, and iron rust. Uses in alchemy («*fi lkīmiyāʿ*») are further registered for magnesia, haematite, lazuli, malachite, and tutty; and in the alchemical art («*fi šināʿati lkīmiyāʿ*») for marcasite, alkali, and lime (*ğir*).

² Who find a utility for quicksilver, sal ammoniac, and vitriol.

³ Thus minium (*zarqūn*), cinnabar (*zanğafūr*), and arsenic are affirmed to be used for dyes («*fi lʿaşbāğ*»); also verdigris («*fi lʿaşbigah*»), which is later said to dye silver with a yellow colour and cream-coloured porcelain with green. According to the text, burnt copper also dyes cream-coloured glass. Then, tin (*qazdir*) whitens iron and copper; sulphur, just iron. Magnesia enters dyes for glass and stones, and iron flakes those for the hair (for which see below a note on cosmetics) and apparently also for wood («*alʿūd*»).

⁴ This reference to lustre-painting is exceptional both on account of its frequency here (it is mentioned for burnt copper [*ḥarqūs*], verdigris, iron saffron, minium, cinnabar, arsenic, sulphur, magnesia, marcasite, haematite, lazuli, malachite, tutty, vitriol, and copper flakes) and of its rarity elsewhere in the corpus. On an incidental note, this meaning of *talwih* is very poorly recorded in lexicographical sources and in this particular context it is quite obvious that the word cannot be understood as referring to wood planks, boards, or tablets (for which cf. CORRIENTE, *LAPA* 187a **twḥ* and *DAA* 487 *{LWH}).

⁵ In which magnesia is used. The same craft is probably implied for mineral glass when it is said to be used for beads and glassed vessels («*fi lḥarazi walʿawānī lmuzağğāğah*»).

⁶ A beautifying use is mentioned for the emerald, pearls, the carnelian stone (twice, the second time in relation to writing on it with a heated piece of iron, which results in a snow-white text); also, if my emendation «*fi zzinati walḥaly*» is correct, for white ruby, which would be paralleled by a similar sentence referred to coral: “and beads are made from it for jewels and

lṣitr),¹

The same connection to practical (perhaps also professional) matters is also shown by isolate mentions of seals (ie the instrument, a signet) for coral, the fabrication of talismans for the lazuli stone, ink-making for vitriol, and soap-making for alkali. Moreover, it is quite probably some naphtha-like inflammable product (or even fireworks) that is intended with **nufūt* (P reads actually «شوط») in the epigraph on sulphur.²

A crux that remains to be solved involves a further craft in which sulphur is used and that I provisionally interpret as *šināṣatu lqarābīs*, in which *qarābīs* might represent either ‘ship bottoms’ (referring perhaps to caulking?) or even ‘stalactites [of a ceiling]’ (much less likely ‘saddle-bows’).³

Finally, there is an especially interesting reference to the ornamental use by Christians (*annaṣārā*) of the artificially made «حجر البسط», on which they are said to engrave diverse images. The identification of the stone is dubious, but its description matches that of marble in some local sources and «البسط» might perhaps be a mutilated reading of an Arabic transcription of Greek ἀλάβαστρον or even Latin *alabaster*, which is identified as marble in eastern and western sources.⁴ The added fact that “Christians” (not “Romans” [*Arrūm*] or “non-Arabs”

adornments [*lilhalyi wazzīnah*]). Moreover, burnt copper (*harqūs*, iron flakes, and copper flakes are mentioned as substances useful for hair-dying («*fi ṣṣibāji ṣṣaṣar*»), while sulphur is affirmed to whiten the hair. A depilatory power is attributed to arsenic.

¹ Curiously enough, perfume-making is nowhere mentioned in the preceding subsection devoted mostly to aromatic substances but it is here for tin (*qazdīr*).

² The mention of ‘coins’ (*nuqūt*) seems to make little sense here, but then I am not well educated on the subject of minting in the middle ages. My emendation is inspired by the mention of naphtha (*nifṭ/naṣṭ*) as a compound, hand-made, inflammable substance in *Apoth* 3.1, then *nufūt* would simply be a plural with a more specific meaning, cf. an excellent explanation of this semantic development in DOZY, *SDA* II 703b–704a s.r. √نط and also late Ġamāṭī Arabic «huego de alquitrán *nar al quibrīt*» in *Vocabulista arábigo* 276b 33 (= *LAPA* 175b **kbrt*).

³ The enigmatic phrase is transmitted as «صناعة العرائيس» in P. At the present moment I cannot guess in which capacity sulphur might have entered the fabrication of spindles (*ṣarānis* would indeed be a characteristically western plural of *ṣirnās*, cf. CORRIENTE, *DAA* 351b *{RNS}) and, on the other hand, even if the use of mineral substances for the beautifying of brides would not be in the least surprising, I am reluctant to emend the text into an otherwise unattested **šināṣatu lṣarāṭis* (nor would a meaning ‘puppet’ or ‘doll’ as recorded in CORRIENTE, *DAA* 349a *{RS(L)} solve the problem). As for Arabic *qar(a)būs/qarābīs*, its different meanings and a possible Greek etymon (namely κρηπίς) are recorded by DOZY, *SDA* II 324 s.r. √قرس/قرص and by CORRIENTE, *DAA* 420 *{QRBS/S}.

⁴ This Greek name (or, to be exact, ἀλάβαστρον) is diversely distorted in the Arabographic tradition (mostly as a consequence of interpreting the initial segment *al-* as the Arabic article), cf. particularly «اسطرس» in ARRĀZĪ and «حجر البسطريط» in ALĠĀFIQĪ, both of which further transmit an identification with marble (*ruḥām / marmar*) that may be relevant to our locus here; as also would be an identification with DIOSCORIDES’ ἀλάβαστρον λίθος in *Materia medica* 5:135, cf. KĀS 2010: 284–286.

[*ṣaḡam*]) are mentioned, on the other hand, is quite exceptional in this sort of literature and may be reflective of the authors actual context.¹

With perhaps a few exceptions,² most of the professionals mentioned in *On stones* may have represented the most likely clientele of the apothecary and it is in this capacity, as potential buyers, that physicians are referred to here. A generic reference to medicine and to physicians (*aṭṭibb* and *alʔaṭibbāʔ*, respectively) is made only exceptionally in the epigraph on salts (those made of hair, urine, and ashes have no use in medicine), then in the description of iron rust (which is used by physicians). All other allusions to medical uses are specific: such and such item is used for collyria, salves, electuaries, dentifrices, etc.³

This insistent reference to medical uses was indeed to be expected, but not so

¹ Since the earliest representatives of the genre and particularly through the pseudo-Aristotelian *Aḥḡār*, reports on Indian and Yemeni kings circulated across the Islamic world (see particularly the case of onyx in Part III, Chapter 4) but I can find no parallel for a reference to Christians in a non-medical (and, needless to say, non-religious) context.

² The most evident of which are tricksters (*muṣaʔbidūn*/*muṣaʔwidūn*), who are mentioned in relation to the magnet stone (which they use to deceive and illude people) and to saltpetre (with no further explanation, but some trick involving fire can be inferred from the context). The analysis of these two passing-by remarks in the frame of the Islamic tradition on prestidigitiation would necessitate a separate excursus; let me draw the reader's attention, however, to a treatise on *Sīmīyā* transmitted in Paris, BnF MS Arabe 2595, fols. 136v 1 – 148r 17 (copied in the year 1632). Nine brief chapters are collected there under the generic name of *filmū ṣṣaʔbadah* which describe different tricks such as I.1 transforming a rod into a snake, then making it turn back to its original being; I.4 making a pair of sandals of crocodile skin that allow to travel from country to country in a single day; or I.9 writing a series of names on a yellow silken cloth, then placing it under the signet of a ring made of carnelian stone: if you wear the wear ring while reciting some characters and saying: "Hide! Hide!", no one shall see you.

³ Ingredients of collyria (*akḥāl*) include burnt copper (*ḥarqūs*), verdigris, sal-ammoniac, magnesia, marcasite, haematite, lazuli, malachite, tutty, antimony, ruby, pearl, saltpetre, gold and silver cadmia. Copper flakes, in turn, enter the recipes of siefs (*šīyāf*), to which a further mention of the sief contained within the jet or *sabaḡ* stone must be added. Salves (*marāhim*) may require burnt copper (*ḥarqūs*), white lead, quicksilver, arsenic, sulphur, and verdigris. Cordial electuaries (*almaṣāḡīnu lmufarriḡah*) contain ruby and pearls; dentifrices (*sanūnāt*), borax. A vague reference to (compound) drugs or remedies (*alʔadwīyah*) is made in the case of iron filings and sal-ammoniac, but more specific instructions are occasionally mentioned too. Thus, iron saffron is used to induce cicatrisation of moist wounds and for ailments of the eyelids; iron dross, to strengthen the stomach and for the treatment of haemorrhoids. Fabricated glass breaks calculi and wipes off dandruff from the head and the beard; the lazuli stone is used to purge black bile; all rubies are alexipharmacs and avail against pestilence, while the emerald protects against epilepsy and *mater puerorum* (*unmu ṣṣibyān*) and has also alexipharmacic properties, just like pearls. The carnelian stone is useful against nosebleeds; coral, for a corrupt stomach. All species of vitriols and alums are beneficial for malignant ulcers, especially in the mouth and gums. Burnt copper purges dropsy (*almāʔu lʔaṣfar*); iron dross avails against a weak liver and against "haemorrhoids in the stomach"; eggshells can heal leukoma after they are treated.

much because the text has any medical leanings (which it has not) but simply because physicians are quite probably the main clients of the apothecary—they are at least the only ones explicitly mentioned as such in the text. The knowledge of the specific applications of the items found in the drugstore is probably implied in *Deontology*, where apothecaries are exhorted to supply their clients with suitable drugs and also to inform them, in an easy-to-understand way, about the indications for their use.

In this light, the presence of alchemy in the subsection becomes perhaps more significant. The only reason to mention the salts made of hair, urine, and ashes appears to be their use in alchemy, since they are quite explicitly affirmed to be of no profit in medicine. Moreover, there are no negative overtones to be perceived in any of the frequent references to alchemists¹ and even a particular interest on the part of the author in alchemical matters can be intuited that might not be exclusively chrematistic.

Intratextuality

It must be emphasised that the degree of cohesiveness shown by the different subsections that conform *Nat I APOTHECONOMY* (into which *Apoth* 3.1.2 is perfectly integrated with all its particularities and localisms) does not correlate with a similar textual coherence across sections within the whole of *Natāʾiğ*. As far as *On stones* is concerned, for example,² the several mentions of specific properties (*ḥawāṣṣ*) attributed to some stones cannot be connected (other than at a general semantic level) to the information transmitted in *Nat III ḤAWĀṢṢ*, and any coincidences between the two sections are purely accidental, whereas instances of inconsistency are due to a differential use of sources.³

Thus, in the epigraph on the onyx (*ḥağaru lğazʿ*) it is affirmed that hanging this stone on children brings upon them a number of afflictions and makes their saliva flow. In *Nat III.vi.2*, on the other hand, a quote from ARISTOTLE attributes the same stone with the property of lessening a child's salivation and making its dribble cease. Now, the two passages stem ultimately from the same source, ie PSEUDO-ARISTOTLE's *Aḥğār*,¹ but while in *On stones* the standard version of

¹ This, of course, need not be representative of the overall social perception of the adepts to this art, who have elsewhere been described as “an isolated community suffering discrimination in a hostile environment” (STROHMAIER 2016: 424).

² See below the survey of *On the shelf-life of drugs* for a similar observation.

³ As shall be demonstrated elsewhere in this dissertation, the section on the specific properties of things is an entirely derivative text for which the author exploited (quite literally so) one single source. In *On stones* specific properties are mentioned for the carnelian stone, the magnet stone, litharge (*martak*), and gypsum. In the case of *sabağ*, the variant form *ḥaṣūṣiyyah* (also realised as *ḥuṣūṣiyyah*) betrays its origin the pseudo-Aristotelian book of stones, of which it is quite characteristic, cf. *Aḥğār* [13] (P 107₁₅₋₁₆ | T 1248-9).

the text is echoed, in *Nat* III in turn the passage has been mediated by a characteristically divergent source (namely ^α*Hawāṣṣ*) that handed down a peculiar reinterpretation of the original text.

Then, being beneficial for a corrupt stomach when hung over it is described as a wondrous specific property of coral (*marġān / bussad*), which reflects a different subtradition than the one echoed in *Nat* V.II.2, where essentially the same effect is attributed in a quote from GALEN to yellow alum (*aššabbu lʿaṣfar*). Both reports derive from a passage recorded indeed by GALEN in which this benefit is affirmed to be ascribed by some people to the green-yellowish jasper stone (ὁ χλωρός ἰασπις), the original Arabic transliteration of the Greek word having been diversely mistransmitted in the written corpus.²

In a contemporary text this flagrant disagreement would betoken, of course, a lack of authorial revision that would certainly be the object of fierce criticism. However, source-bound inconsistency is quite a distinguishing feature of many texts in the Helleno-Islamicate tradition. In therapeutics an ailment may be referred to by a certain name at a given point, then by a different one in another locus; and the exact same drug (particularly a less common herb or one for which several synonyms are available) will be prescribed under two or even three different names in a few pages—even more so within the text of received formulas or recipes.³

¹ See the commentary to *Nat* III.VI.2 in Chapter 4 of Part III of this dissertation for a full analysis of the origin and the transmission of this passage.

² Cf. GALEN, *Simpl. med.* IX.II.19 (KXII 2072-12) ≡ *Mufradah* IX.III (E 149v 8–14). The chapter on the stomach is not included in the sample selected for Part III of this dissertation and the complex transmission of this passage cannot be reasonably summarised here. Suffice it to mention that ḤUNAYN's original translation (featuring probably *alḥaġaru ayašbi lʿaṣfar*, or perhaps rather *yašf*) was quite correctly transmitted in some pharmacognostic texts (eg ALĠĀFIQĪ and IBN ALBAYṬĀR), but the key element in the passage had been distorted and reinterpreted as coral (*bussad*) already in ARRĀZĪ's *Alḥāwī* and also in IBN ALĠAZZĀR's *Istimād*; cf. KĀS 2010: 111–118.

³ See below the overview of *Nat* II.2 THERAPEUTICS in Chapter 6 for several illustrations of this variability that can often mislead the reader (who might interpret as a local denomination what actually is a travelling word inherited from far away in time and space) and which complicates greatly the task of assigning a geographical and chronological context to some features.

4.1.4 *Apoth 4 — On the shelf-life of drugs*

The last subsection within APOTHECONOMY deals with the subject of the shelf-life (*aṣmār*, literally “the ages”) of simple and compound drugs. An explicit request of fresh ingredients is relatively frequent since the earliest documented recipes, while specific instructions as to how long a preparation must be left to age prior to use are characteristically appended to pre-Galenic formulas for theriacs and other antidotes. The author himself has emphatically stated a few lines before that being able to distinguish good drugs from bad ones and those that are recent from older ones is essential for any would-be apothecary. Whereas for the information on the degrees of each item he refers the reader to books on simple drugs, he takes upon himself to include in his compilation an exhaustive catalogue of expiration dates. This information (which is, indeed, only rarely mentioned in texts of the *Mufradah* genre and is likewise missing from most dispensaries) appears, moreover, to be supported by the author’s own professional experience, which surfaces quite insistently in the form of autoreferential remarks.

Paraphrase

The general rubric includes an organisational taxon *bāb* that has not been previously used in the text (up to this point only *qawl* and *dīkr* had appeared in the titles). Then, between the title and the introductory remark that “There are three genera [*aḡnās*] of simple drugs: those of mineral, animal, and vegetal origin”,¹ a textual boundary marker *faṣl* intervenes and from there on explicit textual hierarchy is totally absent. Epigraphs of the higher order are graphically distinguished by size, with the connector *waʿammā* acting consistently as a sort of paragraph sign.

With regard to mineral products, some justification for the longer durability of such stones as rubies, gold, diamonds, and emeralds (which all last unaltered for hundreds and thousands of years) is found in their “nobleness” (*šaraf*). Silver, copper, and iron, in turn, do alter and they actually decay in a short period of time, especially if they enter in contact with earth or water. Now, if kept unsoiled and isolated from earth and water, they can last for many years—but far fewer, in any case, than gold and rubies.

A new piece of mineralogical lore is provided as a justification for the short expiration date of salts: they are the result of condensation of salt water in lakes (*buhayrāt*). This information (which was not included from the epigraph on salts in *On stones*) serves quite evidently an explanatory purpose: being as they

¹ The text does not follow this order: drugs of animal origin are dealt with last, actually after compound drugs.

are essentially salt water, they last less than salts mined (*muḥtafarāt*) from under the ground. To back this opinion the author adduces his own experience with a certain mineral salt («*milḥun maʿḍinī*») that lasted in his possession for some fifteen years showing no change at all.¹

The durability of alums depends also on their differences and genera, with “white fleecy [or Egyptian?] alum” lasting the longest: some twenty or thirty years uncorrupted.²

Sulphur lasts longer than alums and salts, and the author affirms to have witnessed how it remained unchanged for more than twenty years in someone’s possession. Arsenic, in turn, has lasted beyond fifty years at his and also at someone else’s store (*maḥzan*). The power of verdigris, on the contrary, decreases in less than a year. A final series of items follows with no connector (not even a conjunction *wa-*) that comprises white-lead (six years without decaying into soil), litharge (more than twenty years unchanged at the author’s), lead (so

¹ Both “mined” and “mineral” salt correspond to ὀρυκτόν (*ōlyctōn*), which IŞTIFAN translates as «*maʿḍinī*» (to which he further adds that some people affirmed it to be the same as *Andarānī* salt) in *Ḥaṣāʾiʿ* 5:35* أصناف الملح (P 125v 13 | T 424₁₂₋₁₃) ≡ DIOSCORIDES, *Mat. med.* 5:109 ἄλας (W III 79₁₄); whereas HUNAYN prefers «*almilḥu lmuḥtafar*» in *Mufradah* IX.III.2 ذكّر الملح (E 150v 6–7) ≡ GALEN, *Simpl. med.* IX.III.2 Περὶ ἀλῶν (K XII 210₁₂₋₁₅). The reference to salt being condensed in lakes, in turn, seems to echo «*mā kāna mawǧūdan fi mawāḍiʿi lmiyāhi lqāʾimah*» ≡ «ἐν τοῖς προειρημένοις τὰ λιμναῖα» in *Ḥaṣāʾiʿ* P 125v 16–17 | T 424₂₀₋₂₁ ≡ *Mat. med.* III 80₁₋₂. No mention of the shelf-life of salt is made, however, in either of these Greek texts.

² The identity of this white alum is a crux, since the passage is obviously corrupt. The easiest solution would certainly be to follow the conjecture of the copyist of P and to read «المصري» ‘Egyptian’, but there may be cogent reasons not to do so. On the one hand, as far as palaeography is concerned, it is hardly plausible that such a common word as المصري should be misread in this specific context, and much less so in such a manner as to produce the most disparate readings (from «المصرف» in *Natāʾiǧ* DP to «الاصوق» in *Taṣrīf* W), none of which points indeed towards a final unconnected ي but rather towards ق / ف (less likely also ن). Then, even if within the Islamicate tradition there are several references to the whiteness of Egyptian alum (cf. KĀS 2010: 730), this is mostly identified by its roundness after DIOSCORIDES’ στρογγύλη ≡ *mustadīr* variety in *Mat. med.* 5:106 στυπτηρία (W III 75₁₆) ≡ *Ḥaṣāʾiʿ* 5:32* الشب (P 125r 2 | T 422₁₂₋₁₃); while the white alum κατ’ ἐξοχήν, at least for our author, seems to be *Yemeni* alum (cf. the epigraph on vitriols and alums in *On stones*). Taking all this into account, I would suggest a minimal emendation of the reading shared by the manuscripts into «المصوف», which would then match the “wool-like” alum described by IBN ĠULĠUL: «*waminhu nawṣun aḥaru yuqālu lahu “lmuṣawwaf”, wahuwa šibhu anābiba biḍ; idā kasartahū, taṣaḍḍā ilā šaḍāyā barrāqatin fimā baynahā šayḥun kaṣṣūf; wayuṭtā bihī ilaynā aydan min nāḥiyati Siǧilmāsah, wabihi yuṣabbabu lḥarīru ʿindanā*», cf. IBN SAMAGŪN, *Ġāmiʿ* شـ 23 شـ (S IV 262₅₋₈); also AZZAHRAWĪ, *Taṣrīf* XXIX.A s.v. مصوف (S II 439₆₋₇ | 20–21). This variety of alum is attested exclusively in the Andalusī tradition and may correspond to DIOSCORIDES’ τριχίτις also in *Mat. med.* III 76₄, which IŞTIFAN explains correctly as «*ašṣaʿarī*» in *Ḥaṣāʾiʿ* P 125r 4 | T 422₁₅, and which coincidentally has an Egyptian origin (cf. KĀS 2010: 738–739). Both DOZY, *SDA* I 854a s.r. √صوف and CORRIENTE, *DAA* 313b *{šWF} record the adjective *muṣawwaf* ‘fleecy’, but neither of them includes the combination with alum (nor do they in their respective entries for alum, cf. *SDA* I 718b s.r. √شب and *DAA* 271b *{šBB}).

many years that the saying goes that “It lasts as long as gold”), and a final sequence of coordinated stones (namely cadmia, marcasite, haematite, tutty, and the likes of these) that have lasted in the author’s possession for many years.¹

Unlike in the case of minerals, an explicit rubric introduces the items of plant origin. These begin with gums or gum resins (*aṣmāġ*), which last on the shelf much longer than all the seeds and roots. Thus Arabic gum, almond gum, tragacanth, and others have remained without any change for some thirty years at the author’s store—except for those of them that were in contact with some damp, water, or soil. Juices (*fuṣārāt*), in turn, have a much shorter durability: twenty years at most; then they fall prey to moth-worms (*sūs*). In the author’s experience berberis juice lasted some ten years, after which period he tasted it and found that, while it was filled with worms, its power remained unchanged.

Amongst milky saps or latices (*albān*), scammony and spurge are mentioned as remaining unaltered for more than twenty years. Scammony lasts longer than spurge and opium, however, since the power of opium weakens in three years, whereas the author has seen some scammony lasting about twenty years without losing absolutely anything of its power.

Only a few oils (*adhān*) last more than two years, so that there is little benefit in using them after two or three years, especially as far as the oil of roses, the oil of violets, and cold oils are concerned, for these decay and dry up.

The shelf-life of seeds (*buzūr*) is diverse: those that are especially oily like the oil of sesame, almonds, and nuts, and also the seeds of cucumbers, gourds, and the likes of them, decay quickly and last for about a year; after that, they should not be used. Such seeds as fenugreek (*ḥulbā*), cress (*ḥurf*), mustard, nigella, fennel (*rāziyānaġ*), caraway, and the likes of them, in turn, last for two, three, or even more years, depending on where they grow, without any decrease in their power. The author affirms that he has tried these seeds oftentimes and that they have lasted for many years at his store—some of them did not change, others had just begun to change.

The durability of roots (*uṣūl*) and barks (*quṣūr*) depends likewise on their substance. Costus, rhubarb, *bahaġ*,² and behen (*bahman*)³ last more than then

¹ Both manuscripts of *Natāʾiġ* appear to inherit a corrupt sentence at this locus since they repeat the preceding saying “It lasts as long as gold”. That this is a lipography is proved by the parallel locus in *Taṣrīf* (see the critical apparatus *ad loc.*).

² The significance of this phytonym in this context as a possible geolectal marker shall be analysed in Chapter 9.

³ The botanical identification of the roots known in the Islamicate tradition as *bahman* remains as uncertain today as in DIETRICH 1988: II 608 n. 9. Its two chromatic varieties (namely white and red) are already mentioned by AṬṬABARĪ, *Firdaws* VI.II.1 (§ 402₁₉₋₂₀), where it is in fact immediately preceded by *būzīdan* and followed at a short distance by *zurunbād*. Both varieties are described as resembling small carrots in size and being slightly fragrant and they are affirmed

years and at the author's both white and red behen have lasted for some twenty years without losing a bit of their power—which has persuaded him that they can last longer than that. A separate entry is devoted to ginger and zerumbet or wild ginger (*zurunbād*),¹ which, on account of the moisture that they contain, become the prey of worms in one or two years. Root barks (*liḥā?*) are divided into purgative and non-purgative. As to the former (like turpeth and little fir spurge [*šubrum*], amongst others), the author has witnessed how their power diminished noticeably after their expiration date. Regarding non-purgative root barks such as cinnamon (*dārṣinī*), xylocinnamon (*qirfah*), cassia (*salīḥah*), and the likes of them, GALEN reported from some of his predecessors that cinnamon does not ever change. He had said: “I used some cinnamon kept at one of the stores [*ḥazāʾin*] of the king of Rome that was about thirty-years old”. Then he mentioned that its power had diminished but he nevertheless used it for the theriac since nothing else was available. The author's voice intervenes at this point to state that some Indian cinnamon (*qirfatun qaranfuliyyah*) had lasted in his possession for more than ten years, after which he tasted it and found it still as powerful as before.²

to be imported from Armenia and Ḥūrāsān by IBN ʿIMRĀN *apud* IBN ALBAYṬĀR, *Ġāmiʿ* ب-145 (B I 121₃₃–122₃), reproduced almost verbatim without ascription in IBN ALĠAZZĀR, *Istimād* 2:45 (S 66₇₋₁₃). In Andalus the first extant mention of the two behen roots is found in IBN ĠULĠUL, *Tāminah* [15–16] (G 11₇₋₁₁). For a convenient Andalusī survey of the different identifications proposed for *bahman*, cf. *ʿumdah* [933–934] (B–C–T 78₁₋₂₄), where the author distinguishes between an older white behen allegedly mentioned by DIOSCORIDES in Book III (and through him by IBN MĀSAWAYH, IBN ALHAYṬAM, ḤUBAYṢ, and ABŪ ḤĀTIM) and a modern white behen that he describes with remarkable detail. Cf. also VULLERS, *LPLE* I 288b *بَهْمَن* ‘nom[en] plantae quae mense Bahman et hiberno tempore floret, radice rubra et alba’.

¹ Arabic *zurunbād* (also *zarunbād*) is a name of Persian origin for the wild or bitter ginger (*Zingiber zerumbet* (L.) Roscoe ex Sm.), cf. CORRIENTE, *DAA* 229a *{ZRNBD}; VULLERS, *LPLE* II 130 s.vv. زَرْب and زَرْبَا / زَرْبَاد / زَرْبَاهُ / زَرْبَاهُ (where an Arabic synonym ‘locust’s-foot’ [*riḡlū ḡarād*] inspired by its appearance is recorded from native sources). In Andalus IBN ĠULĠUL describes زَرْبَاد as an Indian drug resembling ginger in *Tāminah* [13] (G 11₁₋₃), and he also includes a mention of زَرْب as a wood reminiscent of turmeric (*kurkum*) that grew in India and also in other countries in *Tāminah* [29] (G 15₉₋₁₀). Some people equated *ḡadwār* ‘zedoary’ (*Curcuma zedoaria* (Christm.) Roscoe) and *zurunbād* according to IBN ĠANĀḤ, *Talḥiṣ* [206], but as pointed out in BOS, KĀS, LŪBKE, and MENSCHING 2020: 393, these two species of the Zingiberaceae family were rarely conflated in the written tradition.

² The names “xylocinnamon” and “Indian cinnamon” used here are mere labels of convenience and should not be understood as an attempt to genuine botanical identification. The main problem with the cinnamon/cassia group of related items is the sometimes quite unsystematic and even author-dependent use of these names as specific denominations. For the time being, cf. DIOSCORIDES, *Mat. med.* 1:13–14 *καρσσία* and *κιννάμωμον* (W I 17₇₋₂₀,₁₇) ≡ *Ḥaṣāʾiṣ* 1:10–11 *سليخة* and *دارصيني* (P 5r 5 – 5v 23 | T 20₁₇₋₂₃,₂₂); and for Andalus, cf. the entry on *dārṣinī* (used, very much like in *Mat. med.*, as a hyperonym) in *ʿumdah* [1927] (B–C–T 200₅₋₁₇), where *qirfah* is recorded as a popular name for *dārṣūṣ*, and the species of cinnamon known as *qirfatun alqaran-*

Camel grass (*idhīr*) blossoms and flowers last for a shorter period than roots and herbs (*ḥašīš*). At the author's, violet flowers lost very much of their power after about one year, and so did the blossoms of camel grass, lavender (*ustūhūdus*), rue, and the likes of them—the power of all of them decreased after one year.

At this point, rather than simple substances of animal origin (which should naturally follow minerals and plants), it is compound drugs that are introduced under a general rubric “*As for the theriac and the other electuaries and pastilles*”. The text is typologically very different from the preceding paragraphs. In the first place, it transmits a sequence of foreign, for the most part Graeco-Arabic, names some of which are noticeably distorted.¹

Then, the information about their shelf-life follows a quite different pattern and indicates a span (“from six months to so-and-so many years”) rather than a simple limit. Thus, the theriac is said to last from six months up to thirty years before starting to lose its power, while the logadion, Archigenes’ hiera, Galen’s hiera, and the mithridatium last from six months to five years.² The text goes on with athanasia (six months to two years), selitha (from six months two seven years), sagzenea (from six months to three years), Ariston’s electuary (from six months to three years), and the Persian philonium.³ On the philonium GALEN’s words are echoed: if it is taken after two, three, or four years, its benefit is even greater, and it preserves its power up to ten years, after which its strength diminishes and its effect weakens.

A series of drugs follows that includes the electuaries of sulphur, turmeric (the only one to be referred to as *dawāʾ* rather than as *maʿjūn*), musk, and

ful is glossed as “Indian cinnamon”, “cinnamon of Yemen”, and “perfume bark” (*qirfatu ttib*). Cf. further references in DIETRICH 1988: II 96–97. There is, on the other hand, a possibility that *qirfah* might represent here *qirfatu ttasām*, the aromatic roots of some unidentified Indian tree that were imported into Andalus, cf. *ḥumdah* [4237] (B–C–T 484_{15–21}).

¹ In some cases even beyond recognition, see the *Complementary notes on polypharmacy* at the end of this chapter and also the Editorial criteria in Part II. On a side note, let it be noted that “polypharmacy” is used here with the meaning “requiring a high number of ingredients” as usually in historiography of medicine (cf. for instance STANNARD 1973 and KEYSER 1997) rather than in the contemporary sense of a treatment that involves many medications at the same time.

² For the hiera logodion of LOGADIUS hiera ([ἱερά] Λογαδίου, probably mediated through Syriac ܩܪܦܐܬܘܬܝܒܐ), cf. SCHMUCKER 1969: 98; ULLMANN 1970: 296; KAHL 1994: 220. For the two hieras (namely the ἱερά Ἀρχιγένου and the ἱερά Γαληνοῦ), cf. SCHMUCKER 1969: 97–98; ULLMANN 1970: 296; KAHL 1994: 220. On MITHRIDATES’ drug (ἡ Μιθριδάτειος/ἀντιδοτος ἡ Μιθριδάτου), cf. SCHMUCKER 1969: 457; FELLMANN 1986: 277; KAHL 1994: 216 (who further records the probable Syriac intermediary ܩܪܦܐܬܘܬܝܒܐ); and most especially TOTELIN 2004.

³ On selitha, sagzenea, and the philonium see the *Complementary notes on polypharmacy* appended to this chapter.

anacardium (*balādur*), each one having its own shelf-life.¹ Then the pastilles of lacquer and the pastilles of squill are affirmed to last from two months up to two years.

Medicinal powders or cataplasms (*safūfāt*) prepared with cold and hot water must be used from the moment of their preparation up to two months, then up to a year, whereas other pills remain from two to six months. The cataplasms of roasted mustard (etymologically *محلل*, realised in Arabic perhaps as *maqlītā/maqliyātā/maqilyātā* and probably also analogous forms in *mu-*) and of pomegranate seed are drastically effective up to two months from the moment in which they are prepared, then their effect weakens in one year. The effect of all the pastilles that avail against fevers lasts from the day in which they are made up to six months. The greater and the lesser triphalas, as well as digestives — (some text is missing here from both manuscripts).

All oils are effective until they begin to show signs of rancidness, after that they are useless. It is at this point that utterances in the first-person irrupt back into the discourse, now with a new formula “And I say” in which the conjunction *wa-* has an unmistakable adversative meaning. First it corrects an overgeneralisation: some salves or liniments (*marāhim*) may last longer than one year, for he kept some palm-salve (*marhamun naḥlī*) for more than one and a half years and it did not change; and the black salve lasted even longer without any alteration.

Then, some lines later, he affirms that syrups in general last more than two years after their preparation, especially if the place in which they are kept is isolated from hot air and dampness, in which case they can last many years, as many as five or more. This first-person formula (of which these two are the only instances in the whole section) is combined with a reiteration of the sentence “(such-and-such item) has lasted in my possession so-and-so many years” appended to all categories of drugs (salves, syrups, and collyria and siefs) except for preserves (*murabbayāt*, for which an analogous quote from GALEN substitutes for the first person) and the closing epigraph of dry collyria (*darūrāt*). With regard to the later, a new explanation is provided: the dry collyria which, like the basilicon (*bāsiliqūn*), contain drugs of plant origin (*ṣaḡāqīru nabāṭiyyah*) weaken noticeably after one year, whereas those that contain mineral ingredients (*aḡḡārun maṣḍiniyyah*) such as tutty, antimony, and cadmia, last uncorrupted for two years.

The catalogue of items of animal origin begins with fats (*ṣuḥūm*), which may

¹ The name of the first electuary in the list could not be reconstructed even with the help of parallel loci, but it seems to be a reflection of *διορρηκόν*, cf. «*diyārūṭiqī*» (sic) in IBN SARĀBIYŪN, *Kunnāš* VII.34 (L 240v 20). The old label appears to have been substituted for by an Arabic translation at an early date, cf. a series of three consecutive *mudirru lbawl* (used as a proper name) in pretty much the same context in SĀBŪR B. SAHL, *Ṣaḡīr* [28–30] (K 55₁₇–56₁₇).

last more than a year if conveniently stored after salting. Galls (*marārāt*) last even longer, for many years, when dried and stored so that they are not in contact with air—the author affirms to have personally ascertained this («*waqad ġarrabtuhā*»). Excrements of diverse kinds last for approximately a year before losing their power. The same shelf-life is attributed to blood if carefully preserved, while such bony substances as horn and all sorts of hooves («*alḥawāfiru walʔaḍlāf*») last for many years and the author has found them unaltered after a (long?) period of time. A final observation is made about castoreum (*ġunda-bādastar*), which is said to have lasted at the author's store some fifteen years without giving any signs of alteration, so that he is persuaded that it may well last even longer.

Commentary

There is a major aspect of *On the shelf-life of drugs* that needs being addressed even within the limited space of this overview: intertextuality, particularly the origin of much of the information gathered in this subsection. Related to this, there is an overt conflict with regard to the ascription of the text, which, despite its prima facie unambiguous originality (inferable, of course, from the recurrent emergence of the first person), is transmitted elsewhere in an identical form but under a different authorship.

Inspiration and even ready-to-copy passages were not wanting from the available medical corpus and even if an explicit mention at the very beginning of DIOSCORIDES' *Materia medica* is completely ignored by the author,¹ some of the scattered references to this matter in the Galenic corpus have found their way into the text. Explicit quotes from GALEN are included both in the segment on simple drugs for cinnamon² and in the catalogue of compound drugs for the philonium and for the rob of quince.³ The Pergamene physician was likewise

¹ In the prologue white and black hellebore are said to last for many years, whereas other drugs of plant origin are not useful for longer than three years at most, cf. DIOSCORIDES, *Mat. med.* 1 (W I 420–22) ≡ *Ḥaṣāʔiṣ* 1 (P 2v 2–4 | T 10_{15–18}).

² The passage is a paraphrase of GALEN, *Antid.* I.13 (K XIV 63_{17–65}).

³ The quotation on philonium does not stem from *Ad Glauc.* II.8, where according to GALEN the Φιλωνεῖον φάρμακον, like all opiates, ought to be used «οὐκ εὐθέως, ἀλλὰ μετὰ χρόνον τῆς συνθέσεως ἐνιαύσιον ἢ πάντως γε μῆνας ἕξ» (K XI 114_{15–17}). For the rob of quince, the ultimate origin is a remark on the juice of the kind of quince known amongst Asiatic Greeks as στρούθιον μῆλον in GALEN, *Alim. fac.* II.23 «Ἐξαιρετόν τι παρὰ τᾶλλα μῆλα τούτοις ὑπάρχει στύψιν τε πλείονα κεκτημένοις καὶ τὸν χυλὸν ἔχουσι μόνιμον, εἴ τις ἐψήσας αὐτὸν σὺν μέλιτι φυλάττειν ἐθέλοι· ἡμεῖς δὲ καὶ τὸ διὰ τοῦ χυλοῦ τῶν στρουθίων μῆλων φάρμακον ἐπιτηδεϊότατον τοῖς ἀνορέκτοις, οὐκ ἐν φανερωῖ κατὰ τύχην κείμενον, ὕστερόν ποθ' εὔρομεν ἐτῶν ἑπτὰ μετὰ γεγενησάντων οὐδεμίαν ἐσχηκὸς ὑπαλλαγὴν τῆς ποιότητος» (H 293_{5–11} | K VI 60_{2–10}). The quote, featuring rather «ماء السفرجل», was actually already included in the original chapter in IBN SARĀBIYŪN's *Kunnāṣ* VII.34 (L 242r 9–10); also ALMAĠŪSĪ, *Kāmil* II.X.6 (S II.2 314_{23–24}); thence ALQALĀNISĪ, *Aqrabādīn* XVI (B 45_{11–12}).

the source for similar passages in AṬṬABARĪ's *Firdaws*, for instance, where his recipe for the great theriac is borrowed in its entirety, including the instructions for its use.¹

Now, comparison to earlier texts shows that the previously mentioned difference in tenor between the unit on simple drugs and the unit on compound drugs reflects in fact a difference in the sources for each segment. This could be intuited from the fact itself that, unlike direct knowledge on everyday commodities that were easily available in the Andalusī market, practical experience with the shelf-life of extremely complex and rarely documented compound drugs is highly suspect in a lower-rank physician (and perhaps also an apothecary) working in Ilbīrah. In this regard it is also significant that the first person vanishes for the whole segment on the great antidotes, only to reappear when less grandiose drugs are mentioned. This intuition becomes a certainty when the whole segment spanning from the mention of the theriac down to the paragraph on preserves (including GALEN's quotation on the rob of quince) is found in a virtually word-by-word identical form already in IBN SARĀBIYŪN's *Kunnāš* and in a somewhat reworked and expanded version in ALMAĠŪSĪ's *Kāmil* too.²

There is nothing out of the ordinary in such a borrowing, for sure, and the only thing remarkable would be the availability of a copy of *Kunnāš* VII (or at least a fragment thereof) in Andalus and also ALḤILBĪRĪ's excellent choice of sources for his own compilation—which tallies with what can be inferred for other sections of *Natāʾiğ*. The vexed discussion on the admittedly blurry limits of fair borrowing is of secondary importance here, as the true “problem” with *On the shelf-life of drugs* is that the whole subsection, from the very title to the closing paragraph on castoreum, including all instances of authorial autoreferentiality, is transmitted as Chapter 4 of book XXIX of AZZAHRĀWĪ's *Taṣrif*.

¹ According to AṬṬABARĪ, GALEN would have affirmed that the great theriac (*attiryāqu lʾakbar*) ought to be used after six months or a year and that it keeps its power for more than thirty years, cf. *Firdaws* VI.VI.1 (§ 45_{O18-19}). The source quoted there is, of course, also the origin of the identical opening passage on the theriac in *Natāʾiğ*, namely PSEUDO-GALEN, *Ther. ad Pis.* XIV, with a somewhat different wording but the same expiration expectancy: «ἔστι δὲ δυνατὸν τὸ φάρμακον ἕως ἑτῶν τριάκοντα» (B-M 7_{O11-12} | K 268₇₋₂₆₉₇) ≡ *Tiryāq* 97₆₋₁₆; rather thirty-seven years according to *Ther. ad Pamph.* IV (B-M 8₁₃₋₉₁). Further (pseudo-)Galenic data were available also in the form of scattered remarks such as the one on the shelf-life of the theriac pastilles (ἀρτίσχοι θηριακοί) in *Antidot.* I.8 (K XIV 49₃₋₁₃).

² In the inscription for this table of expiration dates IBN SARĀBIYŪN affirms to transmit the knowledge/practice of Gondēšāpūr, cf. «*Salā madhabi ahli Ġundisābūr*» in *Kunnāš* VII.34 (L 24_{OV} 14 – 242_r 10) ≡ «*secundum intentionem illorum de Gendisabor*» in *Breviarium* VII.28 (P 127_vb 2 | V 85_{va} 43). The Arabic translation of IBN SARĀBIYŪN, *Kunnāš* VII (which has been also checked for the analysis of *Nat V PHARMACOPOEIA* below) has been consulted only through the Leiden manuscript (as I could not gain access to Brussels, Bibliothèque Royale MS 19891), but its readings have been complemented with GERARD OF CREMONA's Latin translation (ie *Breviarium*).

In *Taṣrif* that chapter is copied between the section on substitutes (*abdāl*) and the one on measures and weights that closes book XXIX, and there is no indication whatsoever in *Taṣrif* that the first-person utterances in the text may reflect any opinions or experiences other than the author's. The mystery, therefore, boils down to a deceptively simple question "who is *I* in these two texts?", yet any possible answer to it must be built for the time being on arguments that are either unconvincingly subjective or highly disputable.¹ In view of the heavy implications of this conflict of authorship for the chronology of *Natā'iğ* (if the text is originally by AZZAHRĀWĪ then our compilation must be dated to the mid-11th c. at the earliest) a limited discussion of this topic is provided in Chapter 9.

In any case and regardless of authorship, all the above mentioned texts are mutually complementary from a philological point of view and parallel loci had been put to good use for the establishment of the text of *Natā'iğ*. As far as the segment on the great antidotes is concerned, the transmission of the original text is remarkably complex and the unfamiliarity of scribes with some of the drug names conspires with palaeography ('six [months]' and 'year' are often mistaken for one another through an undifferentiated ductus *سسه*) and with not a few eyeskips—all of which advises against attempting to "reconstruct" the text of *Natā'iğ* with pieces borrowed from *Taṣrif* and vice versa.

¹ An example of the former would be to argue that first-hand knowledge on drugstore-related matters would be more likely to be expected from an apothecary than from a physician, but then there is no confirmation that ALʿILBĪRĪ was actually an apothecary and AZZAHRĀWĪ, while being a physician, was in charge of the caliphal store. Resorting to chronological priority, on the other hand, would be equally disputable, given that *Natā'iğ* is virtually achronous and all evidence for its dating is speculative rather than factual.

4.2 Concluding remarks

Work to be done

The Arabic text of *Nat* I is not definitively established in all its details. Even if I am not exceedingly optimistic, it is hoped that in a future edition of the text some of the current cruces may have been solved. My expectations are rather low with regard to some mistransmitted words but new pieces of evidence could make a few emendations possible. Somewhere in the texts that I have not read yet lies the key for the interpretation of the enigmatic variety of pearls, the confirmation (or refutation) of the herb with which saffron is compared, and an improvement on my unsatisfactory guess about the scent of musk, which can hardly be likened to that of ants («التعلُّ» in P) but might have nothing to do with the Nile either.¹

Then, the integral commentary on the contents of the section must also take definite (and definitive) form. The materials for that study are already collected and digested. Some additional texts can be included in the survey, and the experience gained from the compilation of the analogous commentary on *Nat* III (of which Chapter 4 in Part III of this dissertation is a small sample) shall certainly help to shape that study. Despite its fragmentary and provisional nature, however, the above survey may have shown the interest of this text for the history of Islamicate (and particularly Andalusī) apotheconomy and a readable edition is now available on which to conduct further research.

An Andalusī text for apothecaries

¹ I cannot find one single reference in the corpus to the smell of ants and the two most evident emendations are either “the Nile/blue indigo” (النيل) or “elephants” (الفيل). I currently favour the former on palaeogeographical grounds (it requires less editorial intervention) and I am inclined to understand it as referring to the Nile river rather than to indigo (also *nīl* but universally associated to a colour, never to a smell). There was an Egyptian tradition about crocodiles possessing an egg-like follicle that exuded a scent similar to that of musk, cf. ʿABDULLAṬĪF ALBAĠDĀDĪ, *Ifṣādah* I.3 (84₉₋₁₃); it was crocodiles eggs that had this smell according to ALQAZWĪNĪ, *ʿaǧāʾib* II.4 (W 131₂₆₋₂₇); ADDAMĪRĪ, in turn, reports that Copts affirmed that this exudation of crocodiles was indeed musk, cf. *Ḥayawān* [113] (§ I 539₆₋₇). Musk is said to be found also in crocodiles by ŠAMSUDDĪN ADDIMAŠQĪ, who moreover provides a description of their musk gland, cf. *Nuḥbah* III.1|2 (M 92₆₋₇, 106₁₋₂). As far as I know, however, a direct connection between musk and the Nile river is never made. Let it be noticed, in any case, that since at least the 9th century an Indian tradition also circulated according to which the sweat of elephants is redolent of musk, cf. ALĠĀḤID, *Ḥayawān* VII 210₂₋₅, 229₁₁₋₁₃. Moreover, other alternatives should perhaps not be disregarded, such as نفل *nafl(a)*, which for IBN ĠULĠUL corresponds to DIOSCORIDES’ two varieties of λωτός in *Tafsīr* 4:97–98 (G 82_{5|7} | D 148_{6|19}), the first of which (ie *ḥandaqūqā*) was also known as ‘earth’s-clove’ (*qarunfulu lʿarḍ*, to be compared to English *clover* as a common name for different species of the genus *Trifolium*) because of its fragrance according to the anonymous author of the *ʿundah* in [3128] نفل (B–C–T 356₂₈).

Regardless of the exact date of its compilation (for which see Chapter 9), *Nat* I is quite unique in the Andalusī tradition (and perhaps also in the Islamicate tradition in general) as a representative of the category or thematic genre of comprehensive manuals for apothecaries.¹ This exceptionality is reflected not only in the actual contents of the section (no other text known to me offers so much concrete data on so many different aspects of the subject) but also in its focus: *Nat* was not written for physicians but rather for drug-handlers. Physicians could hardly find what they needed here, whereas apothecaries may have found in it most of the knowledge required to run a drug-shop and to be regarded as respectable professionals by physicians and clients alike.

Whether the author was himself an apothecary or not (on this see also Chapter 9), the text does not leave room for doubt with regard to his intended readership. Unlike most physicians, or at least unlike those whose texts have been preserved, ALʿILBĪRĪ stays away from guildism and the widespread (and largely self-promoting) criticism of apothecaries and drug-sellers. A faint echo of inter-professional competition might be perceived, perhaps, in *Deontology*, but his approach is overall congenial—so much so that it is actually difficult to discard that he may have been personally involved in this craft.

Some very interesting parallelisms with ALṢAṬṬĀR ALHĀRŪNĪ's *Minhāǧ* have been pointed out in the overview of this section and our text had actually already been compared to that treatise,² although I would not push the comparison so far and *Nat* I cannot be considered a predecessor (unless in the most restrictively chronological sense) of *Minhāǧ*.

In the current picture of Mediaeval Islamicate apotheconomy, these two texts are unique species within a genre that remains to be properly described. That description must begin with a proper definition of the agents involved in this trade. Strictly etymological explanations may be informative with regard to diachrony but already in the 10th c. one cannot distinguish either different professions or different levels of specialisation and education on the mere basis of the usual labels *ṣaydalānī* and *ṣaṭṭār*, then also *ṣarābī*, *maṣāǧimī*, etc.³ The

¹ Unfortunately, the extremely promising “book concerning the shop of the ‘aṭṭār” allegedly written by AḤMAD ALQURṬUBĪ according to HARMANEH 1962: 62–63 is a false lead, as it happens to be a book of poetry by the reputed IBN ŠUHAYD (cf. LIROLA DELGADO 2007, and an edition and study of the extant fragments in ALMUFADḌALĪ 2020). The reference to RĪWĀQ AṢṢAYDANĀNĪ's book in HARMANEH 1962: 61, in turn, might be worth exploring, if only I could locate the reference to IBN ANNADĪM's *Fihrist* provided there.

² Cf. CARABAZA and GARCÍA 2009: 385, where ALʿILBĪRĪ's text is considered as “un auténtico, aunque reducido, manual del farmacéutico”.

³ No wonder even HARMANEH 1962: 63 admits that “[i]n some cases it is hard to draw the line between the *ʿaṭṭārīn*, the drug sellers and spicers, and the retail pharmacist”. I could not conduct an analysis of the nomenclature of drug-related professions for this preview. It must suffice to

intended reader of *Nat I* is consistently referred to as a *ṣaṭṭār* whose business ranges from quality assessment of the primary products to the preparation of complex syrups and electuaries to be sold even directly to the patients.

Reconstructing the Andalusī drug market

The author is heavily indebted to the written tradition, that much is for sure. The catalogue of compound drugs in *Apoth 4* is simply a copy (and probably a mediated one) from IBN SARĀBIYŪN's *Kunnāš VIII.1*. Echoes of the pseudo-Aristotelian *Aḥḡār* are easily detected in *Apoth 3.2 On stones*, and evidence for the use of some other written source may emerge from a more exhaustive inquiry. The nature of these data, moreover, makes the possibility of oral transmission extremely hard to admit. Just like in the case of the whole therapeutic treatise in *Nat II.2*, the almost three hundred quotes in *Nat III*, and the one hundred-odd recipes in *Nat V*, the method of transmission must be assumed to have been *wiḡādah*, as usual in these epistemic tradition.

Now, upon close inspection, some of the information brought together in this section does not seem to stem from bookish lore—and it is certainly not the product of individual fantasy. Thus, comparison to precedents and parallels in the genre of *Ṭib* (ie literature on aromatics and perfumery) shows clearly (1) that *Apoth 3.1* does not quite qualify as a member of that category as far as the catalogue of items included in it is concerned, and (2) that the Andalusī text may transmit reflections of a professional know-how that only rarely entered the written record.¹ The same holds true of *Apoth 3.2*, which is indeed far richer in unattested data and in allusions to a non-bookish context.

If this interpretation is not entirely wrong, *Nat I* could prove to be instrumental to a task that has not been a priority for historians of Andalus (even if it might advance greatly our knowledge of a particular aspect of the everyday life of those societies) but which the abundance of primary literature and even partial analyses renders reasonably feasible: the reconstruction of the Andalusī drug market.² A systematic study of all the information related to drug-handling

note that in the late Andalusī context by the Ġarnāṭī lexicon recorded by PEDRO DE ALCALÁ the apothecary was known as *ṣaydalānī*, *ṣaṭṭār*, and *maṣāḡīnī*, cf. «boticario *ṣanadilī*» *Vocabulista arávigo* 118a 39, «especiero de especias *āatār āatarīn*» 243b 1–2, and «boticario *maāḡīnī*» 118b 1 (= CORRIENTE, *LAPA* 120b *ṣndl, 138b *ṭr, and 132b *jn, respectively). All three may have been at least partially coterminous with *ṣaššāb*, cf. «erbolario conoecedor de yervas *āaxīb*» *Vocabulista arávigo* 237b 30.

¹ I have already voiced my intuition that the ultimate source of this information (namely the reality of the market, accessed either directly or through eye-witnesses acting as informants) is quite probably the same that must be assumed for ASSAQAṬĪ's *Ḥisbah VI* (C–Ch 61₄–70₆).

² The interest of such a survey could be made extensive to the whole Islamicate tradition, of course, in view of the “almost total dearth of research on pharmacists in the pre-modern Islamic

(from importation to actual use in the hands of a physician) would be most rewarding and such a project has been greatly facilitated by an excellent edition and commentary of IBN ĠANĀĦ's *Talḥiṣ*. The extant core of IBN ĠULĠUL's oeuvre is likewise available in edited form, the facsimiled fragments of IBN SAMAĠŪN's *Ġāmiṣ* are admittedly awe-imposing but overall readable, and for AZZAHRĀWĪ's *Taṣriḥ*... well, at least a facsimile reproduction of one manuscript is easily accessible. With the significant exception of AZZAHRĀWĪ, all these physicians are remarkably explicit regarding their sources, which include in many instances informants unambiguously identified as drug-handlers or apothecaries.¹

Much ink has been spilled over the question as to whether in an Islamicate context mediaeval apothecaries were or not organised into corporations and whether these hypothetical corporations could be equated to guilds.² Likewise and for reasons that I can only guess, the institutionalisation (or the lack thereof) of drug-handlers, apothecaries, and allied professions has been given disproportionate attention and one can easily find an allusion to “the beginning of pharmacy's independence from medicine” and a discussion propounding a dichotomy between the “uncultured charlatans among pharmacists” and “educated, responsible pharmacists” as working categories,³ or a brief monographic

world” (CHIPMAN 2010: 125).

¹ Let me draw the reader's attention to an enigmatic tenth-century ḤALAF AṬṬĪBĪ from whom several (oral?) accounts are preserved by Andalusī pharmacognostics. For his classification of the varieties of agarwood, cf. IBN SAMAĠŪN, *Ġāmiṣ* عود 2 (S III 129₁–130₅); then IBN WĀFID, *Mufradah* [192] (A 255_{9–20}), where the edition of the Judaeo-Arabic manuscript reads «خلف اللطيني», while the print of the Latin translation has «*Chealfetebeni*» (*Serap* 135_{18–33}). The difference between *fāratu lmisk* (the pod full of musk) and *nāfiḡah* (the pod after being sliced open and depleted of its contents) was reported by IBN ALHAYṬAM from ḤALAF, cf. IBN WĀFID, *Mufradah* [181] (A 241_{12–14}, the edition reads «الظي»). Also an excerpt on زرنب transmitted in IBN SAMAĠŪN, *Ġāmiṣ* 6 (S III 21_{2–3}); then IBN ALBAYṬĀR, *Ġāmiṣ* 19 (B II 158_{25–26}). He appears to have been unknown to IBN ĠULĠUL and, more significantly, to IBN ĠANĀĦ.

² The anachronism of the traditional formulation of this question is forcibly demonstrated by GARCÍA SANJUÁN 1997: 208–214, 225–229. Mark that the whole section *Nat* I (and most particularly the deontological segment) addresses the druggist or apothecary in the third person singular and even if a collective interpretation is admittedly possible (and even probable) the debate on the establishment of professional corporations is entirely irrelevant here.

³ The main representative of the former approach is HARMANEH 1962, which ought to be understood as a reflection of the author's primary concern with the overall institutionalisation and governmental legislation with regard to health-related professions (cf. also HARMANEH 1964 and 1971). There is much valuable information insightfully digested in HARMANEH's scholarly output, but the analysis there is pervaded by positivism and marked by a distinct bias towards elitist forms of knowledge. As can be clearly seen in throughout this dissertation (see particularly Chapter 9 on ALḤILBĪRĪ's professional profile) I do not quite subscribe such a restrictive definition of the “professional status” of physicians and apothecaries, and while I shall echo *contemporary* reports on charlatanry and similar criticisms voiced by the actors of this story, I would avoid by all means anachronistic (and highly subjective) labels. All those agents were

analysis of the *hizānah* established in Madinat Azzahrā?¹

I do not deny the possible utility of this approach (although the admixture of essentialism and positivism does not make it particularly appealing to me) as long as the debate is kept away from the ideological battlefield and anachronistic comparisons are limited to a bearable minimum. Its scope, however, is rather reduced and its results are not especially enlightening.

professionals even if they certainly did not share the same deontological code (but neither did, apparently, some elite physicians) and the difference in their education may perhaps be better described by a distinction between 'learned' professionals (ie those trained in the written tradition) and the rest, which were not all necessarily 'uncultured' (let alone irresponsible) but simply derived their knowledge from other sources (mainly experience). It is, in fact, precisely because the epistemic tradition of non-learned professional was not based in bookish lore that their testimony becomes instrumental to a more correct interpretation of historical *reality* (as opposed to literary representation). Besides, I am not the only one to find HARMARNEH's assumptions on the level of education of the different professions subsumed into the label 'pharmacist' unfounded and lacking any supporting evidence in the documentation, cf. CHIPMAN 2010: 157–158.

¹ Cf. ÁLVAREZ DE MORALES 1991: 1090–1096. The author's exposition is admittedly hard to navigate and the conclusions are not any clearer. While depending heavily from HARMARNEH for the historical frame, the author presses the argument so far as to affirm that "en el tiempo que nos ocupa el farmacéutico, o si se prefiere la clase farmacéutica, no tenía entidad propia; dependía de la medicina, en unos casos, y de la *hisba*, en otros. La labor de los primeros era supervisada y controlada por el director del hospital; la de los segundos, cuando se realizaba en la calle, por el almotacén" (ÁLVAREZ DE MORALES 1991: 1089). Now, in the first case, it is a collaboration that is described (which requires the previous existence of two different professional profiles); in the second case, drug-making did not *depend from* but was rather *subjected to* supervision, which again presupposes the existence of a profession to be controlled and supervised. This misconception is, in any case, quite pervasive and manifests itself in different forms, cf. "[a]t this time, the preparation of medicines was the privilege of physicians; a separate discipline of pharmacology did not yet exist. That was to come in the eleventh century at the time of Avicenna who is regarded as having separated the art of medicine from the skills of compounding drugs, thus earning the sobriquet of the 'father of modern pharmacology'" (BENNET 2013: 81). After all, the *φαρμακοπώλης* was a recognised professional already in Classical Greece (even a verb *φαρμακοπώλέω* 'to be a druggist' was available, cf. LIDDELL–SCOTT, *Lexicon* 1917b) and there is no positive evidence that their supply was even then limited to simple drugs. The reluctance to acknowledge the very existence of 'pharmacists' in a mediaeval Islamic context must have something to do with the name itself and that is one of the main reasons why I favour both 'apothecary' and 'apothecomy' over 'pharmacist' and 'pharmacy'.

In the near future, if circumstances allow, I shall keep looking for further echoes of *realia* with which to contextualise the standard data provided by bookish transmission. Collecting and sifting the latter requires some patience while one makes one's way through an overall well-trodden path, and at the end meticulousness may be rewarded with a handful of fossils and a few items of dubious aliveness. The former task is perhaps more interpretive and it is not exempt from risk, but it may allow us to gain a glimpse of real life and practical knowledge. Besides, it is a promising and certainly less crowded field of research, for

[s]ources for such study of a medieval community are extremely rare since all records of practical medicine naturally vanish over the years, and only some medical books, which contained theoretical medicine, were recurrently used, sold, or kept in libraries, have survived to the present day. Authentic, practical medical and pharmacological knowledge can be extracted from lists of *materia medica*, prescriptions and medical letters found in the Cairo Genizah. Lists of *materia medica* enable us to understand medieval practical pharmacy and to reconstruct their inventories.¹

¹ LEV 2007: 276.

Complementary notes to the catalogue of polypharmacy

The main compound drugs included in the list below are those found in *Nat* I.4, yet some of them are also mentioned in other sections. In such cases a reference to additional instances of the drug is provided and a cross-reference at the pertinent locus may refer the reader back to this catalogue.

The following items, however, are covered in some detail elsewhere. The compound drugs referred to as “the electuary of sulphur” and “the remedy of turmeric” here belong quite probably with the hepatics (*dabīdāt*) mentioned in *Nat* V PHARMACOPOEIA (see *Pharm* 4 and also an excursus on the etymology of this word in Chapter 8). As categories of drugs, medicinal powders (*safūfāt*), pastilles (*aqrāṣ*), pills (*ḥubūb*), triphalas (*iṭrīfalāt*), digestives (*ḡuwārišnāt*), and collyria (*akḥāl* and *dārūrāt*, including the basilicon) are all to be discussed in the corresponding sections within the survey of the dispensatory in Chapter 8.

The list below is not exhaustive and it does not include items that are as yet unidentified or those for which little or no information could be provided. The notes are brief in the case of well-known drugs for which there is no shortage of explanations and references in previous medical literature, and only slightly less so when there is something relatively new to contribute to that previous knowledge. It is a reference-list, not a glossary, let alone a concordance. Were it not for the overtly pedantic overtones of the use of Latin in this context, the above rubric would have read *Notulae*. For further information the reader should consult KAHL's own *Philological observations* to his edition of SĀBŪR B. SAHAL's small dispensatory (KAHL 1994: 212–224), which is itself built on the previous work of several generations of scholars.

In order to keep these remarks as compact as possible, the symbol ® is used to signal attestations of a formula or recipe for the item under examination. The order of the items is strictly alifatic (not abjad). The reader shall notice that the first item in the list (namely the athanasia) is analysed in disproportionate detail. That epigraph is a sample of what I conceive as an informative (but not yet exhaustive) entry in a glossary and a self-imposed model for my own future glossary on the polypharmacy transmitted in *Natāʿiḡ*.

atānāsiyā ‘athanasia’

The Arabic word (which can be morphosyntactically treated as a masculine or a feminine) is a raw transliteration of Greek ἀθανασία (cf. SCHMUCKER 1969: 53; FELLMANN 1986: 231; KAHL 1994: 217). A recipe is already known to GALEN, who borrows it from ANDROMACHUS’ hepatics, cf. *Sec. VIII.VII* (K XIII 203₁₃₋₁₇). A formula for an ἀθανασία ἀνώδυνος πλευριτική is reported from ORIBASIIUS by PAUL OF AEGINA in *Pragmateia* II 300₁₆₋₁₉. In Greek the word is documented also as a generic synonym of ἀντίδοτος (cf. SKODA 2001).

The word is interpreted as meaning *almunqid* by AṬṬABARĪ *Firdaws* 452₃ and this translation is echoed afterwards by IBN HINDŪ:

Miftāhu ṭṭibb VIII s.v. (Q 82₉)

الأثاناسيا — معجون ينفع من أوجاع الكبد وغيرها، ومعناه المنقذ.

المنقذ [المنفذ] Q.

® in AṬṬABARĪ, *Firdaws* 452₃₋₁₀. Also in SĀBŪR B. SAHL, *Ṣaġīr* [36–37] (K 60₂₋₁₅, 60₁₇₋₆₁₃), who refers to wolf liver as the characteristic ingredient of the formula and further distinguishes a lesser variant (*alʿatānāsiyā ṣṣuġrā*). A mention of the little and the great athanasia (*atānāsiyā ṣṣaġīr walkabīr*) is made also by IBN SĪNĀ, *Qānūn* III.XIV.2 (B II 368₇).

There is a parallel (actually older) form ܐܬܢܐܨܝܐ in the Syriac medical tradition, in which a lesser variety ܐܬܢܐܨܝܐ ܥܘܠܡܐ is also recorded, cf. the Syriac *Book of medicines* 356₁₈, 357_{5|14}, 369₁₉ (all references already in MARGOLIOUTH, *STS* 40v). Mark particularly the description «ܐܬܢܐܨܝܐ ܥܘܠܡܐ ܥܘܠܡܐ» in 356₁₈₋₁₉, which shows the characteristic syntactic construction — ܥܘܠܡܐ (≡ δὲ —) from which Arabic *dabīd* originally sprung.

It is possible that this hepatic drug was at some point conflated with the well-documented parallel sympathetic use of a wolf’s liver for hepatic ailments and that the original ἡπατική was reinterpreted as requiring an actual liver as an ingredient.

In *Natāʿiġ* this drugs is nowhere mentioned outside this catalogue.

aristūn

Its evident origin as a transliteration of Greek ἄριστον ‘best, most efficient’ has long been recognised (cf. FELLMANN 1986: 230, 271; KAHL 1994: 213) but a concrete precedent for this ἀντίδοτον ἄριστον still remains to be identified in the medical corpus.

® SĀBŪR B. SAHL, *Ṣaġīr* [5] (K 43₂₋₁₈)

tiryāq ‘theriac’

Its origin is so well-known as to make any remarks superfluous (cf. Greek θηρι-
ακή, also Syriac ܬܪܝܩܐ / ܬܪܝܩܐ).

The catalogue of theriacs mentioned in the different sections of *Natā?iġ* in-
cludes: unqualified theriac (referring probably to the ‘great theriac’), the four-
drug theriac (*tiryāqu l?arba? / attiryāqu lmurabba?* in *Nat* II.2), and the *fārūq*
theriac and Esdra’s theriac (*tiryāq Suzayr*), both in *Nat* II.1.

As for the latter name (which is attested in *NatPhil* 4.1.4), the recipe for an an-
tidote attributed to EZRA, scribe and prophet of the Abrahamic tradition, is doc-
umented by AETIUS OF AMIDA in *Iatrica* XIII.101 *Antidotus Esdrae aut prophetae*
doctoris (B II 405₃₇–407₂₆), and explicit mention is made there of its benefit
for the spleen («*ad splenicos ex aceto aut aceto mulso*» 407₈₋₉). The formula in-
cludes a number of lately-documented ingredients such as lacquer and cloves.
A homonymous drug «ἡ Ἑσδρα ἀντίδοτος» is recommended against suppurative
abscesses (ἐμπύη / ἐμπύημα) and consumption by PAUL OF AEGINA, in *Prag-*
mateia III.31.2 (H I 217₃₂); then a full recipe for «ἡ Ἑσδρα πολύχρηστος» is pro-
vided in *Pragm.* VII.11.26 (H II 303₅₋₂₁), which is slightly different from the one
handed down by AETIUS, especially in its lack of cloves and lacquer and its in-
clusion of jasper stone. Both recipes require the entrails of a shearwater (αἰθουῖα)
as an ingredient.

This drug appears to have been unknown to AṬṬABARĪ and also to SĀBŪR, but
«ترياق عذرة» was prescribed for scorpion stings by both ĞURĠIS and ŠIMṢŪN ac-
cording to ARRĀZĪ, *Alḥāwī* XIX.4* (H XIX 268–269* | B 283_{516|27}). A theriac by
the same name was apparently mentioned by IBN SARĀBIYŪN too in the treat-
ment of miscarriage as quoted in *Alḥāwī* IX 125₂₋₃, but the Latin translation of
that treatise has rather «*tyriace de uiperis*», cf. *Breviarium* V.34 (L 72vb 45–46 |
M 43ra 59 | V 49rb 37–38).

In any case, it is far from certain that AL?ILBĪRĪ was aware of its original name
(he may well have read it as ترياق العزير or even as a meaningless unpointed book-
ish item as transmitted in P). As a matter of fact the word was mostly misread
in the later tradition and a reinterpretation as *tiryāqu lʕazīz* (and also *attiryāqu*
lʕazīz) seems to have gained wide circulation. The original form is however oc-
casionally well preserved, cf. the prescription of «ترياق عزر» against scorpion
stings in IBN ALĠAZZĀR, *Maknūn* VIII (R 36r 18).

A more complete form of the name of the four-ingredient theriac is transmit-
ted by IBN ALĠAZZĀR, *Maknūn* VIII «ترياق الأربعة أدوية» (R 36r 18).

šaġaznāyā [**saġġiznāyā*] (also often in *Nat* II.1–2)

The identification of this drug with the ܫܘܓܙܢܝܐ of Syriac lexicographers was

first proposed by KAHL 1994: 214 and the name would appear to correspond to the qualification πολύχρηστος in the Greek tradition.

No etymology or explanation is provided by IBN HINDŪ, *Miftāhu tṭibb* VIII s.v. السجرينا (Q 82₁₆₋₁₇), but the traditional gloss «وتفسيره: الكثرة المنافع» is handed down by IBN ĠUMAYF, *Iršād* IV.II.17 الشكرنايا (L 142r 2–8) and it was also known at a late date in the west, cf. IBN ALḤAŠŠĀT, *Mufīd* [1162] شخزنايا «هو دواء مركب، ويقال» شخزنايا (C–R 125₁₇).

® SĀBŪR B. SAHL, *Ṣaġīr* [6] (K 43₂₀₋₄₄₇), whose header seems to echo the meaning of this pharmaconym: «وهو السبب لصحة البدن من أشياء كثيرة».

As so often with etymological /g/, the word circulated in two early alifatic transcriptions سجرنايا and سكرنايا that were further transformed in written transmission, -ج- being sometimes reflected as -ج- (/ġ-/) and -ز- as -ر- (/r/).

Both forms are widely attested in the Andalusī tradition and it is probably a hopeless task to try to define their distribution, which appears to be large and by free and at the same time source-dependent. Moreover, in the case of modern edition without a proper critical apparatus there can be no certainty that the spelling has not been silently homogenised by the editor. In any case, cf. a regular use of «الشخزنايا» by ALHĀŠIMĪ in *Maġālis* 63₁₋₂, 65₁₆, 76₃, 76₃, 80₃, 152₄. It appears to be the form favoured by IBN ALĠAZZĀR too, cf. *Maknūn* VIII (R 36r 18); although the critical edition of the first two books of his *Zād* actually reflects some variation amongst the manuscript witnesses.

safūfu lmaqliyātā (or some other possible realisation of the ductus مقليانا)

The origin of this name had been discussed since SIGGEL 1950: 69a s.v.; then SCHMUCKER 1969: 163, 484; and FELLMANN 1986: 263; until KAHL 1994: 221–222 proposed *maqliyātā* on account of its Syriac etymon ܡܩܠܝܢܐ.¹

The original reference to its most characteristic ‘roasted’ ingredient seems to have been extended to the drug itself, but at any rate the name was certainly opaque to all but a few Syriac-speaking physicians in the east.

¹ Pace KAHL and his apparent dislike of interpretive transliterations, FELLMANN’s *muqliyātā* (and even SIGGEL’s *muqlyātā*) need not be historically wrong, as the analogical pressure of Arabic participles in *mu-* may have suggested such a realisation for a written artefact of unknown pronunciation.

šiltā (attested also in *Nat* II.2)

SCHMUCKER 1969: 275 contributes a variant *šilsā* that might be relevant to the prehistory of *Nat* I.4, as it is not far, at least typologically, from the reading «سلبلسا» transmitted by the two manuscripts of *Natāʔiṣ*.

After a first attempt at explaining this pharmaconym as related to relates it to the name of the 𐤒𐤋𐤃𐤕 in KAHL 1994: 218, a much more satisfactory explanation is found in 𐤒𐤋𐤃𐤕 'request, demand' in KAHL 2018: 108–109 n. 123 (with further reference to the *Syriac Book of medicines*).

Regardless of its etymology, there is no doubt that the meaning of this name was unknown to most (if not all) physicians after the Syro-Arabic phase. They simply inherited a written form that certainly circulated in a number of different spellings and in the absence of additional evidence there is no justification to impose the historically correct one against the testimony of the manuscript.¹

filūniyā Fārsiyyah (also *filūniyā Rūmiyyah* in *Nat* II.2)

PHILO OF TARSUS' remedy (Φιλώνειον [φάρμακον] ≡ معجون فيلون) was available in GALEN's output. Its most frequent name (*filūniyā* / *iflūniyā*) entered Arabic in an obviously Syriacising form (cf. ڤلوني). For the identification, cf. SCHMUCKER 1969: 324; FELLMANN 1986: 63; KAHL 1994: 214.² The Persian variant appears to be an Islamicate (or perhaps already pre-Islamicate?) Iranian innovation and its formula includes musk and camphor.

The origin of the name was available to Islamicate physicians:

IBN HINDŪ, *Miftāḥu ṭṭibb* VIII s.v. (Q 83i)

فلونيا: معجون يُنسب إلى فيلون الطرسوسي.

The name is occasionally treated as grammatically masculine, cf. الفلونيا الرومي and الفلونيا الفارسي in IBN ATTILMĪD, *Aqrābādīn* IV [119–120] (K 83₉₋₁₃, 83₁₅₋₂₀).

® for both the Roman and the Persian variants in SĀBŪR B. SAHL, *Ṣaġīr* [7–8] (K 44₉₋₂₀ and 44₂₂₋₄₅₁₂, respectively).

¹ Once again, the "correction" of FELLMANN 1986: 277 *šalītā* as *šiltā* as propounded by KAHL applies exclusively to the modern philological discussion of the term and as far as we can ascertain ALQALĀNĪSĪ may well have inherited and realised this word as *šalītā*.

² On a petty note, if FELLMANN's *falūniyā* is to be "read" as *filūniyā* (but this does not necessarily apply to the actual texts), then "*Ifilūniyā fārsi*" would also need to be read as *iflūniyā*, since that is how prosthetic vowels usually work in Arabic.

Nat II.1 Natural philosophy

5.1 Introduction

The presence of an explicit and well-developed proem following the *basmalah* and the *ṣalṣamah* as well as an *incipit* mentioning the name of the author suggest quite forcibly that, whatever the original place of *Nat I APOTHECONOMY* in the compilation of *Natāʾiğ*, the “book” must have begun here at least in its author’s design. According to ALʿILBĪRĪ, this first constitutive subsection of the book should provide the keys to the health of its recipient and it does, indeed, contain a remarkable exposition that covers the natural philosophical principles of medicine from cosmology to human physiology.

The text opens on a cosmogonical level with the divinely instituted order of creation: causality, a material realm characterised by opposition and an immaterial side in which harmony prevails, the upper and the nether worlds, decree and predetermination, evidence for the unicity of the creator, three ways of epistemic perception. Then it goes on with a discussion of temporal matters from an essentially astronomical perspective: the path of the Sun and the Moon, the signs of the zodiac and the planets, astro-geographical and melothestic correspondences, the seasons, months, and days of the week. It also includes an abridged account of the four human natures (ie the four humours): blood, phlegm, and black and yellow biles.

The latter point is then developed in a separate epigraph under the title *On the four time seasons and the four human natures*, most of which is actually devoted to an extensive description of the humours, for which the author collects data on physiognomy, nosology, regimen, and compound drugs. A minimally motivated digression breaks the continuity of the discourse on phlegm

and turns to the characterisation of spring, summer, and autumn (winter is only tangentially dealt with), but the text focuses back on phlegm-related information before closing the section with a series of passages allegedly borrowed from GALEN and from the collective authority of the excellent philosophers. The subsection closes with an epilogue in which the author addresses again his reader with an exhortation to the study of the methods and principles that he has established in this book.

All in all, despite some occasional redundancy and a slight tendency towards digression, *Nat II.1* is fairly well-organised and provides a quite thorough, albeit admittedly unsophisticated, introduction to the principles of natural philosophy to the extent that these are of some interest to human health and medicine.

In view of the contents of the segment the title *Natural philosophy* should be understood in its usual meaning as an “umbrella term to designate the study of nature” by which the much-feared anachronistic use of *natural science* can be conveniently avoided.¹ In an Islamicate context, early natural philosophy can be described as that “Popularphilosophie [...] die in der Folge nicht nur höfische Kreise, sondern auch eine ganze Masse von Gebildeten und Halbgebildeten ergriff” and which was largely based on Aristotelian (and also pseudo-Aristotelian) materials filtered through Pythagorean and Neoplatonic doctrines.²

It is evident that an unfair comparison to the great Islamicate commentators and interpreters of ARISTOTLE or even to lower-rank representatives of the *falsafah* can make our text look rather unphilosophical,³ yet philosophers are the acknowledged authority that underpins the whole exposition, which is expressly stated to have been written according to “philosophical canons”, “rational proofs”, and “apodictic principles” (see *NatPhil* 1). There is, moreover, a noticeable insistence on the use of philosophical jargon and phraseology and, af-

¹ Cf. BLAIR 2006: 363–406, whose considerations regarding this discipline focus, nevertheless, on the early modern period. As far as I am aware, the use of *natural philosophy* either as a blanket term or a working category is unproblematic and still in currency in the history of Islamicate science, cf. for instance “physics or natural philosophy” as a subject distinguished from logic and epistemology on the one hand, and from metaphysics and philosophical theology on the other, in SABRA 1994: 17.

² DE BOER 1901: 69. His brief survey of Islamicate *Naturphilosophie*, albeit certainly outdated, contains some insightful remarks on the major trends of the ninth-century study of nature in the central lands of Islam, cf. DE BOER 1901: 69–76 (English translation by JONES 1967: 72–80).

³ A fair impression of the untechnical and unconventional nature of the philosophical exposition found in *Nat II.1* can be gained from the fact that neither matter (*hayūlā* ≡ ὑλη) or form (*ṣūrah* ≡ εἶδος), nor movement (*ḥarakah* ≡ κίνησις) or alteration (*istiḥālāh* ≡ ἀλλοίωσις), are anywhere explicitly mentioned by these names by the author. Philosophical terminology is not however entirely missing, and such standard phrases as “bringing into actuality from potentiality”, “generation and corruption”, “increase and decrease” show quite clearly the author’s indebtedness (either direct or indirect) to the corpus of Graeco-Arab translations.

ter all, the title of the book itself contains an unambiguous coordination of the “philosophical methods” and the “medical canons” that is as telling of the general epistemic frame of the work as of its indisputable adherence (not only on a purely rhetorical level) to the philosophical tradition.

In any case, the author, who seems not to be a stranger to philosophical exposition, stays away from controversial matters (the definition of god as cause or the divine attributes, for instance) and his explanations apparently conform with what can be called Islamic (and even particularly Mālikī) orthodoxy. This Islamicness is further enhanced by the conspicuous incorporation of Qurʾānic passages and exegetical and traditionistic materials into the discussion.

Being neither a new Arabic paraphrase of ARISTOTLE’S natural philosophical subcorpus¹ nor a genuinely theological (and assuredly not an anti-*falsafah*) cosmology, *Nat II.1* is best classed as a representative of the medical-philosophical prolegomena that introduce, precisely as premises, at least one of the early medical *kanānīs* and which would afterwards become particularly associated to treatises on hygiene.²

The underlying justification for bringing to the fore such matters as would be better suited for philosophical debate is made explicit, indeed, by AṬṬABARĪ, who recalls his readers of the logical thread that leads from the physician’s main concern (ie preservation of health), to the ultimate constitutional elements of the human body and of the universe (namely matter and form):³

Firdaws Proem (§ 6₁₄₋₂₀)

وإنَّ أَوَّلَ فِكْرَةِ الْمُتَفَكِّرِ فِي الطَّبِّ إِنَّمَا هُوَ حِفْظُ الصِّحَّةِ؛ غَيْرَ أَنَّ الصِّحَّةَ لَمَّا كَانَتْ لِلْأَبْدَانِ،
وَالْأَبْدَانِ مَرْكَبَةٌ مِنَ الْمَزَاجَاتِ الْأَرْبَعِ، وَهَذِهِ الْمَزَاجَاتُ تَتَوَلَّدُ مِنَ الطَّبَائِعِ الْمَرْكَبَةِ، وَالْمَرْكَبَةُ تَكُونُ
مِنَ الْمَفْرُودَةِ، وَتَكُونُ جَمِيعَ ذَلِكَ فِيمَا قَالُوا مِنَ الْهَيُولَى وَالصُّورَةِ — رَأَيْتَ لَئِنَّكَ أَنْ أَبْدَأَ
بِالشَّيْءِ الَّذِي إِلَيْهِ يَنْتَهِي آخِرَ فِكْرَةِ الْمُتَفَكِّرِ فِي الطَّبِّ وَأَنْ أَقْدَمَ الْقَوْلَ فِي أَصُولِ الْأَشْيَاءِ، ثُمَّ
فِي فُرُوعِهَا. .

As far as our knowledge of the early medical tradition goes AṬṬABARĪ’S is, however, almost an isolate example of inclusiveness with regard to philosophical matters,⁴ and in Andalus the emulation of that model as reflected (quite

¹ By “paraphrase” I do not mean only the abridgements, commentaries, and comprehensive accounts by such distinguished philosophers as ALMASĪHĪ and IBN SĪNĀ or, in Andalus, IBN RUŠD and IBN BĀĠĠĀH, but also rather (and mainly) more modest summaries and propaedeutic recapitulations as those of the IḤWĀN or, in the Syriac tradition, JOB OF EDESSA’S *Book of treasures*.

² Cf. most particularly IBN ALḤAṬĪB, *Ḥifẓ* I.1.1–II.3 (V 11₁–29₂₅), which is itself an exception in the genre at least in Andalus.

³ He is nonetheless aware that such matters are not directly related to medicine and even apologises for including them, for the sake of completeness, in his book, cf. *Firdaws* I.1.1 (§ 9₁₋₄).

probably in an indirect way) by *Natāʾiğ* is likewise unparalleled, with the only exception of the fourteenth-century treatise on hygiene by IBN ALḤAṬĪB. While this exceptionality may be somewhat inflated by the gappy nature of the extant corpus, there is no denying that to tackle or to pass over the fundamental workings of the universe as a prerequisite for the study of medicine is an authorial choice and a reflection, therefore, of a particular approach to this discipline—or, to be more precise, to medical didactic writing.¹ That ALḤILBĪRĪ decided to include this exposition as the opening section of *Natāʾiğ* should thus be reckoned amongst the many original features of this book.

No less original is, on the other hand, the successful blend of disparate doctrines on which consists NATURAL PHILOSOPHY. This shall become self-evident from the partial paraphrase of the text provided below, and even more so from the strikingly diverse origin of the precedents and parallels that are mentioned in this survey. A few provisional remarks on the possible sources of ALḤILBĪRĪ's information are to be found at the end of this overview and also in Chapter 9, but a preliminary word ought to be said here about the choice of texts against which *Nat* II.1 has been compared for this study.

I have already said that the author draws significantly from the Graeco-Arabic philosophical tradition, yet not one single source is ever mentioned in the whole segment (other than GALEN for a few dietetic passages) and such ideas as the theory of causation or the universality of opposition, or even the characteristic formula “bringing into actuality from potentiality”, are likely borrowed from intermediary texts rather than directly from the Arabic Aristotelian corpus. For an Andalusī author writing quite probably before the blossoming of philosophical studies in the post-califal period, the main ascertainable ways of access to such doctrines would be ALKINDĪ's treatises, most particularly *Ūlā / Tawḥīd* (ie *First philosophy*), which was not only known but even refuted in Andalus probably in the early 10th c. by no less an authority than IBN MASARRAH (d. 931);² the

⁴ Another major representative of this particular kind of pandect must have been IBN MASĪḤ's *Kunnāš* and the core of its natural philosophical contents may be preserved in the *Hārūniyyah* and perhaps also in the *Tuḥfatu l'aṭibbāʾ* ascribed to ḤUNAYN B. IṢḤĀQ (see Part III Chapter 1 for a provisional analysis of the *Hārūniyyah* and further references to the *Tuḥfah*).

¹ Cosmogony, in the widest sense, is absolutely ignored by IBN SARĀBIYŪN, ARRĀZĪ, ALMAĠŪSĪ, ALKAŠKARĪ, and in Andalus by AZZAHRAWĪ, in their respective *kunnāšāt*. The underlying question is not, to be sure, the legitimacy or the interest of natural philosophy itself but the extent of its *pertinence* for the study of medicine.

² The primary evidence (including IBN ĠULĠUL's testimony in *Ṭabaqāt*) for the identification of the two titles as referring to the same work is conveniently gathered in RASHED and JOLIVET 1998: 129 n. 2. The earliest witness for *Ūlā / Tawḥīd* in Andalus is an excerpt from its no longer extant “ninth *fann*” in IBN ṢABDIRABBIH, *Ūqd* II 195₁₅–196₄, which is reproduced, translated into French, and annotated in RASHED and JOLIVET 1998: 129–130. It shall be quoted below as a strong

epistles of the Iḥwān, which were also introduced in Andalus by the same time and provided a convenient and ready-for-use compilation of already digested materials;¹ or still some local text or texts in which echoes of either of the aforementioned corpora and other philosophical materials were transmitted with no explicit ascription, as for instance the *Rutba* and the *Ġāyah* by MASLAMAH ALQURṬUBĪ, both of which incorporate a great deal of cosmogony and philosophy in support of their alchemical and talismanic doctrines.²

Several other texts that could have mediated the same information may have existed, of course,³ and the customary reference to the *riḥlah* (and particularly

candidate to be the source of *NatPhil* 2.3. As for IBN MASARRAH, who was charged with *zandaqah* apparently because of his doctrines, cf. FIERRO 1987: 113–118; RAMÓN 2006; STROUMSA 2006, 2016; BELLVER 2020: 325–329; GARRIDO 2022. The refutation (= *Radd*) of ALKINDĪ's *Ūlā* was edited by IḤSĀN ṢABBĀS amongst IBN ḤAZM's epistles but its ascription to IBN MASARRAH has been compellingly argued by BELLVER 2020: 334–357 on the basis of new evidence provided by IBN ALṢUQLĪŠĪ's *Inbāʿ*, according to which a refutation of ALKINDĪ's treatise had been penned by IBN MASARRAH. The coincidence between the doctrines ascribed to the latter by IBN ALṢUQLĪŠĪ and the text of the *Radd* is, as shown in detail by BELLVER, almost definite proof of the actual authorship of the text. Incidentally, caution is suggested in the same paper about the ascription to IBN MASARRAH of *Ḥurūf* and *Ṣtibār*, which “should not be taken for granted” (cf. BELLVER 2020: 343).

¹ The reascription by FIERRO 1996 of the *Rutbah* and the *Ġāyah* to MASLAMAH ALQURṬUBĪ (d. 964) rather than to MASLAMAH ALMAĠRĪṬĪ (d. ca 1007) translated immediately in a revision of the chronology of the compilation of the *Rasāʾil*, which is now thought to have begun perhaps as early as the mid-9th c. As far as the Andalusī circulation of the encyclopaedia is concerned, the text is thought to have been introduced in the peninsula by MASLAMAH ALQURṬUBĪ after his return from the east (cf. FIERRO 1996: 106–108; DE CALLATAÏ 2015: 231–232, with further reference to previous analyses of the question). Examination of the two treatises *Ḥurūf* and *Ṣtibār* traditionally attributed to IBN MASARRAH (but cf. the aforementioned remark in BELLVER 2020: 343) leads DE CALLATAÏ to conclude that the “parallels are too close, in the form as well as in the substance, to be explained otherwise than by a direct dependence from the *Rasāʾil*” (DE CALLATAÏ 2015: 233; also 234–244).

² Cf. DE CALLATAÏ 2015: 245–249, where it is affirmed that *Ġāyah* is “lavishly indebted” to the Iḥwān although they are never explicitly mentioned, whereas in *Rutbah* this debt is duly acknowledged.

³ According to ṢĀFĪD ALʿANDALUSĪ's *Ṭabaqāt* 82_{37–13}, at the turn of the 11th c. IBN ALKAT-TĀNĪ, being himself well acquainted with logic, astronomy, and many branches of philosophy («*wakaṭīrin min ṣulūmi ḥalfsafah*») and also the teacher of IBN ḤAZM, would have noted down in some text of his a list of ten scholars from whom he had learnt («*aḥadtu*») the science of logic. He mentions IBN ṢABDŪN ALĠĀBALĪ, IBN YŪNUS ALḤARRĀNĪ, IBN ḤAFṢŪN “the philosopher”, IBN FATHŪN ASSARAQUSṬĪ (the association of all four of them with philosophy is well known), and even the bishop ABULḤĀRĪṬ, a disciple of RABĪʿ B. ZAYD “the philosopher bishop”. The first Andalusī treatise on philosophy known by title appears to be *Ṣaġaratu ḥikmah*, authored by IBN FATHŪN ALḤAMMĀR ASSARAQUSṬĪ, who after having been imprisoned left Andalus and found a new home in Sicily. His text is described as «*risālatun ḥasanatun fi ḥmadḥali ilā ṣulūmi ḥalfsafah*» by ṢĀFĪD ALʿANDALUSĪ in *Ṭabaqāt* 68₁₉–69₂, and IBN ḤAZM affirms to have seen a collection of essays («*rasāʾila maġmūʿatan waṣuyūnan muʿallafah*») on philosophy written

to Qayrawān as the natural stop for Andalusī travellers to the east) as an opportunity for learning is as much of a possibility for ALʿILBĪRĪ as it is impossible to explore at the present.¹

On the other hand, there is quite a bit of information that ALʿILBĪRĪ must have borrowed from traditional, and also traditionistic, Arabic sources. Much astronomy-related data and a few dietetic recommendations were transmitted in the calendrical or *Anwāʾ*-cum-*Azminah* genre, a precedent for which entered Andalus by the beginning of the 10th c. with the arrival of IBN QUTAYBAH's treatise. By the end of the century this tradition had already produced its first full-blown local offspring through ʿARĪB B. SAʿĪD's qalam.² Despite the originally glotto- and ethnocentric focus of their precedents,³ Andalusī calendars came to incorporate a diversity of materials some of which are of direct interest not only for *Nat* II.1 but also for other sections of the collection.

Then there is that cosmogony and astronomy that has been often depicted in a depreciative light as a byproduct of religious orthodoxy but which is better described as the cumulative lore garnered from the early Islamic inquiry into the origin and structure of the universe. In Andalus a restrictive selection (allegedly by IBN MĀLIK) of cosmology-related traditions is transmitted already in the 9th c. by IBN ḤABĪB in *Nuǧūm*, which on account of the ascendancy of its author in religious matters has been considered "the Mālikī astronomical paradigm"

by him in *Faḍl* [15] (A I 1857-8); cf. also FIERRO 1987: 162-163, 2012: 417-418.

¹ It was during his *riḥlah* in the year 307/920 that the Ḡayyānī merchant MUḤAMMAD B. MUFĪT would have met ARRĀZĪ and then introduced medicine and philosophy into Andalus (cf. FIERRO 1987: 162 n. 5). As for Qayrawān (where a figure like IBN SULAYMĀN ALʿISRĀʿĪLĪ is an excellent example of a philosopher-and-physician), it was perhaps there that IBN MASARRAH became acquainted with the work of the IḤWĀN according to DE CALLATAÏ 2014: 263.

² For ease of reference I follow the prevalent hypothesis that relates the *Qurṭubah Calendar* directly with ʿARĪB B. SAʿĪD's book on *Anwāʾ*?. In its weak version, it is mostly the non-Christian contents of the text that are ascribed to the Andalusī scholar (DOZY 1873: IV-VIII; SAMSÓ 1991: 7; both of which assume the combination of at least two different texts by two authors), but a stronger version of the hypothesis (namely that the whole text is by one single hand) has been propounded by ALKUWAIFI 2022: 25 on the basis of the most complete extant copy of the text, which had already been tentatively ascribed to IBN SAʿĪD in FORCADA 2000: 114-115. That copy, preserved in Tehran, Milli Malik MS 2049, mentions the author as ALKĀTĪB ALʿANDALUSĪ and has been recently edited in ALKUWAIFI 2022 alongside an abridgement (or perhaps rather a briefer version) transmitted in Alexandria, Baladiyyah MS 2918 (= *Tafṣīl*). Throughout this study I shall refer to this constellation of texts (particularly *Qurṭubah Calendar* [= QC] and *Anwāʾ*?) as genetically related to ʿARĪB B. SAʿĪD, but the matter is far from settled.

³ Which is sometimes purposely exaggerated, as when IBN QUTAYBAH boasts to report all his data exclusively from the Arabs, being as they are the most knowledgeable nation in astrometeorological matters, cf. *Anwāʾ*? [2] (H 1,4-2,2). Despite his self-imposed restrictions with regard to information derived from philosophers and computists, he does include data from non-Arabian sources (as, for instance, the division of the year in four seasons, for which see below).

for the region.¹ A much more comprehensive compilation that is mentioned and quoted several times in the overview below is the tenth-century *Ṣaḍamah* by ABUŠŠAYḤ, who is an early systematiser of the exegetical efforts of the first generations of Muslims and also the main source for the later genre of strictly Islamic *hayʿah* fostered by such figures as ASSUYŪṬĪ or ALQARAMĀNĪ.²

Needless to say, many of the parallel loci mentioned hereunder are brought to the readers' attention by the way of illustration and do not necessarily imply a direct borrowing,³ although they do often point towards a possible common source or constellation of sources that ought to be further explored. Moreover, any bias derived from the size of the sample of texts chosen for comparison should be also corrected in the future by a more exhaustive analysis against a larger and more variegated corpus. In this regard, a conscious effort has been made (within the limitations of space imposed by the circumstances) to glean information from as wide a spectrum of texts as possible regardless of the communal or denominational ascription of their authors—in the hope of finding some light for the obscure prehistory of this particular section of *Natāʾiğ*.

With regard to the distribution of the contents proposed here, the division in subsections and paragraphs reflects as closely as possible the explicit structure of *Nat II.1* (only in a few instances have two or three paragraphs been subsumed into a single epigraph), but its main function is, after all, to serve as an easy reference for the survey of the text. Besides, in order not to incur in unnecessary redundancies, the overview of this section follows a general pattern

¹ Cf. FORCADA 2000: 113. Further cosmogonical data are transmitted in a likewise traditionistic context in his *Taʿrīḥ*, and an influence of IBN ḤABĪB on our author (here through those two texts, and also in *Nat IV* through *Ṭibb*) would be all the more plausible given that both were fellow townsmen from Ilbīrah; however positive evidence is wanting.

² Our knowledge of the literary output of ABUŠŠAYḤ (d. 979) has greatly improved since HEINEN's first description of *Kitābu Ṣaḍamah* based on one single Turkish manuscript (cf. HEINEN 1982: 37–52) and that bulky text can now be consulted in a critical edition. For ASSUYŪṬĪ's treatise, cf. HEINEN 1982, whose insightful reappraisal of Islamic cosmology is cited several times throughout this dissertation. As for sixteenth-century ALQARAMĀNĪ of Āmidah/Diyarbakır, he is the author a book bearing the unambiguous title of *Kitābu Ṣilmi ḥayʿah Ṣalā Ṣtiqādi ahli ssun-nati walʿamāʿah dūna lʿalāsifah* (cf. HEINEN 1982: 7) that to the best of my knowledge remains unedited. The relation of ALʿILBĪRĪ's cosmogony to Islamic *hayʿah* is commented upon below in the closing remarks to this chapter.

³ This is rather obvious in the case of eastern texts that never reached Andalus (eg ABUŠŠAYḤ's *Ṣaḍamah*) and even more so in the case of those that are later than the latest possible date of compilation of *Natāʾiğ*. In a similar vein, any references to later philosophers such as IBN RUŠD or IBN BAĞĠAH are only meant to offer a counterpoint for the reader to perceive how directly (or for the most part rather indirectly) our author reflects standard Aristotelian philosophy. By the same token and like throughout this dissertation, all words and loci quoted in the original Greek (or, for that matter, in Syriac or in Hebrew) are intended to provide diachronical or contextual information and do not presume the use of non-Arabic sources by the author.

of paraphrase-cum-commentary instead of disaggregating the information in two separate epigraphs. While the latter system may be admittedly clearer, the flexibility of the former is better suited to the nature of the text, which, unlike the remaining sections, does not show any clearly defined hierarchy of the several text units of which it is composed and does not lend itself to an easy linear microanalysis. Some additional observations and provisional conclusions are included in the *Remarks* at the end of the survey. All full-page tables and synoptic excerpts have been appended at the end of the chapter so that they do not disrupt the flow of reading.

5.2 NatPhil 1 — Proem

The treatise opens with ALʿILBĪRĪ’s address in a somewhat flowery *sağf*-like style to an anonymous destinatary to which the author refers as his lord («yā sayyidi») and who deserves the traditional courtesy formula “may I be thy ransom” («ǧuʿiltu fidāka»).¹ While it may never make it into an anthology of Arabic literary prefaces, there is an evident aim at rhyme in both the initial and final segments, which conform to the most typical pattern of proem in the Arabo-Islamicate tradition.² The presence of a preamble (and also an epilogue) distinguishes, in fact, NATURAL PHILOSOPHY from the rest of the sections of *Natāʾiğ*, and from the point of view of the structure of the text the exceptional intervention of the first person singular (so different here from the insistingly assertive and yet maybe borrowed *I* of the preceding chapter on the shelf-life of drugs) acts as a sort of textual boundary at the beginning and at the end of the unit.³

As for the author’s account about having received a letter (*kitāb*)⁴ in which the addressee expressed his wish for the composition of “this noble book”, far from being a mere literary convention it may provide some invaluable information about the prehistory and the original context of *Natāʾiğ*. First, the compila-

¹ I know of no study of the terms of address for Andalusī Arabic and it may be impossible to infer the rank of the addressee or his relationship with the author from the use of *sayyidi* or from the diverse *duʿā* formulas (the concept is translated as “initial commendations” in FREIMARK 1993: 495) used by ALʿILBĪRĪ throughout *Nat II.1* and which include, in addition to the aforementioned, also «ayyada llāhu lǧamila minka», «aṭāla llāhu martabaka fi nniʿmah», and «aṭāla llāhu baqāʾaka fi lǧināʾi wannuzhati walǧawdi wanniʿmah». The expression *ǧuʿiltu fidāka* is quite conservative (it is almost exclusively found in ḥadīṭ quotes), which might point towards a traditionistic background for the author, while «aṭāla llāhu baqāʾaka» is fairly common and is used, for instance, by ALKINDĪ in the preamble to one of his philosophical letters addressed to ALMUʿTAṢIM (cf. *Ūlā* 9₅). There is no trace, in any case, of the IḤWĀN’s idiosyncratic shibboleth and the addressee is never styled “brother” (cf. DE CALLATAÏ 2015: 228–230).

² Cf. FREIMARK 1993: 495). The wording of the exordial segment bears a striking resemblance to the prologue in ALĠĀḤIḌ, *Ḥayawān* I 33–6 (see the critical apparatus *ad loc*).

³ Let it be noted that while in the proem ALʿILBĪRĪ addresses his recipient invariably in the first person singular («qawāyya waḍamīri», «nataǧa fiyya», «aṣqaba li», «fahintu», «waqad širtu», and «kuntu»), in the body of the text the first person plural is prevalent («tunma narǧīʿu... ibtadaʾnāhu... naqūlu», «qulnāhu», «qaddamnā... falnašif... walnašif... natbaʿu»), and in the closing paragraph the singular and the plural intermingle («waqad badaʾtu» and «rasamtu», but also «ǧaraḍunā», «ḍakarnāhu» and «lam nadkurhu» (twice each), «waṣafnāhu», and «al-lafnāhu»). It does not seem, however, that this alternation might be interpreted as a hint to a borrowing from *Rasāʾil* (or any other text written in the first person plural) as suggested by DE CALLATAÏ 2015: 236 for IBN MASARRAH’s *Istibār*.

⁴ This use of *kitāb* (particularly in the opening formula *waṣala kitābuka*) is abundantly attested east and west since the earliest Arabic written tradition and it is documented in Andalus even in late Ġarnāṭī Arabic, cf. «letra, carta mensagera *quitīb cutīb*» in PEDRO DE ALCALÁ, *Vocabulista arávigio* 292a 37 (cf. also CORRIENTE, *DAA* 454 *{KTB}).

tion of the text (including at least *Nat* II.1–2 and probably also some additional section) seems to answer to an explicit request (perhaps even a commission) for a book that might serve as a means (*madḥal*)¹ to attain the well-being of the addressee's body and to preserve his health.² The nature of the contents of the text (which includes a whole therapeutic treatise) and above all its bulk make it an unlikely product of casual scholarly correspondence but tally well with a requested work as mentioned by the author.³

Then, the book was expected to conform to the epistemological framework of “medical methods, philosophical canons, rational proofs, intellectual conclusions,⁴ meteorological phenomena,⁵ truthful reports,⁶ and apodictic prin-

¹ I borrow from LANE the translation of *madḥal* as ‘means to’ (cf. *AEL* 861a «مَدْخُلٌ خَيْرٌ») but the Arabic noun retains all the force of its literal meaning ‘entrance’ in combination with the preposition *ilā* and might equally be rendered as “the door to the well-being”. Besides, on a literary and didactic level *madḥal* is also an ‘introduction’ and as such it features in the standard title *kitābu lmadḥal* (sometimes read as *mudḥal*) so characteristic of introductory manuals in all sort of sciences. In the same propaedeutic context it also translates εἰσαγωγή (cf. also Syriac ܡܚܠܐܐ), cf. ALḤWARIZMĪ, *Mafātih* II.II.1 (V 1417); and IBN ḤAZM, *Taqrib* (A IV 1049–10). In fact, the IḤWĀN composed some of their epistles “as an introduction” («*šibha lmadḥal*») or alternatively “as an introduction and premises” («*šibha lmadḥali walmuqaddamāt*») for learners and beginners, cf. *Rasāʾil* III.1|29 (R–M 8_{1–2}, III_{3–4}), XV.1 (B 5_{10–12}).

² The ‘preservation of health’ (*hiḥḍu ṣṣiḥḥah* ≡ ὑγιεινόν) is one of the canonical parts into which medicine was usually divided and at the same time also the title of several treatises within the Islamicate tradition, particularly of the Arabic translations of HIPPOCRATES’ and also of RUFUS’ lost Ὑγιεινά (cf. ULLMANN 1970: 32, 74), as well as of AṬṬABARĪ’s and IBN ḤIMRĀN’s original compilations. For AṬṬABARĪ it is indeed «*awwalu fikrati lmutafakkiri fi ṭṭibb*», cf. *Firdaws Proem* (§ 6_{14–15}), which has been quoted above.

³ Some observations on the *topos* of the commissioned work and few examples of letter exchange between scholars in Andalus are to be found in the *Remarks* at the end of this chapter.

⁴ It is worth noting that while all the nouns and adjectives in this first series (with the sole exception of *fikriyyah*) feature also in the general title of the book, none of their combinations coincide in both loci; nor are any of these phrases (except for *annatāʾiḡu lfikriyyah*) identical to the ones found at the end of *NatPhil* 3 (for which see below). The expression «*fahimtu*», on the other hand, seems to betoken an intellectual dialogue and is used by ALKINDĪ in at least three of his philosophical letters in an identical context (cf. *Waḥdāniyyah* 137₈, *Māʾiyyah* 151₇, and *Ibānah* 177_{8–10}), which in view of several other possible echoes in *Nat* II.1 may not be entirely coincidental.

⁵ This *alʾatāru lṣubwiyyah* is actually the title of the early Arabic translation of ARISTOTLE’S *Meteorologica* probably by IBN ALBIṬRĪQ (for which a critical edition is available in PETRAITIS 1963, as is IBN ṬIBBŌN’S Hebrew translation in FONTAINE 1995), as well as of one of the epistles (namely the fourth one within the second section on natural philosophy) of the IḤWĀN, cf. *Rasāʾil* XVIII (B 185_{1–2456}).

⁶ What I translate here as “truthful reports” («*alʾanbāʾu lḥaqiqiyyah*») seems not to derive from philosophical terminology but rather from the Islamic tradition, cf. the extensive use of *ṣnbʾ* in the Qurʾān, particularly complemented by the prepositional phrase *bilḥaqq* in Q 5:27, 18:13, 28:3. It features also in a non-religious but still tradition-related context in IBN QUTAYBAH, *Anwāʾ*? [2] (H 1₁₄), which is quoted below. For similar, but definitely non-coincident, phrases, cf. for

ciples”, with which the author confidently affirms to have complied. This impressionistic accumulation of phrases loaded with unconcealed philosophical denotations confirms (if there was any need for further confirmation) the author’s leaning towards that branch of knowledge, which was indeed quite obvious from the title of the book itself. To which extent this overt affinity to *falsafah* may be interpreted as an indicator of a certain chronological context is explored elsewhere (see Chapter 9).

Let it be remarked, nevertheless, that there is no consistency in the use of these phrases within *Nat II.1*, which suggests that this phraseology ought be interpreted perhaps as a token of natural philosophical discourse or as a rhetorical (and a little bit bombastic) device. In other words, at times the author appears to be more concerned about the outlook of his text (thence his insistence on sounding philosophical enough) than in the accuracy and even the pertinence of its contents. While he was certainly one of those few Andalusīs whose wide range of interests included Graeco-Arabic philosophy as well as medicine, he was by no means a logician.

5.3 *NatPhil 2 — Cosmogony*

If a second *saġŝ*-like segment and the Qurʾānic epithet “Lord of the worlds” mark unambiguously the end of the proemial address, the rhetorical imperative “Know” (*iʿlam*) is not any less clear in signalling the beginning of a new text unit despite the lack of any specific rubric. As a matter of fact, “Know” acts as a strong discourse marker throughout the section (in nine instances),¹ while lesser segments are introduced by *tumma* and *kaḍālika* and are usually further indicated by the use of stop-marks on the two manuscripts. The subdivision of the cosmogonical segment that I propose follows closely these indications with only one exception: the one marked here as *NatPhil 2.3*, which despite being introduced by *tumma* (therefore it could also be subsumed into the preceding paragraph) shows a shift in the focus from universal opposition to three subjects that are concatenated through the connector *tumma* (god’s decree and pre-determination, the doctrine of the macrocosm and the microcosm, and evidence for the unicity of the creator). Transitions between these subsegments are for the most part smooth, however, and there is a distinctive thread that leads all

example «*barāhīnu manṭiqiyyatun wadalāʿilu ʿaqliyyah*» in IḤWĀN, *Rasāʾil* XIX.1 (B 248₃₋₄).

¹ As a discursive and also rhetorical device *iʿlam* is so ubiquitous in the Arabographic tradition as to become insignificant as an indicator of any intertextual relations beyond a vague stylistic influence for which no particular source can be pinpointed. Note, however, that «*iʿlam, waḥḥaqa llāh*» at the opening of *NatPhil 4* finds an exact correlate in «*waʿlam, waḥḥaqa llāh*» twice in ʿARĪB B. SAʿĪD, *Anwāʾ* 124_{4|10}.

the way from the opening axiom of causality to the appeal to rational speculation as a means for intellectual and spiritual enlightenment at the very end of the section.

2.1 — The intention of the author not to engage in polemics or delve into nuanced complexities is clearly expressed from the very beginning when he informs his addressee that “the sages of the past and the most outstanding philosophers did not differ in their writings [«*fīmā allafū*»]” and that they all agreed, “without dissent or opposition”, upon what he is about to expound.¹ No survey of conflicting theories, no epistemological debate or diversity of opinions should therefore be expected from what follows. In this regard, and also in a noticeable tendency towards undeveloped apodictic and sporadically even axiomatic exposition, the author stands apart from the dialectic and argumentative tradition represented by ARISTOTLE and his Islamicate heirs—this is *not* a book on philosophy. His unapologetic and actually programmatic resorting to the uncontested authority not only of the sages (*ḥukamāʾ*?) but also of the philosophers (*falāsifah*), nevertheless, would not have been free of risk in a period of suspicion and persecution of “heterodox” thinking, but it was perfectly standard in the 9th and 10th centuries. The formulaic collocation “sages and philosophers” (or alternatively “philosophers and sages”) is, indeed, a recurring device of epistemic validation in the encyclopaedia of the IḤWĀN (which, while imbued with Islamic piety, makes free use of foreign non-Islamic sources) and both groups are also often mentioned in medical treatises as a collective authority for general statements,² but for such an authority is for the most part alien to traditional literature.

¹ This rhetorical device to the collective agreement of sages is already Platonic, cf. *Philebus* 28c: «πάντες γὰρ συμφωνοῦσιν οἱ σοφοί, ἑαυτοὺς ὄντως σεμνύνοντες, ὡς νοῦς ἐστὶ βασιλεὺς ἡμῖν οὐρανοῦ τε καὶ γῆς» (B 516–8). Cumulative authority is referred to by AṬṬABARĪ through the formula “I have seen that the Indian, Roman, and Babylonian scholars [*ḥulamāʾ*?] agree [*ittafaqa*] on” in *Firdaws* VII.III.1 (§ 541₅) and again in VII.III.4 (§ 547₂₂). The same applies to astrology, cf. «*fakullu lʿawāʾili mina lʿfalāsifati mimman takallama ʿalā lʿašyāʾi lʿḥabwiyati muttafiquṇa ʿalā anna...*» in ABŪ MAʿŠAR, *Madḥal* I.3 (B–Y 80₉). Cf. still «*aḡmaʿati lʿulamāʾu walʿfalāsifatu ḥukamāʾu ʿalā anna*» in PSEUDO-ARISTOTLE, *Sirr* II (B 86₁₇). For the shared use of this principle of authority in an Islamic context (with exclusion, therefore, of the philosophers), cf. for instance «*faʿinna ḥukamāʾa qad aḡmaʿū anna...*» in IBN ḤABĪB, *Taʾrīḥ* 142–3.

² Cf. IḤWĀN, *Rasāʾil* III.29 (R–M 116₇), XVII.14 (B 181_{–3}), XXXIIb.2 (W 188_{–9}), XXXIII.4 (W 41₅); and particularly XVIII.2 (B 187₇–188₁), where the sages and philosophers appear to be opposed to some (Islamic?) scholars (*ḥulamāʾ*?) with regard to their different understanding of nature. In *Firdaws* and *Ḥifḍ*, in turn, AṬṬABARĪ cites always separately (and at times interchangeably) the philosophers (cf. *Firdaws* 78, 88, 96₁₂, 19₁₄, 538, 948, 5038, 542₁₈, 5456, 553₁₁; including PTOLEMY in 547₁₁) and the sages (cf. *Firdaws* 2₉, 8₁₂, 97₄, 553₁₄; some Egyptian *ḥakīm* in 95₁₄); HIPPOCRATES the *ḥakīm* and ARISTOTLE the *faʿlasif* are quite invariable phrases, but mark that THEOPHRASTUS and ALEXANDER (of Aphrodisias) are both styled *ḥakīm* in *Firdaws* II.II.2|3 (§ 63₇ and 66₆,

The need to provide philosophical support for one's own discipline seems to have been a conspicuous trend in the early history of several epistemic genres in the Islamicate tradition. Concerning astrology, for example, ABŪ MA'ŠŠAR's emphasis in this regard can be considered quite paradigmatic. His attitude is all the more relevant to our case since he appears to echo a clash between physicians and astrologers that, while certainly springing from a conflict of chrematistic interests, translates into a philosophical discussion on the priority of one science over the other.¹

The universal agreement reported by our author is, then, “that all creatures [*maḥlūqāt*] and originated beings [*mabdūṣāt*]² that God created [*ḥalaqa*] were made to bear a relationship of causality between them:³ a cause [*ṣillah*] produces on its caused being [*maṣlūl*] the effects [*ātār*] of which it is a cause. However, simple causes [*«alṣilalu lbaṣiṭah»*], which are the causes of whatever lies beneath them, do not effect upon that which is their cause, because after them [*baṣdahā*, that is “behind”, or rather “above them”] there is only the Originator [*almubdiṣ*] and Realiser [*almuḥtariṣ*], which is unaffected by accidents, unassailed by diseases... unchanged by time, unperceived by the eyes, and uncomprehended by minds—which encompasses everything and which has originated all of it without an assistant, governed it without a minister, subdued it through constraint, and arranged it with incomparable power, the Lord of the worlds”.

This initial paragraph sets the tone, from the very outset, for the syncretic amalgam of dogmas that makes up AL'ILBĪRĪ's cosmogony and rudimentary

respectively). Since the mentions of sages and philosophers in *Nat II.1* do not overlap in any significant way with passages arguably borrowed from or inspired by any identifiable sources, such references may well be labelled (at least provisionally) as “not-binding allusions” (cf. DE CALLATAÏ 2015: 262) rather than as quotation markers; cf. also the pertinent remark that such “group references” and “[s]weeping references to sages” are “hard to substantiate” in KAHL 2020: 25–26 n. 166. An early parallel to this practice in the proto-Islamicate Pahlavi corpus can be found in the *Dēnkard*, in which for historical/etymological reasons “philosophers” (*pīlāsōfā*, cf. also *filāsōfā* in MACKENZIE, *CPD* 32) refers to Greek figures whereas Iranian and Indian authorities are styled “sages” (*dānāg*), cf. *DkM* 429.13: «*Pad harōm pīlāsōfā ud pad hindūgān dānāg ud pad abāriḡ dānāg*» “Among the philosophers of Rome, the sages of India and the sages of other (countries)” (cited from JAFARI-DEHAGHI 2014: 2).

¹ As it could be expected, the Balkhī scholar argues quite vehemently in favour of the priority of star-lore over medicine, the former being a foundation or prerequisite (*awwalīyyah*) for the latter. He even resorts to a classical argument when he states that the supremacy of astrology over medicine lies in the fact that its object is the upper bodies, which makes of it an “upper art” (*ṣināṣatun ṣulwīyyah*), as against medicine, which is a “terrestrial art” (*ṣināṣatun arḍīyyah*); cf. *Madḥal* I.5 (B–Y 1381s) and *Madḥal* I.2 (B–Y 66.6–72.6), respectively.

² The use of the non-agentive participle of the basic form of the verb *badaṣa* is quite exceptional in this context against the universal *mubdaṣa* and it may have been induced by the preceding participle *maḥlūqāt*.

³ Cf. «*Islam anna lnaḥwǧūdāti kullahā ṣilalun wamaṣlūlāt*» in IḤWĀN, *Rasāʿil* XXXV.6 (W 114₂).

natural philosophy. A sketchy but still recognisable theory of causation borrowed from the Greek philosophical tradition is blended with the basic tenets of Islamic theology into a simple and harmonious synthesis. Whether the text was written from scratch by the author (which does not seem unlikely) or inherited from some previous source, it certainly has some historical interest as a probably quite early Andalusī echo of a trend well documented in the east since the efforts of ALKINDĪ's circle and which may have reached one of its peaks with the epistles of the IḤWĀN. In any case, the seamless integration of polygenetic elements shows that our text cannot be the casual product of improvised juxtaposition.¹

Only a few indications for future study can be included here. First, the author's terminology might provide some clues regarding his possible sources, but often it is much easier to establish which texts ought *not* to be considered than to pinpoint a particular source with any degree of certainty. Thus, the consistent use of *ʿillah* (and accordingly its non-agentive correlate *maʿlūl*) to express the ontological concept of cause reflects the majority reading of the Islamicate philosophical tradition, since at least ALKINDĪ's and the IḤWĀN's corpora, which differs from ḤUNAYN's translation of ARISTOTLE's *Physica*, where αἰτία is rendered quite systematically by *sabab*.² Arabic *aṭar* (plural *aṭār*) for 'effect' is also quite standard terminology, as is the verb *attara* and all its related forms, particularly *taʿtīr* 'influence'.³

¹ In this paragraph one single discursive thread brings together the authority of non-Muslim sages and philosophers of the past, the Abrahamic narrative of creation enriched with the historically foreign theory of causation, and an Islamic exegetical-philosophical characterisation of the originator and realiser that consists almost exclusively of scriptural lexemes (only *ʿrtb* is non-Qurʾānic Arabic) and closes with the purely Qurʾānic epithet "the Lord of the worlds".

² In the paraphrases of ARISTOTLE's model of causation αἰτία is rendered as *ʿillah*, as seen for instance in the doctrine of the four causes (material, formal, efficient, and final) transmitted in ALKINDĪ, *Ūlā* 11.3–12, also *apud* IBN MASARRAH, *Radd* [2] (A IV 363_{10–16}); as well as in IḤWĀN, *Rasāʾil* XVIII.13 (B 229_{4–230}), XIX.2 (B 252_{5–253}), *Rasāʾil* XXXV.6 (W 114_{4–11}). The IḤWĀN, however, resort sporadically to *sabab* too, particularly in a fragment in which the two terms are used in purely stylistic alternation, cf. IḤWĀN, *Rasāʾil* XX.5 (B 370₈, 371_{8–9}, 372_{8–375}). It is also *ʿillah* that features in the Arabic translation of the *Corpus Dionysiacum* by IBN SAḤQŪQ dating from 1009 (cf. TREIGER 2007: 368–369, 392), and its prevalence is further enhanced by the parallel of Syriac ܐܘܪܘܚܐ in the same contexts. On the other hand, a clearcut philosophical distinction between *ʿillah* (as an intrinsic cause and a total explanation) and *sabab* is suggested for the *Kalām* by FRANK 1967: 250–251, but it is highly improbable that our text should reflect such an elaborate level of speculation.

³ The word *aṭar* is also translated as 'sign' in a similar context (cf. for instance BAFFIONI 2013: 260) but I provisionally consider that in ALḤILBĪRĪ's simplified exposition the postulated relation is best conveyed by the terms (*efficient*) *cause* : *caused* (= recipient of the effect) : *effect*. This may be a rather original reformulation induced, probably, by such statements as «inna listihālata aṭarun min fāʾilīn fi maʿfūl» in AṬṬABARĪ, *Firdaws* I.1.6 (§ 15₁₈) or «aṭaru lmuʿattiri fi lmuʿattari

In the absence of an explicit elucidation of the concepts referred to throughout the section, the diversity of words for ‘creator’ (and also ‘creation’) may be interpreted as a sort of *variatio synonymica*¹ since their distribution, while not absolutely free and perhaps conditioned by previous models, does not seem to reflect a well-defined philosophical distinction. Thus, the use of *albārī?* (the most frequently used epithet in our text) and *alhāliq* adheres to standard Qurʾānic parlance (although in inverse proportion), *aṣṣāni?* is implied by *ṣun?* in Q 27:88, and *almuhtari?* is also traditional even if it appears only rather late in the exegetical tradition.² Even *almubdi?* (with the non-agentive participle *almubda?* and the action noun *ibdā?*), which is incorporated elsewhere in the philosophical discourse as non-identical to *alhāliq*,³ can hardly be assigned any specific nuance here (see below *NatPhil* 2.2, however, for an interesting mention of “the

ft» in ALKINDĪ, *Fāṣil* 169₉. A little further, however, a conventional relationship cause : effect is stated in the case of the movement of the planets being the cause (*Sillah*) for the existence of time (see *NatPhil* 3.9).

¹ For which a precedent can be found in the Qurʾān, cf. «هُوَ اللَّهُ الْخَلِيقُ الْبَارِئُ الْمُصَوِّرُ» in Q 59:24. Cf. also an accumulation of epithets for the world, which is «*muḥdaṭun mubdaṣun muhtaraṣun kāʾin*» and for its *mubdi?*, *muhtari?*, *hāliq*, *muṣawwir*, which is the *bārī?* in IḤWĀN, *Rasāʾil* XIX.1 (B 247₇₋₈); also a tetrad *hāliq*, *bārī?*, *munšī?*, and *muṣawwir* in *Rasāʾil* III.30 (R–M 122₃₋₄).

² The lexematic root $\sqrt{h}r?$ is not attested in the Qurʾān, but *abdaṣa waḥtaraṣa* (and accordingly *almubdiṣu lmuhtari?*) is a fairly usual collocation in traditionistic and also philosophical texts, cf. IḤWĀN, *Rasāʾil* XVI.26 (B 138₃₋₇), XXXIIb.2 (W 17₁₇₋₁₈); also the triad «*baraʿa waʾawḡada waḥtaraṣa*» in *Ras* XXXIIb.2 (W 18₇); cf. likewise *Ras* XXXIII.1|8 (W 35₆₋₈, 49₂). The verb *ihṭaraṣa* is considered “apparently synonymous with *abdaʿa* although much less frequently used” by WALKER 1974: 82 n. 4, and FRANK 1966: 37 renders it as “the realisation out of non-being” (thence “realiser” in my own paraphrase of the text). An interesting instance of this lexeme is found in a quote ascribed to PLATO in which *alfiṣlu liḥtirāṣi* is said particularly in reference to the creator’s act, which is described as *taʿyīs* (to be read so, edited as «تأسيس») *aysin min lays* (which actually sounds quite like ALKINDĪ), cf. IBN MASARRAH, *Radd* [72] (A IV 39₁₄₋₁₅).

³ Despite its early specialisation as a philosophical term, *almubdi?* is unproblematic from a traditionistic perspective as it is modelled after the phrase «بَدِيعُ السَّمَوَاتِ وَالْأَرْضِ» in Q 2:117 ≡ 6:101. On ALKINDĪ’s use of *ibdā?* as “a temporal creation from nothing”, opposed to *ḥalq* as “the creative activity of God” in the Qurʾān and also to “eternal creation from nothing” in Neoplatonic philosophers, cf. WALZER 1962: 187–190. An extremely interesting analysis of *ibdā?* as “origination” and “emanation origination”, conceived as an emanation from higher to lower, is conducted by TAYLOR 2012: 129–133 for the Islamicate tradition reflected first in the Arabic translations of PROCLUS and PLOTINUS, then in the original syntheses by ALFĀRĀBĪ and IBN SĪNĀ. He further interprets this origination as a *creation*₂ that unlike Abrahamic *creation*₁ does not involve any volition, a question that shall be addressed below with regard to ALʿILBĪRĪ’s unambiguous and repeated reference to god’s will. Still *ibdā?* is translated as “Erschaffenheit” and the concept of god as *mubdi?* is interpreted as a genuine “Islamisierung neuplatonischen Denkens” by DAIBER 1986a: 288. In an Ismāʿīlī context *ibdā?* is interpreted as “the radical coming-to-be of being from what is not-being” by WALKER 197: 82, who further refers to CORBIN’s use of “existenciation”, which is in fact the usual rendering of *ibdā?* amongst French-writing scholars (cf. RASHED’s and JOLIVET’s translation of ALKINDĪ’s philosophical epistles).

world of origination”).

On the basis of the laconic testimony of *NatPhil* 2 it is hard to judge whether the vagueness of ALḤILBĪRĪ’s exposition is a reflection of an amateurish penchant for philosophy or rather a deliberate attempt to avoid taking a clear stance on some consequential issues. The danger of reading too much—or too little—into his words is all too present and only a more detailed analysis of the text shall help to outline the actual intellectual profile of the author. The following remark is, therefore, provisional and it is included here as food for thought for more insightful readers.

First of all, one should bear in mind that already in early-tenth-century Andalus ALKINDĪ’s identification of the creator with the philosophers’ first cause prompted a vigorous refutation by IBN MASARRAH:¹

Radd [19] (A IV 369_{17–20})

فلذلك ليس نقول نحن إلهة أفعال المعلولات، ولا علة المعلولات، ولا علة العلة في مطلبنا هذا الذي نريد به قَضَدَ الواحد الصَّمَدَ جلّ ثناؤه. بل نقول: هو الأحد الأول الصمد المبدع العلل، وهو الذي ابتدع جميع المعلولات لأجل تلك العلل التي سبقت منه.

On the other hand, identifying the creator (*alḥāliq*) of all created beings with the cause (*ṣillah*) of all that is caused (*maṣlūl*) à la ALKINDĪ was unproblematic not only for AṬṬABARĪ, but also for the IḤWĀN within an overall emanationistic framework.² Now, if there was a natural locus for the explicit affirmation of the creator being the (ultimate/first) *cause* of all creatures, this initial passage was certainly the place to do it, yet ALḤILBĪRĪ does not say so—or does he? A literal reading of “the simple causes [...] do not effect [*laysat tu?attiru*] upon that

¹ From the text of *Radd* one can infer that its author “understands creation as a composition, whereas simple realities are originated but not created. These simple, uncreated but nevertheless originated realities include the four elements” (BELLVER 2020: 346). Even if the assumed authorship of *Radd* were to be challenged, this opinion is externally ascribed to IBN MASARRAH by IBN ALḤUQLĪŠĪ, who reports that the Qurṭubī scholar affirmed that god’s attributes were not created (*maḥlūqah*) but rather originated (*mabdūṣah*) and made (*mağṣūlah*) by god (cf. BELLVER 2020: 337, 344).

² Cf. AṬṬABARĪ, *Firdaws* I.1.2 (§ 9_{9–10}), which is paralleled by the creator (*albārī?*) as cause (*ṣillah*) of existing beings and creator (*ḥāliq*) of creatures in IḤWĀN, *Rasāʾil* XXXIIa.1 (W 6_{4–5}). In the latter treatise the creator (*albārī?*) is described as “the cause of existing beings and their maintainer [*mubqihā*], completer [*mutimmuhā*], and perfecter [*mukammiluhā*]”, cf. *Rasāʾil* XXXIIa.2 (W 10_{18–19}) and again as “the cause of all existing beings, their sustainer [*mutqinuhū*], completer [*mutammimuhā*], and perfecter [*mukammiluhā*]” in *Ras* XXXIIa.2 (W 13_{1–3})—the alternation مَبْقِيهَا / مَبْتَقِيهَا (and even مَتَمِّمَهَا / مَتَمِّمَهَا) may have originally sprung as variant readings (or at least it was facilitated by their graphical resemblance), cf. also «*mūğiduhā wamuḥdīṭuhā wamuḥtariṣuhā wamubdiṣuhā wamuqibuhā* [sic, مَوْجِبِيهَا] *wamutammimuhā wamukammiluhā*» in *Ras* XXXV.2 (W 107_{16–108}₁).

which is their cause, for after them there is only the Originator” would make of the originator quite clearly the cause of simple causes (itself being ἀναίτιον), which would then contrast with *Radd* («*walā ʿillatu ʿillah*»). Then, the use of the epithet *almubdiʿ* in this precise context may not be entirely random, but it can be linked to either of the two philosophical positions depending on whether it is read as a mere synonym of *alḥāliq* or rather as reflecting a genuine conceptual distinction.

Moreover, the identification of ALʿILBĪRĪ’s simple causes is not as straightforward as it would perhaps be expected, for he does not seem to refer to the Intellect and the Soul,¹ nor does he seem to share the opinion of the author of the *Radd* in this respect. According to the latter, the “primordial simple causes” (the only ones that ought to be called “causes”) are the four elements (*uṣṭuquṣṣāt* ≡ στοιχεία), namely earth, water, fire, and air, which were not created but rather brought forth from non-existence (*ʿadam*) and placed (*mawḍūʿah*) for all existent beings to become actualised by them:

Radd [20] (A IV 370₁₋₅)

فإن سأل سائل عن تلك العلة الأولى: هل هي غيره بدواتها وغير الإبداع الكائن منها؟ قيل له: نعم. ومن أجل تلك العلة الأولى البسيطة الانهال كانت الهويات المركبة في أنفسها حقائق — والعلة الأولى هي التي تُستقى بالحقيقة عللاً، لأنها وُضعت لتكون معلولاتها المتبوية منها بفعال فاعلها ﷻ ولا تقول إن العلة كانت لأجل واضعها الخرج لها من عدم، لأنه الغني عن ذلك والمتعالي عنه ﷻ.

Radd [23] (A IV 371₁₄₋₁₉)

فإن سأل سائل عن تلك العلة الموصوفة البسيطة السابقة لتبوية الهويات، قيل له: الأسطقتصات الأربع الخارجة من عنده التي هي للخلق موضوعة منفصلة. بعد إذ هي لا كائنة ولا موجودة، فهي الأسطقتصات الأربع المتبوية المتأيسة في المكان الجامع لها، وهي الطبائع الأربع المتأيسة السابقة للخلق من ربها عز وجل: الأرض والماء والنار والهواء، هي العلة الموضوعات لتبوية جميع الهويات في المكان الجامع.

For ALʿILBĪRĪ, in turn, simple causes are located above others but beneath the ultimate cause, which is remarkably reminiscent of the “simple spiritual substances” (such as the spheres and the angels) that shall be mentioned below and which are above time and close to the world of origination. Thus, in *NatPhil* 3 the twelve signs of the zodiac are stated to be the cause (*ʿillah*) and essential element (*ʿunṣur*) of time; the great sphere, the cause and element of the days; and

¹ Quite significantly, neither *ʿaql* nor *nafs* are mentioned in a Neoplatonic sense (marked above by the initial capitals) anywhere in this section.

the signs, mansions, and planets (including the Sun and the Moon), the cause of hours days, months, and seasons; the Moon was likewise made the cause of night, and the sun the cause of day. The vertical hierarchisation of the causes (which is even more explicit in *NatPhil* 2.2 with the mention of the “vicinity” [*qurb*] of spiritual beings to the creator) suggests, for sure, some Neoplatonic (or Neoplatonicising) influence; yet in a number of passages the author refers to a non-mediated creation (*ḥālaqa*, most particularly in *NatPhil* 3.9 in relation to the Sun, the Moon, and the signs of the zodiac; also in 2.2 about death) that is perhaps more traditionistic than philosophical.

All in all, as shall be discussed in the closing remarks, the whole exposition is essentially a philosophical(ish) paraphrase of the Qurʾānic/Abrahamic narrative for which ALḤILBĪRĪ must have brought together whatever pieces were available to him and suited his purpose, without caring too much (probably because he did not find it necessary) to harmonise them explicitly. In the particular case of his “simple causes”, he may even have picked the phrase from some account in which a different meaning was intended.

2.2 — In accordance to the aforementioned syncretic tendency, the volitional creation (*ḥalq*) of the world by the creator (*albārī?*) is coordinated with the Aristotelian “bringing forth what is in potentiality to actuality”, which is glossed by the author («*aḥnī*») as bringing “what precedes in Its knowledge and antecedes in Its hidden unseen [*fī maknūni ḡaybihi*] to existence and presence [*mušāhadah*]”.¹

Besides the unsurprising adherence to the basic, albeit not universal, Islamic tenet of god’s will being involved in the act of creation (for which see below), one of the most interesting passages of this epigraph is the intriguing “Islamic translation” of ARISTOTLE’s formula ἐκ δυνάμεως εἰς ἐνέργειαν,² which might even con-

¹ The reconcilability of the Greek and the Islamic formulations was all the easier given the Qurʾānic use of *aḥraḡa* ‘to bring forth’ with a non-positional and cosmogonically loaded meaning, cf. “[He] brings forth [*yuhriḡu*] the living from the dead; He brings forth [*muḥriḡ*] the dead too from the living” (Q 6:95 ≅ Q 3:27) or “then He shall return you into it, and bring you forth [*wayuhriḡukum*]” (Q 71:18). Incidentally, a purely philosophical paraphrase «*taʾyisu lʾaysāti ṣan lays*» intended to describe origination was coined apparently by ALKINDĪ (or his circle), as found twice in *Fāṣil* 169₆₇ (cf. also ADAMSON 2002: 307).

² Which the author must have borrowed indirectly, cf. for instance «*falkawnu huwa ḥurūḡu ššayʾi mina lʾadami ilā huḡūdi aw mina lquwwati ilā lʾfiʿl*» in IḤWĀN, *Rasāʾil* XV.12 (B 318–9); also ALKINDĪ, *Suḡūd* 185₉, 187₆₁₁. For a more direct reflection of this phrase in Andalus, cf. IBN RUŠD, *Mā baʿda ṭṭabiṣah* VIII.R (B 1102_{4–7}), which comments on ARISTOTLE’S «ὥστε αἴτιον οὐθὲν ἄλλο πλὴν εἴ τι ὡς κινήσαν ἐκ δυνάμεως εἰς ἐνέργειαν» in *Metaphysica* H 1045b20 (= VIII.6). The whole of *Metaphysica* Θ (= 1045b27–1052a11 in BEKKER’S edition) is mainly devoted to the question of actuality and potentiality, cf. an extensively commented translation into English by MAKIN 2006, and also IBN RUŠD, *Mā baʿda ṭṭabiṣah* IX (B 1103–1233).

vey Bāṭinī overtones with its reference to divine foreknowledge and especially to god's hidden unseen.¹

The creator's will translated, according to our text, into a division of the world in two parts (*qism*): one spiritual or immaterial (*rūḥānī* ≡ ἀσώματος) and another one corporeal or material (*ǧismānī* ≡ σωματικός),² cause and caused, sense (*ḥiss* ≡ αἴσθησις) and sensed (*maḥsūs* ≡ αἰσθητόν), able to speak or rational (*nāṭiq* ≡ λόγον ἔχον) and speechless or irrational (*ṣāmit* ≡ ἄλογος), moving and resting, inert and growing, simple and compound, sinking and descending and arising and ascending, agent (*fāʿil* ≡ ποιητικός) and patient (*munfaʿil* ≡ παθητικός). The corporeity of the world god built (*banā*) on the basis of opposition (*taḍādd* ≡ ἐναντιώσις) and difference (*iḥtilāf* ≡ διαφορά); its spirituality, on homogeneity (*taǧānus* ≡ συγγένεια / ὁμογένεια) and harmony (*iḥtilāf*).³

The verb *qasama* features only once with god as its agent and a meaning 'to distribute' in Q 43:32, but in the exegetical tradition it also denotes a cosmogonic operation (not unlike «לַיְהוָה» in the Tanakhic narrative in Gen 1).⁴ Thus, in a report from RABĪŦ B. ANAS god's division of primeval water into two parts is mentioned and the verb *qasama* is coordinated with *ǧaʿala* just like in our text:

ASSUYŪṬĪ, *Hayʾah* I [17] (H 317-20)

لَمَّا خَلَقَ اللَّهُ السَّمَاوَاتِ وَالْأَرْضَ، قَسَمَ ذَلِكَ الْمَاءَ الَّذِي كَانَ عَلَيْهِ عَرْشُهُ قَسَمَيْنِ، وَجَعَلَ نِصْفَهُ تَحْتَ الْعَرْشِ [...]. وَجَعَلَ النِّصْفَ الْآخَرَ تَحْتَ الْأَرْضِ السُّفْلَى.

A remarkable parallel from theological discourse and the other extreme of

¹ The phrase «*mā kāna fi sābiqi ʿilmihī*» is documented already in the early exegetical tradition, cf. ABUŠŠAYḤ, *Ṣaḍamah* XXI.31 [643] (M 1164₉₁₀); also «*alladī faṭara lḥalqa biqdratihī waṣar-rafahum biḥikmatihī ṣalā sābiqi ʿilmihī wamašīʿatihī*» in ALMĀTURĪDĪ, *Tawḥīd* III (T-A 3016). As for *maknūn ǧaybihī*, which reappears later in *NatPhil* 2.3, it does not seem entirely identical with the concept of "le côté caché" left by god in its creation as referred to by ABŪ MAŠŠAR and which LEMAY interprets as "[c]ette portion de l'Univers qui reste cachée (*ǧayb*), et donc à découvrir, constitue l'objet concret de la recherche scientifique pour chaque génération et chaque individu qui se consacre au progrès de la science" (cf. LEMAY 1992: 27–29, 32). In this regard, the knowledge of the hidden (*ʿilmu lǧayb*) alluded to by the IḤWĀN in an astrological context may not be so concrete and material as the translation "something hidden" in RAGEP and MIMURA 2015: 83 might induce to think, since after all such knowledge is explicitly affirmed to be reserved to god alone, cf. IḤWĀN, *Rasāʾil* III.32 (R–M 143₂₋₇) and especially the essential cosmic dichotomy between things that are *šāhid* and *ǧāʾib*, both of which are comprised by the knowledge of the creator, in *Rasāʾil* XXXIIa.1 (W 9₇₋₈).

² The latter word is actually missing from both manuscripts but can be safely restored.

³ All the Greek equivalences provided here are well documented in the *Glossarium Græco-Arabicum* (accessible online at <https://glossga.bbaw.de/>) and show quite clearly the overall framework of the exposition.

⁴ For a quite different, non-cosmogonical, use of *qasama* (also *inqasam*) in an essentially astronomical and astrological context, see below *NatPhil* 3.

the Islamicate world is provided by the Samarqandī Ḥanafī scholar ALMĀTURĪDĪ (d. 944), who resorts essentially to the same formula in his description of the foundation of the world on the basis of heterogeneous and opposite natures:

Tawhīd Prologue (T-A 677)

ثم كان العالم بأصله مبنياً على طبائع مختلفة ووجوه متضادة.

The division of beings into corporeal and spiritual has, on the other hand, nothing original in itself, but the abstract nouns *ġismāniyyah* and *rūḥāniyyah* seem to imply a collective conceptualisation (“the corporeity of the universe” as a sum of all corporeal beings?) not unlike the distinction between the world of spirits (*ʿālamu lʿarwāḥi*) and the world of bodies (*ʿālamu alʿaḡsād*) ascribed to the philosophers and sages by the IḤWĀN.¹ An essential dichotomy between immaterial (*rūḥānī*) and material (*ġismānī*) is applied in a similar way by IBN MASARRAH to the four Aristotelian causes and also to substance and accident:²

Radd [71] (A IV 39^o₃₋₄)

العلّة العنصريّة تنقسم ضربين: روحانيّ وجسمانيّ. فأما الروحانيّ، فمثل إرادة الباريّ جلّ ثناؤه؛ والجسمانيّ: مثل الأسطُفُصّات الأربع.

Even closer to our text, a division into material/corporeal and immaterial/spiritual is propounded by the IḤWĀN for all existing beings:³

¹ Cf. *Rasāʾil* XVII.14 (B 181₁₋₃); also *Rasāʾil* XXXIIa.1 (W 108₈₋₉) in a Pythagorean context in which the former (translated by WALKER as “the realm of immaterial beings”) is associated with odd numbers, the latter (“the realm of bodies”) with even numbers. In the Islamicate (and also in the Islamic) philosophical tradition *ġismānī* is well attested as an adjective but the abstract noun *ġismāniyyah* is much rarer, whereas *rūḥāniyyah* is widely documented with a variety of meanings (especially in the so-called esoteric and magic-related sciences).

² According to the author of *Radd* formal cause is divided in immaterial (spirits and angels) and material (human bodies, beasts, plants); the efficient cause likewise in immaterial (the word [*kalimah*] of the creator) and material (moving nature); and so is the final cause either immaterial (godly sciences) or material (the movement of all bodies), cf. *Radd* [71] (A IV 39^o₅₋₁₃). As for substance, immaterial substance is represented by the intellect and the soul; material substance by “long, wide, and deep” (ie the dimensions) in *Radd* [73] (A IV 39^o₂₀₋₂₁). Finally, accident is also either immaterial (such as knowledge, which is a predicate of the soul) or material (such as blackness and whiteness, which are predicates of the body), cf. *Radd* [73] (A IV 39^o₂₂₋₃₉₁₂).

³ A vaguely similar but more markedly hierarchical duality material (*ġismānī*) / immaterial (*rūḥānī*) within the unicity of the universe is described in PSEUDO-ARISTOTLE, *Sirr* X (B 156₄₋₁₅). Cf. also «*falḥalqu yanqasimu qismayn: minhu ġawharun ġirmīyyun (ay ġismī) waminhu ġayru lġirmī*» in *Hārūniyyah* I.I (G 45₇), then a similar formulation in *Hārūniyyah* I.II (G 51₂₋₄), going back quite probably to MASĪḤ’s original *Kunnāš*.

Rasāʾil XXXV.5 (W 1138-14)

اعلم، يا أخي، أنّ الموجودات كلّها نوعان: جسمانيّ وروحانيّ. والجسماني ما يُدرك بالحواس، والروحاني ما يُدرك ويُتصوّر بالفكر. والجسمانيّ ثلاثة أنواع: منها الأجرام الفلكيّة، ومنها الأركان الطبيعيّة، ومنها المولّدات الكائنة. والروحانيّ أيضًا ثلاثة أنواع: منها الهيولى الأولى الذي هو جوهر بسيط منفعل معقول، والثاني النفس التي هي جوهر بسيطة فعالة علامة، والثالث العقل الذي هو جوهر بسيط مُدرك حقائق الأشياء.

It is precisely with regard to a passage transmitted in the Iḥwān's encyclopaedia that a more concrete possibility of an echo from that collection can be detected. When explaining the Pythagorean tradition of arithmetic analogies, a catalogue of things that come in pairs is provided and put in harmonic relation, in a characteristically Iḥwānī manner, with Q 51:49 "And of everything created We two kinds [*zawḡayn*]":¹

Iḥwān, *Rasāʾil XXXIIa.1 (W 614-71)*

فأمّا الأشياء الثنائيّة مثل الهيولى والصورة، والجوهر والعرض، والعلة والمعلول، والبسيط والمركّب، واللطيف والكثيف، والمشقّ وغير المشقّ، والمظلم والمنير، والمتحرّك والسّاكن، والعالي والسافل، والحارّ والبارد، والرطب واليابس، والخفيف والثقيل، والضارّ والنافع، والخير والشرّ، والصواب والخطأ، والحقّ والباطل، والذكر والأنثى — وبالجملة من كلّ زوجين اثنين.

In the alternative version of Epistle 32 a theological reason is provided for this feature of the creation and a different list of opposite pairs is included that shows an even more significant overlap with the one noted down by our author:²

Iḥwān, *Rasāʾil XXXIIb.2 (W 184-197)*

وذلك أنّ الله تَعَالَى، لما كان واحدًا بالحقبة من جميع الوجوه والمعاني، ثم لم يُجزَّ أن يكون المخلوق المخترع واحدًا بالحقبة، بل وجب أن يكون متكثرًا مثنويًا مزدوجًا. وذلك أنّ البارئ تَعَالَى أول ما برأ وأوجد اخترع أشياء مثنوية مزدوجة، وجعلها قوانين الموجودات وأصول الكائنات. فمن ذلك ما قالت الحكماء والفلاسفة: الهيولى والصورة؛ ومنهم من قال: الجوهر والعرض [...]. ومنهم من قال: الروحانيّ والجسمانيّ. ومنهم من قال: اللوح والقلم [...]. ومنهم من قال: العلة والمعلول [...]

¹ Only identical parallels are colour-marked, but let it be noted that "high and low" are also shared by the two texts although they are represented by different words. Even within *Natāʾiḡ* itself this pair features in the two lists in a lexematically different form.

² If ALḤILBĪRĪ's second list of contraries is taken into consideration, the parallelism extends also to the pairs "hot and cold" and "increasing and decreasing".

وعلى هذا القياس توجد أشياء طبيعية مثنوية مزدوجة أو متضادة كالمحرك والسكن،
والظاهر والباطن، والعالي والسافل، والخارج والداخل، واللطيف والكثيف، والحار والبارد،
والرطب واليابس، والزائد والناقص، والجهد والناهي، والناطق والصامت، والذكر والأنثى —
ومن كل زوجين اثنين.
وهكذا توجد تصاريف أحوال الموجودات من الحيوان والنبات، كالحياة والمات، والنوم
واليقظة، والمرض والصحة، والألم واللذة، والبؤس والنعمة [...]

Now, it can be argued that, after all, any two given lists of contraries produced in a more or less homogeneous cultural background are bound to share a number of items. In this regard, the differences between the two double catalogues could be accorded more probative weight than their partial coincidence and it cannot be denied that, if ALʿILBĪRĪ is actually echoing the *Rasāʿil*, he does not simply borrow from them the whole list (or a part of it) but rather integrates bits of it into his own discourse. This appears to be, in fact, his overall strategy throughout *Nat* II.1, where no indisputable word-by-word borrowings could be identified so far. In any case, if the passage quoted above is not the direct source of inspiration (and also of partial information) for our text, it certainly points towards the existence of either a mediating source (not the *Ġāyah*, for it does not include any such catalogue) or otherwise an earlier common source.¹

As to the dogmatic side of the subject, in *Natāʿiḡ* as well as in the *Rasāʿil* the pivotal rôle assigned to opposites not only by the Pythagoreans but also in the Aristotelian *Physica* is perfectly integrated in a divinely instituted universal dualism, and philosophical terminology (increase and diminution, causes, accidents) is likewise combined with Islamic dogma and scriptural references. An additional Andalusī reflection of this coalescence is provided by the refuter of ALKINDĪ, whose text does not only include a new list of contraries but also an instance of the divine test (*miḡnah*, cf. Q 49:2) in the exact same context as in ALʿILBĪRĪ's exposition (see the next paragraph):

Radd [79] (A IV 396₁₀₋₁₅)

¹ These lists represent a development of the Pythagorean *συστοιχία*, the table of ten paired opposites, but quite certainly not through ARISTOTLE's account thereof, cf. *Metaphysica* A 986a22–986b2 (= P 484), where he also affirms that ALCMAEON OF CROTON would have claimed that most things exhibit duality and contrariety. The only coincidence between PYTHAGORAS' list and our text is the pair «ἡρεμῶν κινουμένων», and the overlapping with *Rasāʿil* XXXIIa/b is likewise minimal. Moreover, with the exception of the first catalogue in *Natāʿiḡ* (which might be interpreted as comprising ten pairs of contraries if the double reference to “descending and ascending” is disaggregated), none of the Arabic lists under consideration here include *ten* pairs (but *Rasāʿil* XXXIIb comes close with eleven). For a commentary on this locus in *Metaphysica*, cf. SCHOFIELD 2012: 155–158 and particularly GOLDIN 2015, who provides an exhaustive survey of ARISTOTLE's criticism of the Pythagorean table of opposites.

وَإِنَّ اللَّهَ عَزَّ وَجَلَّ، لَمَّا خَلَقَ الدُّنْيَا دَارَ مَحْنَةٍ وَبَلْوَى، خَلَقَهَا أَضْدَادًا وَأَزْوَاجًا لِنَتَقَّ الْمَحْنَةَ وَتَمَّ الدَّلَالَةَ. وَتَمَّ الدَّلَالَةَ بِذَلِكَ، لِأَنَّهُ لَا يُعْرَفُ الشَّيْءُ بِتَحْقِيقِهِ إِلَى مَنْ قَبِلَ ضَدَّهُ، فَبِالظُّلْمَةِ يُعْرَفُ النُّورُ، وَبِالْمَكْرُوهِ يُعْرَفُ الْمَحْبُوبُ، وَبِالشَّرِّ يُعْرَفُ الْخَيْرُ، وَبِالْبَرِّ يُعْرَفُ الْحَزُّ، وَبِالتَّحْتِ يُعْرَفُ الْفَوْقُ، وَبِالظَّاهِرِ يُعْرَفُ الْبَاطِنُ — كُلٌّ وَاحِدٌ مِنْهَا يُعْرَفُ بِصَاحِبِهِ وَيُهْتَدَى إِلَيْهِ بِزَوْجِهِ وَضَدِّهِ، وَيُهْتَدَى بِالْأَضْدَادِ كُلِّهَا إِلَى وَحْدَانِيَّةِ الْخَالِقِ لَهَا.

Back to *NatPhil* 2.2, the discourse elaborates at some length on opposition, which is stated to be the common trait of all things that can be perceived by the senses: the different elements, animals, plants, world regions, signs of the zodiac, planets, winds, seasons are all opposites (*mutaḍāddah*) and heterogeneous (or different from one another, *muḥtalifah*). “For all things over which time rolls [*dār*] are built on opposition; whereas what is above time is simple spiritual substances that are congruous and not opposites”. Examples (*ka-*) of the latter are the shining spiritual spheres and the bodies of the angels, which are lights (*anwār*) and spirits impossible to perceive and represent. A remarkably impressionistic contrast is depicted by the author between those bright substances that are close to the world of origination (*ṣālamu lʾibdāʿ*) and in the vicinity (*qurb*) of the originator on the one hand, and the gloomy, earthy, dense individual beings (*ašḥāṣ*) that exist beneath time and are subjected to opposition, pains, maladies, and calamities on the other. A theological justification (namely god’s will to test humanity’s worship) is provided for the fact that human individuals have been built from opposite and different things, a long catalogue of which is given before ending the argument with a slightly adapted Qurʾānic quotation (Q 2:76 with a simple change of pronouns) and the author’s choice Qurʾānic phrase throughout *Nat* II.1: “That is the ordaining of the All-mighty, the All-knowing”.¹

The two examples provided by ALʿILBĪRĪ for simple spiritual (ie immaterial) substances are far from trivial.² Regarding the spheres (*aflāk*), this is the only instance of the plural in the whole section, whereas all other references are to the “great sphere” or “the sphere of the signs of the zodiac”. This plural must be, of course, an allusion to the classical division of the universe into nine spheres,³ but the fact that they are described here as “luminous” suggests that the author

¹ It may be no coincidence that it happens to be also a frequent corollary in the IḤWĀN’s discourse, cf. *Rasāʾil* III.16|23 (R–M 62₂, 80₅₋₆), XVIII.17 (B 238₁₀₋₁₁), XIX.7|11 (B 285₆, 312₁₃). It is used at least once in the same sense by ABŪ MAʿŠĀR in *Madḥal* I.4 (B–Y 104₁₈).

² As is his omission of first form (*alḥayūlā lʾūlā*), which is considered the only simple substance imperceptible to the senses in IḤWĀN, *Rasāʾil* XV.3 (B 97–8). Incidentally, the IḤWĀN’s emanationistic theory allows for a gradation of simpleness, the Intellect being “simpler” (*absaṭ*) than the Soul, cf. *Rasāʾil* XXXIII.8 (W 50₁₃).

³ For a syncretic cosmological structure consisting in nine spheres, seven of which are the skies (ie the orbs of the planets), plus the sphere of the fixed stars and finally the ninth sphere,

may have transposed some of the qualities of the planets (or, more generally, the stars) to their respective spheres¹—or otherwise he conceives the spheres as immaterial but yet possessing a light of their own, which still seems to contradict their classification as imperceptible by the senses. As for the definition of the angels as lights and spirits, unlike in the case of human beings and the *ǧinn* (whose material origin is explicitly mentioned in Q 55:14–15), the Qurʾān does not specify from which substance they were created. Amongst the first generation of Muslims there circulated two different accounts according to which angels would have been created from light (*nūr*) or from god’s spirit (*rūḥ*), and our text could actually be read as an uncompromising coordination of both traditions.²

A description of the spheres, the planets, and the four elements (*arkān*)—but not the angels—as the simple universal bodies (*aḡsām*) can be found in the IḤWĀN, where they are opposed to the particular begotten (*muwalladāt* ≡ γιγνόμενα) bodies such as animals, minerals, and plants.³ A closer parallelism obtains between the two texts with the affirmation that celestial bodies (*alʾaḡrāmu lʾfalakiyyah* in the *Rasāʾil* but also below in *NatPhil* 3.2)⁴ are not affected by

cf. AṬṬABARĪ, *Firdaws* VII.III.2 (§ 543₁₇–544₃); also IḤWĀN, *Rasāʾil* XVI.3 (B 73₅–76₆), where the ninth sphere is identified as the sphere of the divine throne. Only the singular *falak* is attested in the Qurʾān (cf. Q 21:33 and 36:40) and the equation of the scriptural plurality of skies (*samawāt*) with the astronomers’ orbs was the product of exegesis. In *On astronomy* the IḤWĀN identify the upper enclosing sphere with the one mentioned in Q 21:33, cf. *Rasāʾil* III.1 (R–M 10₄–11₂).

¹ The stars (*kawākib*) are “spherical, round, and luminous bodies” whereas the spheres are “spherical, transparent, and hollowed-out bodies” in IḤWĀN, *Rasāʾil* III.1 (R–M 8₅–9₂).

² As reported by ʿĀṬIŠAH, the gap left by the revelation of Q 55:14–15 would have been supplemented by MUḤAMMAD with «*ḥuliqatī lmalāʾikatu min nūr*», cf. ABUŠŠAYḤ, *Ṣaḡamah* XI.1–2 [306–307] (M 725₂–726₄); and an even more specific reference to “the light of the chest and arms” was transmitted by ʿABDULLĀH B. ʿAMR, cf. *Ṣaḡamah* XI.10 [315] (M 733₃–6); cf. also «*faḥalaqa lmalāʾikata waššamsa walqamara walǧannata wakulla mā fi ssamāwāti min nūr*» IBN ḤABĪB, *Taʾrīḥ* 15₁₄–15. On the other hand, YAZĪD B. RŪMĀN would have heard («*balaġanā*») that angels had been created from god’s spirit, cf. ABUŠŠAYḤ, *Ṣaḡamah* XI.5 [311] (M 726₈–727₃).

³ Cf. IḤWĀN, *Rasāʾil* XVI.1 (B 67₁–68₃); the spheres or orbs are described as bodies also from an astronomical perspective in *Rasāʾil* III.1 (R–M 9₂–3). The subject of angels is quite more complex in that encyclopaedia, for ‘angels’ is more than once stated to be the religious/legal denomination of what philosophers call ‘natural faculties’ (*quwan ṭabiʿiyyah*) or simple ‘nature’, cf. *Rasāʾil* XVIII.2 (B 188₄–9), where legal/philosophical terminology (*billaḡḡi ššarʿi* / *billaḡḡi lʾfalsafi*) are contrasted, and *Rasāʾil* XIX.1 (B 335₃–5), where the Law (*Annāmūs*) is opposed to physicians and philosophers, respectively. Elsewhere in the epistles angels are referred to, alongside the tribes of the *ǧinn* and the parties of the demons, as spiritual beings (*rūḥāniyyūn*) and souls (*nufūs*) present in the world whose workings are manifest but whose essence is concealed, cf. *Rasāʾil* III.28 (R–M 106₁–3).

⁴ The phrase *alʾaḡrāmu lʾfalakiyyah* is seemingly an inherited one and must be compared with *alʾaḡrāmu ssamāwiyyah* in an Aristotelian passage paraphrased by AṬṬABARĪ, *Firdaws* VII.III.1 (§ 542₁₃); also *alʾaḡrāmu lʾsubwiyyah* in ABŪ MAʿĪŠAR, *Madḡal* I.2|3 (B–Y 52₈, 54₁₃, 82_{5|9|17}) and

generation and corruption, change, and increase and decrease, as those bodies (*aḡsām*) under the lunar sphere are.¹ Let it be remarked, in any case, that in our text it is the bodies (*aḡsām*) of angels that are mentioned and that, on the other hand, nowhere are any souls associated with either the spheres or the angels—an unconcealed doctrine in the Iḥwān that did not go unnoticed by the guardians of Islamic orthodoxy in Andalus:²

IBN ḤAZM, *Taqrīb* [7] (A IV 123₁₆–124₁)

فالتُّوسِ الناطقة هي الملائكة وأنفس الأشخاص الخلدية التي أخبرنا الصادق ﷺ أنّها في دار النعيم، من الحور والولدان، وأنفس الإنس وأنفس الجن. وغيرنا يعتقد مكان الأشخاص الخلدية التي ذكرنا أنّ الأجرام العلوية من الكواكب والفلك ذات أنفيس حيّة ناطقة.

The explicit mention of the “vicinity” (*qurb*) to “the world of origination” (*ṣalamu lʾibdāʿ*) seems to be a new bit of unelaborated (perhaps indigested) Neoplatonism. If on the one hand it must be combined with the previous hint to a vertical hierarchy of causes in *NatPhil* 3.1 and compared with the standard accounts of the scale of emanation,³ on the other hand (and with all due caution) it may not be insignificant that the phrase “the world of origination” seems to be particularly documented amongst Ismāʿīlī missionaries.⁴

alʾaḡrāmu ssaṁāwīyyah in *Madḥal* I.3 (B–Y 82₅, 86₃). There appears to be a general tendency in the Arabic tradition to refer to any celestial body as *ḡirm*, cf. also *aḡrāmu lkawākib* in *Firdaws* VII.III.5 (§ 550₂₀). Such bodies are usually defined as *aḡsām*, cf. the definitions of the planets and the spheres as bodies in Iḥwān, *Rasāʾil* III.1 (R–M 8₅ and 9₂, respectively; also the planets in ALBĪRŪNĪ, *Tanḡim* [120] (W 43₇); but they are apparently never styled *aḡsād*.

¹ Cf. Iḥwān, *Rasāʾil* XVI.25 (B 135_{6–9}). The standard identification of the sphere of the Moon as the world of generation and corruption is found in *Rasāʾil* XXXVI (C 131_{4–5}).

² The beliefs to which IBN ḤAZM alludes here are quite probably doctrines similar to those expounded by the Iḥwān and according to which the planets in the sphere are god’s angels and deputies (*ḥulafāʾu llāh*), kings of Its skies, cf. *Rasāʾil* III.29 (R–M 114_{6–115}₁). But they may also include the attribution of individual *rūḥānīyyāt* to the planets as reflected, for example, in talismanics.

³ As a passing-by allusion, our locus can be compared to the mention of the vicinity (also *qurb*) of the highest sphere from the “place of perfection” (*maḥallu ttamām*) in AṬṬABARĪ, *Firdaws* VII.III.1 (§ 543_{11–14}). The full scale, from the lowest level (namely the earth, which is the thickest and darkest body) to the all-embracing, enveloping, sphere, which is the subtlest body and the most spiritual/immaterial of them all, is found in Iḥwān, *Rasāʾil* XXXIII.8 (W 50_{4–14}). According to the latter simplifying paraphrase of the emanationistic doctrine, the intellect received the direct emanation from the creator “in one fell swoop, outside of time, without motion or exertion, only because its close proximity to the Creator and the intensity of its spirituality”, cf. Iḥwān, *Rasāʾil* XXXIIa.2 (W 148_{–10}; WALKER’S translation).

⁴ Cf. especially ḤAMĪDUDDĪN ALKIRMĀNĪ (d. 1021), *Rasāʾil* II (Ġ 31_{–16}). The concept as expounded by ALKIRMĀNĪ in several of his works appears to be central to the Ismāʿīlī discussion of cosmogony in thirteenth-century Yemen for ALḤUSAYN B. ʿALĪ B. ALWALĪD, *Mabdaʿ* 29_{5|10|20}, 30_{9|11},

A word should be said, before moving forward, on the explicit mention of the involvement of divine will (*irādah*) in the act of creation, reflected here in the formula «*lammā arāda ḥalqa lšālam*» and repeatedly as *irādah* in *NatPhil* 2.3.¹ There is no doubt that both in doctrine and in phraseology ALʿILBĪRĪ draws from Islamic traditionistic sources² and that he does not share in the philosophical rejection of a volitional act of creation as seen, for instance, in the Arabic PLOTINUS.³

310; and still in the 15th. c. for IDRIS ʿIMADDUDĪN, who devotes most of chapters 4–8 of his *Zahru lmaʿānī* to this question (Ġ 334–635). I have been unable to locate this exact phrase in earlier sources (it seems to be unknown to the IḤWĀN) and while its use in *Natāʾiḡ* may be merely coincidental it might also be of some significance regarding the sectarian affinities of its author.

¹ For the sake of exhaustiveness let it be noted that god's will is also mentioned in relation to the testing of humanity («*lammā arāda mina stīʿbādīnā*») in *NatPhil* 2.2 and to the apparition of hours, days, months, and seasons («*lammā arāda iḏhāra ssāʿātī walʾayyāmi waššuhūri walʾazmān*») in *NatPhil* 3.9.

² Cf. already «*falammā arāda an yaḥluqa ssamawāti walʾarḍ*» ascribed to WAḤB B. MUNABBĪH (d. ca 728) in ABUŠŠAYḤ, *Ṣaḍamah* IX.41 [230] (M 600₁₁); also IBN MASʿŪD (d. 653): «*falammā arāda an yaḥluqa ḥalq, aḥraja mina lmāʾi duḥānā*» in ASSUYŪṬĪ, *Hayʾah* III [8] (H 9_{26-10,1}); and ʿUMAR «*anna llāha lammā arāda an yaḥluqa min ḥalqihī mā ḥalaqa*» in IBN ḤABĪB, *Taʾriḡ* 14₁₇; or «*lammā arāda llāhu taʿālā an yaḥluqa lʾašyāʾ*» in *Hayʾah* III [29] (H 12₁₀₋₁₁). Even the extension of this divine will to acts other than creation (as seen in the preceding footnote) has exegetic precedents, cf. «*lammā arāda llāhu an yuhlika qawma ʿād*» in ASSUYŪṬĪ, *Hayʾah* VI [8–9] (H 23_{20-24,1}). On a side note, ʿARĪB B. SAʿĪD's use of *aḥabba* in this context (cf. «*inna llāha [...] aḥabba an yaḥluqa*» in *Anwāʾ* 123₃) looks strangely like an interference of Romance *querer* 'to wish, to want' and also 'to love' (CORRIENTE includes 'to want' amongst the meanings of this verb in *DAA* 112a *{HBB} exclusively from PEDRO DE ALCALÁ's dictionary).

³ According to that strand of Neoplatonism, creation/origination is an emanation from the ultimate cause by its very being (αὐτῷ τῷ εἶναι ≡ *biʾinniyatīhī*), "the First Agent does not wish (*lan yaridu*) the origination of intellect such that it comes about after an act of will (*al-irādah*) because there was no willing (*al-irādah*) preceding its act. Rather, it would be a sign of deficiency for there to be will (*al-irādah*) between it and its product" (TAYLOR 2012: 128). In the encyclopaedia of the IḤWĀN, accordingly, a volitional mode of creation is never explicitly mentioned, yet the order of the spheres is affirmed to ultimately reflect such a divine will: «*kamā arāda bāriʾuhā*», cf. *Rasāʾil* XXXIII.1 (W 37₁₋₂).

For a literary echo of first-generation exegetical sources, see for instance AL-MASʿŪDĪ's transmission of a ḥadīṭ put in ʿALĪ's mouth that contains this explicit allusion to god's will and also a diachronically interesting instance of the verb *abdaʿa* in the context of cosmogonical origination:

Murūğ I,3 (A I 32₃₋₇ | M-C I 55_{7-56₂})

وَرُوِيَ عَنْ أَمِيرِ الْمُؤْمِنِينَ عَلِيِّ بْنِ أَبِي طَالِبٍ عليه السلام أَنَّهُ قَالَ: «إِنَّ اللَّهَ حِينَ شَاءَ تَقْدِيرِ الْخَلْقِ الْخَلْقَةَ وَذَرَأَ الْبَرِيَّةَ وَإِبْدَاعَ الْمَبْدَعَاتِ، نَصَبَ الْخَلْقَ فِي صُورٍ كَالْهَبَاءِ قَبْلَ دَخْوِ الْأَرْضِ وَرَفْعِ السَّمَاءِ، وَهُوَ فِي انْفِرَادٍ مَلَكُوتِهِ وَتَوْحُّدٍ جِبْرُوتِهِ، فَأَتَا حَ نَوْراً مِنْ نُورِهِ فَلَمَعَ، وَ[نَزَعَ] قَبَساً مِنْ ضِيَاءِهِ فَسَطَعَ. ثُمَّ اجْتَمَعَ النُّورُ فِي وَسْطِ تِلْكَ الصُّورِ الْخَفِيَّةِ، فَوَافَقَ ذَلِكَ صُورَةَ نَبِيِّنَا مُحَمَّدٍ صلى الله عليه وسلم».

وَرُوِيَ [وذكر M-C | عليه السلام كَرَّمَ اللَّهُ وَجْهَهُ M-C | فَأَتَا حَ] فَاسَاحَ M-C.

Once again, a close parallel for our text, both in context and in contents, is found in IBN MASARRAH's refutation, where the idea of divine will and divine choice (*iḥtiyār*) are in fact central to his argumentation. Mark, moreover, the prominence of the creational imperative *kun*, which is elsewhere a typical trait of Ismāʿīlī cosmogony:¹

Radd [52] (A IV 382₇₋₁₀)

وهو، جلّ وعزّ أبداً، إن أراد شيئاً، قال له: «كُنْ»، فيكون. قوله الحقّ وله الملك، فقوله الحقّ وإرادته الحكم الفاصل جلاً ربّنا وتقدّس. فإن أراد شيئاً، كان بقوله «كُنْ» فيكون كأنثاء؛ وإن لم يُرد شيئاً، لم يكون. فنقول إنّ الله تعالى فاعل بالقول لأجل الإرادة التي سبقت منه قبل الفعل».

¹ On IBN MASARRAH's opinion about divine will, cf. further *Radd* [45–46] (A IV 378_{14-379₁₁}). According to DAIBER 1986a: 289–291, a key concept in the argument of the author of *Radd* is god's autarchy (αὐτάρκεια). When set against this traditionalistic background, the coincidence with the Ismāʿīlī concept of the creation process as “voluntaristic” (cf. WALKER 1974: 8) becomes certainly less significant even if it extends to the inclusion of the two key elements *irādah* and *kun* (for which see below *NatPhil* 2.3).

2.3 — “Then”, the text follows, “God ruled [sās] it all through decree [alqadāʿ] and predestination [alqadar], and it made predestination subservient [tābiʿ] to power [alqudrah] and power submissive [munqād] to knowledge [alʿilm],¹ knowledge being a foundation [uss] for the two of them, for predestination and power emerge [ḥāriḡāni] from God’s knowledge and follow what comes forth from Its hidden unseen [«limā ḡarā min maknūni ḡaybihi»]. Will is what perfects [mutimmah, perhaps originally mutammimah?] active generation [takwīn], as no generated thing can ever be except by Its will and Its permission. It is will that brings forth what is in knowledge and predestination”—as seen in Q 36:82–83: “His command, when He desires a thing, is to say to it ‘Be’, and it is. So glory be to Him, in whose hand is the dominion of everything, and unto whom you shall be returned”.

In the hope that a further exploration into theological literature may shed some light on this densely packed paragraph, let me point out a few items here. First, the opening of the paragraph must be a rewording of a passage from ALKINDĪ’s *Tawḥīd* (= *Ūlā*) that is not found in the unique extant copy of that treatise but is preserved in IBN ʿABDIRABBIH’s excerpt from it:

ʿiqd II 195¹⁵–196⁴

قال الكندي في الفن التاسع من التوحيد: «اعلم أن العالم كله مسوس بالقضاء والقدر. أعني بالقضاء: ما قسم لكل معلول مما هو أصلح وأحكم وأتقن في بنية الكل. لأنه جل ثناؤه خلق وأبدع مضمراً ومختاراً بتمام القدرة؛ فلما كان المختار غير تام الحكمة (لأن تمام الحكمة لمبدع الكل)، كان لو أطلق واختياره، لاختار كثيراً مما فيه فساد الكل. فقدر جل ثناؤه بنية الكل تقديراً محكماً، فصير بعضه سواخ لبعض، يختار بإرادته ومشيتته، غير مقهور، ما هو أصلح وأحكم في بنية الكل. فتقدير هذه السوانح هو القدر. فبالقضاء والقدر ساس جل ثناؤه جميع ما أبدع؛ فهذه السياسة المحكمة المتقنة التي لا يدخلها زلل ولا نقص. فاتضح أن كل معلول فيما قسم له ربه من الأحوال لا خارج عنها؛ وأن بعض ذلك باضطرار، وبعضه باختيار. وأن المختار عن سواخ قدره اختار؛ وإرادته، لا بالكثرة منه، فعل».

معلول [مفعول R-J | غير تام] (عاجزاً) عن تمام R-J | بنية الكل [بنية لكل AR-J | ما هو] مما A | معلول [مفعول R-J | اختار] - R-J | منه] - R-J.

¹ The two manuscripts share a reading «العالم» here that makes no sense whether it represents “the world” or, much less likely, “the knowing one”. On the other hand, on strictly palaeographic ground the word might be also read as *qalam*, but the passage bears no doctrinal resemblance to such exegetical traditions as mention the Qalam in collocation with the Tablet (*allawḥ*) in a similar creational context.

The borrowing (or more precisely, the echo) is limited to the initial sentence and our text does not provide enough grounds (at least I cannot find them) to infer the author's stance in the theological debate on *qadar* and determinism—which can, therefore, be presumed to have been either in accordance to the prevalent orthodoxy of his time or otherwise concealed in his laconicity. Depending on how the couple *alqaḍāʾu walqadar* is read one can presume a distinction between divine decree and predetermination as apparently implied in the original source,¹ or rather interpret them as a simple parasynonymical coordination. The former option appears to be inferable from the fact that only *qadar* is mentioned after the opening sentence, but this is an argument from silence—and it must be emphasised that ALḤILBĪRĪ deliberately omits the original gloss that clarifies ALKINDĪ's understanding of *qaḍāʾ*?. He further passes over the true core of the discussion in his source, namely the question of choice and compulsion (neither *iḥtāra* / *iḥtiyār* nor *iḥṭarra* / *iḥṭirār* are anywhere mentioned in *Nat* II.1). If my interpretation of this opening as a genuine echo of *Ūlā* / *Tawḥīd* is correct, it would confirm two of the main assumptions pointed out so far: that the author is indeed exploiting philosophical materials (even if he had accessed the fragment through the *ṣiqd* he must have been aware of its ultimate origin) and that he eschews, not without some skill, all theological debate linked to the concepts with which he weaves his text.

Unlike in the original passage, on the other hand, a rather evident parallelism with the Neoplatonic concept of emanation can be perceived in *Natāʾiḡ* by which predetermination and power appear to have somehow substituted for the Intellect and the Soul. The definition of god's will as “the perfecter of generation” (*mutimmatu ttakwīn*) and as “the bringer-into-being of what is in Its knowledge and predetermination” confirms the suspicion of a theological-philosophical blend.² God's will (*irādah*) and power (*qudrah*) are collocated by IBN MASARRAH in *Radd*, but he does not provide any additional clues for our text, as his argument focuses rather on causality and aims to establish that the only true causes of creation are the will, the word (*alqawl*), and the power, not

¹ A differential definition of *qaḍāʾ* and *qadar* is propounded also by the Iranian Ṣūfī scholar ʿABDURRAZZĀQ ALQAṢĀNĪ (d. ca 1230) in *Qaḍāʾ* Proem (G 1₂–2₂). On the complex subject of this pair of concepts in the Islamic theological debate, cf. for instance a whole series of *quaestiones* and a criticism of both the Muʿtazilah and the Qadariyyah in ALMĀTURĪDĪ, *Tawḥīd* III (T–A 295₁–414₂₄).

² The significance of the explicit mention of god's will has been duly emphasised above, as well as the wide extension of the *topos* of referring to Q 36:82 in this context. On a tangential note, according to a tradition put into circulation by IBN ʿUMAR, there would be four exceptions to the creation through the imperative *kun*: Adam, the Throne, the Qalam, and the Garden of ʿadn, all of which god created with its own hands, cf. ABUŠŠAYḤ, *Ṣaḍamah* IX.24 [212] (M 578₉–579₄); thence ASSUYŪṬĪ, *Hayʾah* I [6] (H 26–7).

their agent:

Radd [54] (A IV 383₁₅₋₁₆)

لأنه ليس علة الخلق إلا الإرادة والقول والقدرة؛ فأما محدث ذلك، فليس علة.

The scrutiny of these hints cannot be pursued further now, but I hope that the sample provided here may spark the curiosity of the reader, particularly of historians of Andalusī philosophy.

“Then He made all created beings subjected to sensation, perception, and definition, homogenous and opposite. He made for them natures, elements, worlds [*ṣawālim*], a beginning and an end, an ascent and a descent, and He separated His attributes [*ṣifāt*] from His creatures”. A new pious expression is complemented by Q 2:102–103.

The reference to the separation of god’s attributes from the creatures is as explicit as enigmatic to me, and it should be explored, of course, in light of the theological debate on the divine attributes. In any case, it does not seem to be related to the concept of simple, unqualified or attribute-less, being (*in-niyyatun faqaṭ*) as expounded by ALKINDĪ,¹ and the formula is so ambiguous as to make any comparison to parallel discussions extremely difficult.² Needless to say, what now may appear (especially to the uninitiated) as ambiguous or cryptic need not have been so in the original time and space of the author.

The doctrine of the macrocosm (*alṣālamu lkabīr* ≡ μακρόκοσμος) and the microcosm (*alṣālamu ṣṣagīr* ≡ μικρόκοσμος) is then introduced in a direct remark addressed to the reader: “If thou thinkst on this with thy brightest intellect and thy purest thought, thou shalt find that the world is divided in two: a great world and a little world, a single one and a compound one”. The single world is equated with the great one, which is the closer world (*dunyā*) surrounding the human being; whereas the little compound world is the human being contained in this *dunyā*. Even if some melothetic information is introduced a little later (see below *NatPhil* 3.2|5), this is as far as the explanation of the microcosmic idea goes in our text. There is no need, therefore, to delve here into this concept, which has been moreover extensively studied both regarding its earliest written manifestations in ancient Mesopotamia and its Islamicate echoes.³ This analogy, at

¹ A splendid analysis of this question is to be found in ADAMSON 2002: 300–306.

² Thus, does separation from the created beings imply that these attributes are not created or rather that they are created *then* separated from creation? In the former scenario, a possible parallel might be found in Andalus in IBN MASSARRAH’s affirmation that the attributes of god are not created (*maḥlūqah*) but rather originated (*mubdaḥah*) and made (*maḡṣūlah*) by god. This point is echoed by IBN ALṬUQLĪŠĪ in his *Inbāʿ* in a passage that BELLVER translates into English and which he shows as coincident with *Radd* [22] (A IV 371–13), cf. BELLVER 2020: 337, 344.

any rate, was accessible not only through philosophical texts (most particularly in several epistles of the IḤWĀN)¹ but also in such fundamental medical compendia as AṬṬABARĪ's *Firdaws*.²

After that allusion to the microcosm the text turns to the previously mentioned subject of divine predestination: "If thou thinkst on it all, thou shalt find it ruled by decree and predestination, lead by knowledge and power... *That is the ordaining of the All-mighty, the All-knowing*". It certainly looks like our author did like ALKINDĪ's phrase (it is the second time that he uses it in a few lines) but that is all that he may have liked in that source, for the reiterated mention of knowledge and power has nothing to do with the original context of that reference.

The exhortation to ponder on this matter goes further and involves all three characteristic lexemes \sqrt{fkr} , \sqrt{ndr} , and \sqrt{sbr} , the application of which to the object of sense-perception must lead to the recognition of the manifest indications of wisdom, production, composition, subjection, etc, all of which are evidence, in turn, of the existence of a wise one, a producer, a creator.³ These

³ A monographic study of this concept in PLATO's *Timaeus* is conducted by OLERUD 1951 from the perspective of comparative mythology. The different versions of the microcosmic analogy in the IḤWĀN and in several related texts have been extensively studied in a wide context by NOKSO-KOIVISTO 2014 (cf. particularly a table containing all explicit instances of the concept in that collection on page 54), and also with a more limited scope in MAUKOLA 2009, and NOKSO-KOIVISTO and SVÄRD 2013. A reflection of the same primeval idea (apparently inherited from Hellenistic sources) can be found in the *Bundahišn*, where the small world (*gēhān ī kōdak*) and the great world (*gēhān ī wuzurg*) are dealt with in chapter 28 (cf. an English translation in AGOSTINI and THROPE 2020: 148–153).

¹ Cf. for instance *Rasāʔil* XXXIV.2 (P 58₂). Mark, however, that *Natāʔiġ* shows no echo of the related analogy of the macroanthropos, to which the IḤWĀN devote a whole separate epistle, cf. *Rasāʔil* XXXIV (P 51₁–104₄); also *Ras* XXXIII.1 (W 38₁₃–15), where the idea is linked to the "Know thyself" (Γνῶθι σεαυτόν) maxim. The concept was integrated even into theological discussions, cf. ALMĀTURĪDĪ, *Tawhīd* Prologue (T–A 678–9), to the point that speculation on the macro- and microcosm actually "grew into a special genre of literature" (HEINEN 1982: 48).

² The idea of the microcosm is hinted at by name in AṬṬABARĪ, *Firdaws* Proem (§ 3₁₃–14) and the universe is referred to as "the great world" (*alʔālamu lkabīr*) with no further elaboration in *Firdaws* II.1.8 (§ 43₄). The comparison of the human body to the universe, which is the reason why humans were called "the lesser world" (*alʔālamu lʔaṣġar*) is then developed in some detail in *Firdaws* II.1.13 (§ 49₁–15). In view of the sources exploited by AṬṬABARĪ, one should consider a possible influence of either the original Hippocratic *Περὶ ἐβδόμηδων* or its pseudo-Galenic commentary, cf. the human being as «*addunya ṣṣaġīrah*» in *Asabīʔ* Proem (B 4₃–4) and the pair *alʔalamu ṣṣaġīr* / *alʔalamu lʔakbar* in *Asabīʔ* [1] (B 6₁₂–13); cf. an analysis of the cosmology of *De hebdomadibus* in WEST 1971; and CRAIK 2015: 126–128. An allusion (without further explanation) to "this great world" and "this little world" is found also in *Hārūnīyyah* I.11.3 (G 53₁₃–14), and *Hārūnīyyah* I.11.9 «*waqad yuṣbihu raʔsuhu ṣṣamāʔ, wariġlāhu lʔarḍ, waʔaynāhu ṣṣamsa walqamar, wayaminūhu lyaman [...] wyuṣbihu waġhuhū wamustaqbaluhu lmaṣriq, waḥalfihu lmaġrib*» (G 61₃–5).

³ This evidential argument is a classical one and a close partial parallel can be found, for example,

are, according to the author, the clearest probative evidence for (god's) unicity (*waḥdāniyyah*). The argument is expanded afterwards in *NatPhil* 2.4 with regard to the existence of the proof, where an effect or sign, a wall, and a fruit are taken to be inferential indicators of the existence of their respective agents. A strikingly similar passage is transmitted by ABUŠŠAYḤ, which must be interpreted as proof of a lively and fruitful interface between a *falsafah*-influenced search for knowledge and exegetical speculation:¹

Ṣaḍamah II (M 271₅–272₁)

وذلك إذا نظر إلى نفسه، وجدها مكوّنة مكوّنة مجموعة مؤلّفة مجزأة منضّدة مصوّرة متركّبة بعضها في بعض، فيعلم أنّه لا يوجد مدبّر إلا بمدبّر، ولا مكوّن إلا بمكوّن — وتجد تدبير المدبّر فيه شاهدًا دالًّا كما تنظر إلى حيّطان البناء وتقديرها، وإلى السقف المسقف فوقه بجذوعه وعوارضه [...] فكلّ ذلك يدلّ على بانيه ويشهد له. فكذلك هذا الجسم، إذا نظرت إليه وتفكرت فيه، وجدت آثار التدبير فيه قائمة شاهدة للمدبّر، دالّة عليه.

Once again, the presence of some common key words (*saḥḥara*, *dalla*, *dabbara*) reveals a theological-philosophical approach to the argument, as shown by the following passage by ALMĀTURĪDĪ:

Tawḥīd I (T-A 125₁₅–126₂)

مع ما لا يوجد شيء من أعيان العالم وصفاته إلا مُسَخَّرًا به مذللاً بما لولا ذلك أهون عليه وألذّ [...]. ولا يجوز أن يكون المسخّر المذلّل يملك التدبير حتّى يكون به غنى الغير وقيامه، ولا يملك إزالة الدلّة عن نفسه والسُّخْر. ثبت أنّ لكلّ ذلك مدبّرًا علمًا وجوه حاجاتهم وغناهم، فخالقهم على ذلك [...] ثبت أنّ لذلك كلّ مدبّرًا على تدبيره جرى أمرهم.

in IḤWĀN, *Rasāʾil* XIX.11: «an taʿlama biʿanna ṣṣanʿata lmutqanata lā takūnu illā min ṣṣāniʿin ḥakīm» (B 316₈₋₉); and again as «waʿlam anna lmaṣnūʿa lmuḥkama yadullu ʿalā ṣṣāniʿi lḥakīmi waʿin kāna ṣṣāniʿu muḥtaḡiban ʿan idrāki lʿabṣār» in *Rasāʾil* XXI.1 (B 413₈₋₉).

¹ In a similar vein, although drawing from different arguments, ABŪ MAʿŠAR states that the knowledge of the workings of the stars leads to the confirmation of the existence of a unique creator and he validates his point through an explicit quote of “the Philosopher” (ie ARISTOTLE) on the ultimate mover, cf. *Madḥal* I.3 (B-Y 90₁₋₇).

2.4 — After having shown the evidence for the unicity of the creator, a new subject is introduced by “Know”: there are three different ways to ascertain the existence of beings. The word inherited by the author (for he does certainly not innovate here) is *wuġūd*, which is rather unfortunately ambiguous as to its valency but here, as elsewhere, the context makes it sufficiently clear that a *transitive* meaning is implied. It is not “the *existence* of the five senses” (ie the fact that the five senses exist) that is intended here, but rather “the (way of) finding (out that something exists) through the five senses” (ie perception through the senses or sense-perception). By the same token, the being of things can be “found” through the intellect (*ʕaql*) and through demonstration or apodictic reasoning (*burhān*). The two interpretations (ie the transitive and the intransitive ones) or *wuġūd* are, in fact, combined in this passage, as the senses, the intellect, and apodictic reasoning find (ascertain or apprehend) the existence (*wuġūd*) of their respective objects. The latter are: (1) such things as can be represented, sensed, and perceived, in sum all sorts of generated things, in the case of the five senses; (2) spiritual/immaterial substances, high sciences, and lofty meanings or concepts, which are not embodied nor are they perceived by the senses either through touch or colour but rather by the intellect; and (3) the effect (*aṭar*) from which the existence of an effector (*muḏattir*) is inferred, and the wall that points towards (the existence of) a builder,¹ and the fruit towards a tree. The third and last way of perception corresponds to the existence of the creator.

This short and dense paragraph, which is moreover quite clearly delimited in form and contents within *NatPhil* 2.3 contains what is probably the second most arguable borrowing from ALKINDĪ’s treatise on the First philosophy. There the philosopher of the Arabs expounds, in a discontinuous manner, how human perception (*abwuġūdu lʔinsāniyyah*) is in fact twofold, namely the perception of the senses (*wuġūdu lḥawāss*, later referred to as *wuġūdun ḥissī*) and the perception of intellect (*wuġūdu ʕaql*, then *wuġūdun ʕaqlī*), only to then mention some pages later a third way of perception, that of demonstration (*abwuġūdu lburhānī*»²). This essential identity in doctrine and particularly in terminol-

¹ The example of the wall is a recurrent one in the Helleno-Islamicate philosophical tradition. It is one of the examples of evidentiality (alongside thunder and lightning, and smoke) for ABŪ MAʕŠAR, *Madḥal* III.2 (B–Y 232₁₃); cf. also IBN RUŠD’s short commentary on ARISTOTLE’s *Rhetoric*, which I quote here from its English translation: “Then, too, certainty about the essential existence of sense-perceived things may result through the syllogism; an example of that is: “This wall is built; thus, it has a builder.” However, the essential form of the particular builder does not result through it” (BUTTERWORTH 1977: 75). For essentially the same idea of inferentiality conveyed by different examples, cf. for instance ALMĀTURĪDĪ, *Tawḥīd* I (T–A 93_{18–23}).

² Cf. *Ūlā* 19_{4–21₁₂} and 25_{11–19}. I adhere here to RASHED’s and JOLIVET’s translation of *wuġūd* as ‘perception’, which has the disadvantage of being the usual rendering of *idrāk*. If on an episte-

ogy can hardly be due to coincidence. We now, moreover, that this particular point in *Ūlā* / *Tawḥīd* drew the attention of his Andalusī refuter, who reproduced it extensively and even provided a convenient recapitulation of the intended meaning of some of the passages in form of authorial glosses:

Radd [5–6|11] (A IV 364_{12–16}, 365_{1–2}, 366_{6–9})

«الوجود الإنساني وجودان: أحدهما وجود الحواس [...] والوجود الثاني أقرب من الطبيعة وأبعد عتًا، وهو وجود العقل. [...]» — اختصار هذا: أن الحواس تجد الأشخاص، وأن العقل يجد المعاني.
 [...] «الوجود البرهاني [...] لأنه ليس كلّ مطلوب عقليّ موجودًا بالبرهان، لأنه ليس لكلّ شيء برهان».

Given that this theory is not, after all, an original contribution by ALKINDĪ but, as most of his philosophical ideas, an elaboration of Graeco-Arabic sources, one might suspect that this might a new instance of *parallel* transmission from a common source rather than dependence of one author from the other. Now, the IḤWĀN's paraphrase of the same idea suggests that the particular wording shared by *Natāʾiḡ* and *Ūlā* but not by *Rasāʾil* must be considered compelling evidence for a closer genetic link between the former two texts. The IḤWĀN, in fact, feature a semantically unambiguous action noun *wiḡdān* and appear to represent a genuinely parallel reworking of the some materials ultimately related to those used by ALKINDĪ:¹

mological level this may be unproblematic (see below a quote from IBN RUŠD in which *idrāk* is used in this exact same context), I have avoided this correspondence in my own paraphrase in order to mirror the author's differential use of *adraka* and *waḡada*. When translating this locus in ALKINDĪ's text IVRY renders the original Arabic also as "perception", the three modes being "sensory perception", "perception of the soul", and "apodictical perception" (the latter glossed as "a demonstrative 'finding' or apprehension"), cf. IVRY 1974: 133, 137, 141. It is also "perception", alongside "finding", that translates *wuḡūd* in the commentary on this passage in ADAMSON 2007: 88–90. It is not a simple problem of translation: the ambiguity of Arabic *wuḡūd* was so problematic for Arabic-speakers themselves that some of them avoided it at all costs and coined *huwiyyah* in its stead according to ALFĀRĀBĪ, *Ḥurūf* I.15 (M 114_{3–115}).

¹ Cf. WALKER's translation (on page 118) "Know that each human being is a thing, and thus finding it to exist is not free from one of three processes: either it is by a faculty of sense perception [...]; or it is by an intellectual faculty, which involves pondering, deliberation, understanding, discrimination, true conjecture, and pure reason; or it is by means of necessary demonstration [...] There is no other way for humans to know what is known other than these three".

Rasāʾil XXXV.2 (W 107₄₋₁₀)

واعلم أنّ كلّ واحد من البشر شيئاً، فإنّ وجدانه لا يخلو من إحدى الطُّرق الثلاث: إمّا بإحدى القوى الحسّاسة، كما بيّنا في رسالة الحواس؛ وإمّا بإحدى القوّة العقلية التي هي الفكر والرؤية والفهم والتمييز والوهم الصادق والذهن الصافي؛ وإمّا بطريق البرهان الضرويّ، كما بيّنا في رسالة البراهين التي هي بطريق الاستدلال. وليس للإنسان طريق إلى المعلومات غير هذه الطرق الثلاثة.

In order to reach more solid conclusions with regard to the exact nature of the relationship that obtains amongst the aforementioned texts (and others that may probably emerge from further exploration), the ultimate Aristotelian source of this doctrine shall have to be examined, which means checking ALKINDI's account against the background of the *Posteriora analytica* and *De sensu et sensibili* (probably also *De anima*).¹ For the time being, however, one can admit that it is virtually impossible to arrive to the concise and clear definitions of the three ways of finding out the existence of beings expounded in *Natāʾiḡ* from ALKINDI's convoluted philosophical discourse without a hermeneutical effort on the part of the borrower. If *Ūlā* is, as it seems to be, directly or indirectly the source for ALʿILBĪRĪ, then the Andalusī physician ought to be credited with having provided a clarification that improves considerably the readability of the original—and in this he may be compared with the didactic conciseness of the author of *Radd*.

2.5 — The exposition of the fundamentals of natural philosophy ends on a somewhat initiatic tone with an encouragement for those that wish to devote themselves to this precious wisdom and to the interpretation of this lofty creation to apply themselves to thinking and contemplating. The reward of such a task could not be described in more encomiastic terms by the author and overall the passage is by no means a text filler but provides additional proof that he knows his prose and that he has some intellectual aspirations and metaphysical leanings. As far as the contents of this exhortation are concerned, there are some expectable coincidences with such propaedeutic texts as the IḤWĀN's *Rasāʾil*,

¹ In the commentary on ALKINDI's *Ūlā* IVRY points to *Post. anal.* 72a1–5 (= I.2) for the idea of the two human ways of perception; *Post. anal.* 71b20 for the perception of the soul; and *Post. anal.* 72b18 (= I.3) for apodictic perception, cf. IVRY 1974: 133, 137, 141; the Arabic translation is available in ARISTOTLE, *Burhān* I.1–2 (B 329₂–338₃). The question of sense-perception (αἴσθησις ≡ mostly *idrāk* but seemingly also *wuḡūd* in some loci) is dealt with at some length in *Sens. et sensil.* as reflected particularly in IBN RUŠD, *Ḥiss* I (G 286–316, 471₀–481). A summary of a doctoral dissertation on the only known copy of the original translation of the latter text is provided by HANSBERGER 2010: 143–162, but precisely in the acephalous fragment transmitting the first book there is “nothing that would amount to a translation or paraphrase of any passage in *De sensu*”.

yet the characteristic motif of the ascent is missing (unless one is willing to read a great deal into the adjective *rafīṣah* and the verb *yasmū*), nor is there any allusion to a ladder or steps as in IBN MASARRAH.¹

2.6 — A double epilogue closes the segment. First, the author asserts how, were it not for his addressee's dislike of prolixity and verbosity, he would have caused him to be grateful and fully satisfied by writing extensively on the composition, classification, division, and order of the worlds, as well as on the specific properties, natures, benefits, and dangers of animals. Then, a standard transitional sentence («*wahādā ḥīna naṣīru ilā raġbatika min waṣfi lʔazmāni alʔarbaṣah...*») describes with remarkable detail the contents of the following segment *NatPhil* 3.

¹ For the ladder of ascension in IBN MASARRAH as a possible echo of IḤWĀN, cf. DE CALLATAÏ 2014: 270–276.

5.4 NatPhil 3 — *The four seasons: cosmic and physiological correspondences*

3.1 — The explanation of cosmic time is introduced with a new reference to the agreeing authority of past sages and outstanding philosophers: “the year [*sanah*] consists of twelve months that are divided [*maqsūmah*]¹ according to the twelve signs of the zodiac [*burūḡu lʿfalak*], which are prior to the year and time itself, for the days, the weeks, and the seasons are a consequence [*natiḡah*] of the course [*ḡary*] of the Sun, the Moon, and all the other planets through the twelve signs that are arranged [*murattabah*] in the lofty regions of the sky and the quarters of the sphere”.

Describing time itself as a consequence (mark the insistence on philosophical terminology) of the movement of celestial bodies (in *NatPhil* 3.9 the author actually identifies the latter as the *causes* of time) is once again positively related to philosophical matters (it can be linked to the classical discussion on movement and time, which is otherwise absent from this section) but the subject was at the same time also an object of inquiry for Islamic cosmology. The coordination of the characteristically lexicographic/ḥadīṭic phrase “the lofty regions of the sky”² and the astronomical term “quarters of the sphere”³ is quite telling of this interface and the passage, like most of *Nat* II.1, can be qualified as Islamic knowledge in *falsafī* garb. Moreover, in what concerns the seasons of the year (*azmān* / *azminah*, singular *zaman* / *zamān*, which like Syriac ܙܡܢ is the

¹ Although *qasama* (and also *inqasama*) has elsewhere in this subsection a more astrological meaning ‘to assign’, ‘to allot’ (for which see below *NatPhil* 3.2) and it has previously appeared with a cosmogonical sense, it is clear from the context that a simple temporal division or segmentation of the year is intended here. Cf. for instance «*wadālika anna manāzila lqamari* [...] *qusimat ʿalā lburūḡ*» in IBN ḤABĪB, *Nuḡūm* 174.8.

² Both *ʿanānu ssamāʿ*? (meaning either ‘whatever appears to the sight of the sky’ or ‘clouds’) and *aʿnānu ssamāʿ*? its ‘regions’ or ‘cardinal points’ («*nawāḥihā*») are recorded by ALḤALĪL B. AḤMAD in *ʿayn* I 90.13–17 s.f. √نح; cf. also ABŪ ḤANĪFAH *apud* IBN SĪDAH, *Muḥaṣṣaṣ* IX 91–2 (also *apud* IBN ʿĀṢIM, cf. FORCADA 1993: 51). The two appear as transmissional variants in ḥadīṭ, cf. ABŪ ʿUBAYD ALHARAWĪ, ḠARĪB [769] (§ V 98.3–8). The latter (which is the one used by ALʿILBĪRĪ) is documented in Andalus since IBN ḤABĪB, *Taʿrīḥ* [75] (A 39.5); also IBN BAŠKUWĀL, *Qurbah* [48] (P 43.7). Incidentally, although the semantic shift (rather extension) is quite self-evident, the meaning ‘clouds’ (*saḥāb*) seems to be borne out by its cognates in Syriac ܣܚܒܐ (cf. PAYNE SMITH, *Thesaurus* 2923; BROCKELMANN–SOKOLOFF, *Lexicon* 1118a) and also in Tanakhic Hebrew ܣܚܒܐ (eg in Ez 30:18, Hos 6:4).

³ Four quarters of the orb/sphere (eastern, southern, western, and northern) of 90° each are described in IḤWĀN, *Rasāʾil* III.11 (R–M 536–544) and a fourfold division of the sphere related to the four quarters of the earth is reiterated in *Rasāʾil* XX.5 (B 37.2–3). A mention and then a full description of these quarters is transmitted also by ABŪ MAʿŠAR, *Madḥal* II.6|7 (B–Y 210.3–4, 216.1–7) and *Muḥtaṣar* 1 (B–Y–Y 28.1–8); also ALQĀBIṢĪ, *Madḥal* 140–44 (B–Y–Y 22). For the Hellenistic precedents of this doctrine, cf. the τεταρτημόρια in PAUL OF ALEXANDRIA, *Isagogica* [7] (B 20.1–21.3) and even earlier in PTOLEMY, *Apotelesmatica* I.13 (B–B 35.5–10).

exact same word meaning also ‘time’, cf. also the wide semantic spectrum covered in Greek by both χρόνος and ὥρα) an additional ingredient for this amalgam is provided by the Hippocratic explicit link between astronomical phenomena and seasonal changes, the latter being in turn responsible for changes in human physiology:¹

Aer. aqu. et loc. 2 (D 26₁₃₋₂₁ | L II 14₁₀₋₂₀) AṬṬABARĪ, *Firdaws* VII.III.1 (§ 541₇₋₁₀)

εἰδῶς γὰρ τῶν ὥρέων τὰς μεταβολὰς
καὶ τῶν ἄστρον τὰς ἐπιτολάς τε καὶ
δύσας κατότι ἕκαστον τούτων γίνε-
ται προειδείη ἂν τὸ ἔτος ὁκοῖόν τι μέλ-
λει γίνεσθαι. οὕτως ἂν τις ἐννοεῦ-
μενος καὶ προγινώσκων τοὺς καιροὺς
μάλιστ’ ἂν εἰδείη περὶ ἐκάστου καὶ
τὰ πλείστα τυγχάνοι τῆς ὑγιείης καὶ
κατ’ ὀρθὸν φέροιτο οὐκ ἐλάχιστα ἐν
τῇ τέχνῃ. εἰ δὲ δοκέοι τις ταῦτα μετε-
ωρολόγια εἶναι, εἰ (μὴ) μετασταίη τῆς
γνώμης, μάθοι ἂν, ὅτι οὐκ ἐλάχιστον
μέρος συμβάλλεται ἀστρονομίῃ ἐς ἰη-
τρικὴν, ἀλλὰ πάνυ πλείστον· ἅμα γὰρ
τῆσιν ὥρησι καὶ αἰ κοιλίαι μεταβάλ-
λουσι τοῖσιν ἀνθρώποισιν.

قال أيضًا إنَّ طلوع الكواكب وغروبها هي علة
تغير الأزمان، وتغير الأزمان هو (علة) تغير
الأبدان.

هو (علة) هي §.

Bilādīyyah 13₇₋₁₅

فإن طلق أحدُ أن الأشياء التي ذكرنا هي من
العلم العلوي فآقر به وصدقته، فإنه سيعلم
أم علم النجوم ليس بجزء صغير من علم
الطب. وذلك أن بطون الناس تتغير في بعض
الأزمنة.

More straightforward definitions of the seasons (and, overall, of the different units of time) were also available which did not include explicitly the words ‘consequence’ or ‘cause’:²

¹ The first segment of the Arabic translation of this fragment in *Bilādīyyah* 13₂₋₆ deviates widely from the original Greek. The same locus is quoted, with slight variations, no less than four times by ABŪ MAṢṢAR in his philosophical defence of star-lore, cf. *Madḥal* I.2 (B–Y 54₈₋₅₆), I.5 (B–Y 126₁₋₄), III.3 (B–Y 256₁₂₋₂₅₈), and especially the only instance in which the whole passage is explicitly quoted from HIPPOCRATES’ *Ahwīyah* in *Madḥal* I.5 (B–Y 140₆₋₇).

² Cf. also time being “the path [*masīr*] of the Sun within its sphere” in AṬṬABARĪ, *Firdaws* I.I.9 (§ 20₇₋₈); or even a “number of movements”, cf. «*ṣadadu ḥarakāti lʿaflāki wannayyirāt*» in *Firdaws* I.I.9 (§ 21₈₋₁₉), and an abridged version of the same formula «*ṣadadu ḥarakāti lʿfalak*» in *Firdaws* II.II.5 (§ 70₂₀₋₂₁), for which cf. ARISTOTLE’s definition of time as «*ṣadadu ḥarakati lʿfalak*» in *Aetius Arabus* 20₁₄.

ATṬABARĪ, *Firdaws* II.1.18 (§ 58₇₋₁₀)

فالأزمنة والشهور والدهور والساعات والمواقيت وتغيرُ الزمان من حال إلى حال، إنّما هو كما ترى بحركات الفلك الأعظم وتحريكه ما دونه وتحريكه الشمس وقبيلها في فلكها — فتبارك الله أحسن الخالقين.

A description of the sphere as *muntiġ* of winter and summer in the pseudo-Galenic commentary on HIPPOCRATES, *De septimanis* offers an interesting term of comparison for our author's use of *natīġah*:

PSEUDO-GALEN, *Asabīʿ* [4] (B 10₂₋₆)

ونقول الآن إنّ الفلك الذي فيه البروج والنجوم هو علة الشتاء والصيف وبقية الفصول؛ إلا أنّ هذا الفلك يسلك في ذلك العالم الأقصى. فلك قال أبقراط إنّ مسلك الشتاء والصيف، ليس أنّه علة للشتاء والصيف؛ لكنّه حامل لفلك البروج المنتج للشتاء والصيف

Then, the enumeration of the zodiacal signs (*burūġ* ≡ ζώδια) in our text reveals a peculiar nomenclature that must probably be interpreted as a geolectal marker, as the same synonyms are well attested in Andalus in the 9th and 10th centuries. Thus, Aries is referred to as *Alkabš* rather than as *Alḥamal*, the former being actually closer to Greek Κριός 'ram'; Gemini as *Attawʿamān*, not as *Alġawzāʿ*, yet both mirror Δίδυμοι 'twins'; and Virgo as *Alṣadrāʿ*, a literal rendering of Παρθένος 'maiden', unlike standard *Assunbulah*, which corresponds etymologically to *Spica* (α Virginis). This feature is analysed in some detail alongside other Andalusī features in Chapter 9.

3.2 — “The first sign is Aries [*Alkabš*], which is assigned [or allotted, *munqasim*]¹ to the head of the sphere and also to the head of humans. It was in Aries that the Sun started its course at the beginning of creation and whenever it arrives [*hallat*] in Aries it is spring. The last sign is Pisces [*Alḥūt*], which is assigned to the end, rear, and extreme of the sphere, and it is likewise assigned to the feet of humans. When the Sun arrives in Pisces in the month of March [*Mārs*] it is the end of the year and of winter. When it has passed through it and arrives in the head of Aries, it is spring, which is the first season, the most splendorous to the

¹ As mentioned above, *qasama* and *inqasama* (particularly as a non-agentive participle *maqsūm* / *munqasim*) conveys throughout *NatPhil* 3, especially when combined with preposition *li-*, an unmistakably astrological meaning that mirrors (or perhaps rather translates) Greek ἀπομερίζω, cf. ἀπομεμερισμένον (followed by a dative) in reference to the winds in PAUL OF ALEXANDRIA, *Isagogica* [2] (B 3₂₋₃). In the same text ἀποκλιρῶ is also sporadically used with the same meaning. This is, in fact, a specialisation of the basic meaning 'to divide', 'to distribute', also 'to allot', but so far I have found no parallel for this exact phraseology in the Islamicate astrological corpus.

soul and the most pleasing to nature. The twelve months are assigned to these twelve signs, which are their origin and element [or matter, *ḥunṣur*], for they are prior to them, since the element/matter of a thing is prior to that thing and its cause exists before that caused thing”.

This passage is quite representative of the confluence of traditions reflected in the second main segment of NATURAL PHILOSOPHY. There is that peculiar polygenetic blend of undifferentiated astronomy and astrology so characteristic of early Islamicate star-lore, the strictly astrological ingredient being actually limited in our text to a few bits of cosmological and human physiological matters (prediction is nowhere to be found here, not even in the form of medical prognostication). Then there is the philosophical approach, which is noticeable in the above paragraph in the statement about the chronological priority of simple elements and causes over compound bodies and caused things. It can be compared with the Aristotelian maxim about the overall (and particularly epistemological) priority of causes over effects:

ABŪ MAṢṢAR, *Madḥal* I.4 (B–Y 92_{11–12})

فإِذَا نَذَرَ قَوْلَ الْفَيْلَسُوفِ حَيْثُ قَالَ إِنَّ كُلَّ مَعْلُولٍ، عَلْتُهُ أَقْدَمُ مِنْهُ بِالْمَرْتَبَةِ.

Just like before in *NatPhil* 2, the exposition is punctuated by Islamic (usually Qurʾānic) references, and terminology is overall standard but not entirely devoid of interest, especially with regard to some localisms and some possible flashes of the author’s own idiolect. As for the contents, a more complete account of melothesia is provided below in *NatPhil* 3.5 and the motif of the beginning of creation is also developed in some detail in 3.9–10.

According to ALʿILBĪRĪ, then, “these twelve signs of the zodiac, which are the cause and the element/matter of time, are arranged [*murattabah*] in the great sphere¹ and they are assigned [*maqsūmah*] to the four regions [*aqṭār*] and cardinal directions [*nawāḥin*] of the earth, its winds, the elements, and seasons, as well as the human natures. Because the four natures of the human being (namely the two biles [*almirratān*], phlegm, and blood) were created from the four elements [*ḥanāṣir*] and these four elements, as well as the twelve signs of the zodiac, the mansions, the seven planets, and all other bodies in the sphere [*alʾaḡrāmu lʾfalakiyyah*] and the two shiny luminaries [*annayyirān*] that are in the sphere,² they were all created from the simple [*basīṭah*] natures. The four

¹ All references in *NatPhil* 3–4 are to a singular sphere (*falak*), which is explicitly identified with the “great sphere” or the “sphere of the zodiacal signs” (ie the eighth or englobing one in the classical description of the structure of the universe), in striking contrast to the plural previously seen in *NatPhil* 2.2. The author may have found unnecessary to mention the individual spheres of the planets as this information did not contribute substantially to his discourse.

directions [*ǧihāt*] and the four winds that descend from them, and the twelve signs of the zodiac, in turn, were created to strengthen those four elements (namely earth, water, air, and fire) that are the origin [*aṣl*] and the element/matter of created beings, for these four are the elements of animals, the “mothers” [*ummahāt*] of the human being,¹ and the origins [*uṣūl*] of the four bodily natures [*ṭabāʾiṣ*]. Thus, black bile was created from the element of earth; phlegm, from the element of water, which is its origin [*aṣl*] and kind [*ǧins*]; blood, from the element of air; yellow bile, from the element of fire”.

This second segment of the epigraph deserves some remarks. If the general framework is for the most part essentially identical to what can be found in any other account of these matters in the early Islamicate tradition (which shall become clearer a little later when parallels for virtually of these doctrines are quoted below), there are nonetheless a few features that are either less common or plainly idiosyncratic.

Thus, *ḥunṣur* for ‘element’ (στοιχείον) in reference to earth, water, air, and fire, is common usage, and so is its synonym *ummahāt* ‘mothers,’² but ALḌILBĪRĪ appears to differ from the standard terminological tradition that calls the two biles, phlegm, and blood “humours” (*aḥlāt* ≡ χυμοί).³ As a matter of fact, he rather op-

² The two manuscripts agree on transmitting a dual «النَّيرَان» (ie the Sun and the Moon) and the context seems to confirm their reading. The qualifiers that follow could be interpreted syntactically as related to the whole series but on semantical grounds they are more likely linked to the last-mentioned luminaries, in which case the plural instead of a dual would be non-normative but yet relatively well documented, cf. the remark on «*samakātāni mukawkabah*» in DAIBER 1980: 285. The Sun and the Moon are frequently distinguished from other planets precisely as *annayyirān*, cf. for instance IḤWĀN, *Rasāʾil* III.6|28 (R–M 43₂, 99₆₋₇). Let it be noted, however, that AṬṬABARĪ uses quite consistently a plural *nayyirāt* throughout *Firdaws* (cf. 19_{5|18}, 20₁₈, 21_{19|22-25}, 54_{13|24}); and particularly «*aššamsa wannayyirāt*» in 49₉) and it cannot be totally ruled out that the dual in *Natāʾiǧ* might have its origin in a misreading.

¹ The “four mothers” are mentioned also by AṬṬABARĪ, *Firdaws* VII.III.1 (§ 54_{24|15|16}). The same four elements are also styled “mothers” in *Rasāʾil* XVI.2 (B 69₂), XIX.13 (B 342₈₋₉), and specifically “universal mothers” (*alʾummahātu lkulliyyāt*) in *Rasāʾil* XVII.2 (B 156₈₋₁₅₇₆). The expression (which is not without parallels, cf. 𐤀𐤃𐤁𐤀 or μῆτρῆρ) is idiomatic in Arabic with a non-genetic but still similar sense, cf. for instance the four cardinal winds being alluded to as “the mothers of winds” by IBN QUTAYBAH in *Anwāʾ* [188] (H 158₄₋₈), whence ʿARĪB B. SAʿĪD, *Anwāʾ*? 129₁₃₋₁₃₀.

² Curiously enough, however, the word *arkān* that features in the rubric of this segment alongside (and therefore apparently as a non-synonym of) *ḥanāšir* is never used again. Each of the four elements is usually referred to also as *ḥunṣur* by AṬṬABARĪ, cf. for instance *Firdaws* I.I.9 (§ 21₉₋₁₀), but he occasionally alludes to them as “compound natures” too, as in *Firdaws* I.I.3 (§ 11₁₈₋₁₂₂). For the IḤWĀN, in turn, *arkān* is the most usual denomination of the four elements, as for example, with a variable order in the enumeration, in *Rasāʾil* III.1 (R–M 14₁), XVII.14 (B 182₁₋₂), XVIII.1 (B 185₆₋₇), XIX.2 (B 251₂₋₃, 253₂₋₃), XXXIIa.1 (W 7₈₋₉), XXXIII.5 (W 42₃₋₄). It is also *arkānu lǧasad* that ʿARĪB B. SAʿĪD uses in *Anwāʾ*? 155₇.

³ For the four *aḥlāt*, cf. IḤWĀN, *Rasāʾil* III.1 (R–M 14₂₋₃) and XXXIIa.1 (W 7₉₋₁₀); for the *ṭabāʾiṣ*, cf. *Rasāʾil* III.1 (R–M 14₁₋₂) and XXXIIa.1 (W 7₇₋₉).

poses “simple natures” (which, one must infer, are hotness, coldness, moistness, and dryness)¹ to the four “human bodily [*ǧismāniyyah*] natures” (ie the four humours). Besides, there is a possibility that in some instances the singular *ḥunṣur* might actually refer to ‘matter’ (ῥλη), which would certainly make better sense of some apparently redundant loci in which the elements or one single element are affirmed to be “the element” of something else.² In order to preserve the ambiguity of the original, however, and since ‘matter’ is never mentioned as such in the whole book (except perhaps in these few loci), I have avoided imposing this interpretation onto my paraphrase of the text. Be it as it may, given that this terminology is probably source-dependent and that there is some fluctuation in this regard in the early tradition,³ the assessment of the extent of the author’s peculiarity shall have to be conducted when a wider corpus is examined in the future.

On the other hand, cosmological analogies based on the number four as those consistently expounded in our text were particularly cherished by physicists (*tabiʿiyyūn* ≡ φυσικοί)⁴ and this is not the only place in *Natāʾiǧ* in which an echo of such doctrines is incorporated into the author’s discourse. Some concrete examples are to be found below, and in *Nat* II.2 THERAPEUTICS the macrostructure of the section is indeed explicitly arranged according to a quadripartite division of the human body.

¹ Cf. the same concept of “simple natures” in AṬṬABARĪ, *Firdaws* I.1.3 (§ 11₁₈–12₂), where they are explicitly opposed to “compound natures”, which are the four elements. For ABŪ MAʿŠŠAR the “natures” (unqualified) are fire, air, earth, and water, cf. *Madḥal* I.2|3 (B–Y 54₂₋₇, 8₀₁₀₋₁₁), then a little later he refers to these four elements more conventionally as *arkān*, cf. *Madḥal* I.5 (B–Y 108_{2|5}), but *alʾarkānu lmufradah* are hotness, coldness, moistness, and dryness in *Madḥal* II.5 (B–Y 204₂₋₃). The four elements (water, earth, air, and fire) are labelled *aṭbiʿah* in the prolegomena to *Hārūniyyah* I.1 (G 45₉₋₁₀), but then as *ustuqussāt* a few lines later (G 47₇); whereas the four *ṭabāʾiʿ* are the four bodily humours in *Hārūniyyah* I.III.1|2|3 (G 65₅, 71_{4|14} drawing from HIPPOCRATES, 73₆, 75₁).

² According to the *Glossarium Græco-Arabicum*, *ḥunṣur* renders indeed ῥλη particularly in the Arabic translations of ARISTOTLE’S *De caelo* and of PSEUDO-PLUTARCH’S *Placita philosophorum* (= *Aetius Arabus*).

³ The four humours are called *mizāǧāt* by AṬṬABARĪ, cf. *Firdaws* Proem (§ 46) and also in *Firdaws* II.1.8 (§ 42₁₁₋₂₃), which is quoted below.

⁴ Cf. IḤWĀN, *Rasāʾil* XXXIIa.1 (W 8₇₋₈), where the arithmetical preferences of several epistemic schools are echoed.

3.3 — The principle of analogy is stated according to which “the four human natures [now *aṭṭabāʿiṣu lʿinsāniyyah*] resemble the nature of the element from which they were created. Black bile [*mirratun sawdāʿ* ≡ μέλαινα χολή] is cold, dry, thick, heavy, dreggy or dusty [*ʿakirah*], earthy, for it was created from the element of earth, which is cold and dry too, thick and dusty—it is the thickest and heaviest element, indeed, and for that reason it became the bottom of the world and was placed thus by the creator so that it might be “a fixed place” [*qarār*, a reference to Q 27:61 and 40:64]”. A much shorter explanation is provided for phlegm (*balġam* ≡ φλέγμα), whereas in the case of blood (*dam* ≡ αἷμα) a new cosmological comparison is made with air, “which is the life of animals through breathing just like blood is the life of humans”. The comparison goes further with a simile drawn between humans dying when air is lacking and a lamp becoming extinguished in the absence of oil, “for blood is to the spirit as clean oil to the lamp; and air is to the spirit as the wind that gives life to fire”.

The association of yellow bile (*mirratun safrāʿ* ≡ ξάνθη χολή) to fire also calls for a macrocosm-microcosm comparison: “just like the sun makes the atmosphere [*alġaww*] subtle, hot, and lively, so does yellow bile heat the body in winter, and subtilises thick superfluities, and prevents phlegmatic chymes [*kīmūsāt* ≡ χυμοί] from full development and exacerbation, which they would reach because of the winter cold that strengthens them”. Monotheistic dogma surfaces again when the creator is credited with putting the hot and dry yellow bile in winter as a counterpart (*munāḍirah*) and antagonist (*munāziʿah*) to phlegm, while It put the cold and moist phlegm in summer as a counterpart to the heat of the yellow bile and of the season—all for the benefit of humankind. Then It put the hot and moist blood in autumn as a counterpart of the black bile, and the cold and dry black bile in spring as a counterpart to blood (the two manuscripts read “phlegm” here). For black bile opposes (*muqāwimah*) blood in spring just like blood opposes it in autumn; while yellow bile opposes and acts as a counterpart of phlegm in winter with its heat and dryness just like phlegm opposes it in summer with its cold and moistness. Such is the established order (*ḥukm*) with regard to the four elements, cardinal points, and winds, “that is the ordaining of the All-mighty, the All-knowing”.

The most remarkable feature of this passage, other than the obvious theistic teleology that underpins it, is probably its syntactically convoluted form, which resulted in severe mistransmission, both misreading and lipography being represented in a few lines. What ALʿILBĪRĪ expounds in a somewhat verbose manner is, after all, what in more didactic and user-friendly text would probably be conveyed in tabularised form.

3.4 — The next two paragraphs are introduced by the discourse marker *tumma*. “Then the creator put the four elements, the four cardinal points, and the four winds in analogical correspondence [*munāsabah* ≡ ἀναλογία] to the natures of the human being so that they might strengthen them. For every nature, cardinal point, and wind of the world strengthens its genus [*ǧīns*, here and elsewhere probably in the sense of ὁμογενής] and its correlate [*naḍīr*] amongst the four natures of the human being”.

“The four natures were also assigned [*qusimat*] to the twelve signs of the zodiac and to the four seasons that follow them”. These correspondences are specified: windy (*rīḥīyyah*) signs of the zodiac, the eastern direction, the eastern wind (*ṣabā*), air, and spring are all assigned or allotted (*munqasimah*) to blood and they are its counterparts (*naḍīrah*). Fiery signs, the *qiblah* (ie the south), the southern wind, elementary fire, and summer, are assigned to yellow bile. Watery signs, the southern direction, the † northern [thus in both manuscripts] wind, elementary water, and winter, to phlegm. Finally, earthy (*turābiyyah*) signs, the western side, the western wind (*dabūr*), elementary earth, and autumn, to black bile.

Such cosmological correspondences are well documented in the early Islamic tradition and there is a number of sources from which the author may have drawn this knowledge, although I have been as yet unable to locate any text that collects in one single paragraph the same data as *Natāʾiǧ*. Let it be noted that even if our author’s classification is humour-centred (ie it specifies all the elements of the universe that correspond to each one of the four humours), it is by the mention of *groups* of zodiacal signs that each enumeration begins, which might point towards some astrological treatise as the ultimate source of this information. Now, the most complete extant account of the natures (*ṭabāʾiṣ*) of the signs of the zodiac is the one compiled by ABŪ MAŠŠAR (d. 886) and which is widely reported (directly or indirectly, and some cases perhaps even independently from parallel sources) by later authors of all sorts of genres. The analogical association of the signs to elements, humours, winds, etc are recorded separately in his great *Madḥal* but this information is conveniently collected in a single compact epigraph in his own abridgement, which shall be quoted below when commenting on the melothesia¹ and which does definitely not contain all the data found here in *NatPhil* 3.4.

An attempt to explain this catalogue of associations in our text is to be found below in the commentary to 4.1–4, where essentially the same lists are noted down for the description of each human humour, but there is one particular

¹ Cf. ABŪ MAŠŠAR, *Muḥtaṣar* 1 (B–Y–Y 14₁₄–24₅); ALQĀBIŠĪ, *Madḥal* 1.162–194 (B–Y–Y 34–36); and see below *NatPhil* 4.1.1 too.

aspect that can be dealt with here. In Helleno-Islamicate astrology each one of the twelve signs of the zodiac is associated to one of the four elements: Aries, Leo, and Sagittarius to fire; Taurus, Virgo, and Capricorn to earth; Gemini, Libra, and Aquarius to air; Cancer, Scorpio, and Pisces to water. The signs that share an association to a common element are thus grouped into triplicities (*mutallatāt*), which are in fact the ones alluded to in our text as fiery, earthy, windy, and watery.¹ Now, the qualifications *riḥīyyah* and *turābiyyah* here in *NatPhil* 3.4 and again below in 4.1.1|4.3.1 are unusual and may prove to be a compelling marker of cognacy or of dependence.

In standard terminology those triads are qualified everywhere as *hawāʾīyyāt* and *arḍīyyāt*, respectively (as expectable from their link to *hawāʾ* ‘air’ and *arḍ* ‘earth’)² but in Andalus IBN FĀRIS’ account of the traditional characterisation of the zodiacal signs includes *riyāḥī* for Gemini, Libra, and Aquarius, and *turābiyyah* for Taurus, Virgo, and Capricorn.³ The text of this epigraph in IBN FĀRIS’ treatise is essentially identical to the corresponding chapter in ABŪ MAʿŠAR’s *Madḥal* and *Muḥtaṣar* (for which see below *NatPhil* 3.2) but he is the only one apparently adding this extra item to the description. In his text, however, *riyāḥī* is collocated with *hawāʾī* in the case of Gemini but not in Virgo or in Aquarius, which ought to be interpreted as a reflection of authorial adaptation of the terminology. This is corroborated by similar duplicity in the pair *turābī arḍī* for Taurus, Virgo, and Capricorn, whereas one single adjective is provided for *nārī* and *māʾī*, suggesting in sum that it is a case of synonymy (*riyāḥī* = *hawāʾī* and *turābī* = *arḍī*) and not an extra feature attributed to the signs.

An additional partial witness to this terminological tradition is ʿARĪB B. SAʿĪD’s *Anwāʾ*, in which the description that introduces each month includes an extract of the same characterisation for the planet that is associated to it. In this brief account (which is only fragmentarily reproduced in in *Tafṣīl* and not at all in the *Qurṭubah Calendar*) the qualification *turābī* is found for January/Capricorn (missing from May/Taurus and September/Virgo), but for February/Aquarius

¹ A full explanation of this classification is provided by ABŪ MAʿŠAR in *Madḥal* II.3 (B–Y 192₄–196₁₆), to be complemented with II.7 (B–Y 216_{8–17}); an abridged account, in turn, in ABŪ MAʿŠAR, *Muḥtaṣar* 1 (B–Y–Y 24₁₀–26₃); and in ALQĀBĪSĪ, *Madḥal* 1.69–80 (B–Y–Y 24–26). An expanded version of this basic characterisation of the zodiacal triplicities is transmitted also in IḤWĀN, *Rasāʾil* III.1 (R–M 18₁₀–19₇); and in ALBĪRŪNĪ, *Tanḡīm* [347] (W 210_{12–15}). The *mutallatāt* are a reflection of the Hellenistic τριζωδία, cf. PAUL OF ALEXANDRIA, *Isagogica* [2] (B 4₁₄–8₃) and especially the anonymous Περὶ ἐνεργείας τῶν ἑβ’ ζωδίων, which, if pre-Islamicate, would represent an early witness for the exact qualifications πυρῶδη (ἵδῶς), γεώδη (ὕδῶς), ἀερώδη (ἄνεμος), and ὑδατώδη (ὕδωρ), cf. Περὶ ἐνεργείας τῶν ἑβ’ ζωδίων 105₂₄–106₂.

² It is already so in ABŪ MAʿŠAR, *Madḥal* II.3 (B–Y 192_{18–19}).

³ Cf. IBN FĀRIS, *Anwāʾ* [19] (F 197₁₃–200₅). For the identification of the author with AḤMAD B. FĀRIS, the chief astrologer of caliph ALḤAKAM II (r. 961–976), cf. FORCADA 2000: 109–112.

and October/Libra *hawāʿī* (not *riyāḥī*) is used.¹

This linguistic feature (which seems to go back to a seemingly primitive translation of ‘earth’ as *turāb* and ‘air’ as *rīḥ*) is, thus, quite characteristic of Andalusī and Maḡribī astrological texts,² but its origin must be sought not in a local translation from pre-Islamic Latin astrology but in the east, for the same terminology is known, at least partially, to the IḤWĀN too. Quite significantly, the qualification *turābiyyah* is not to be found in their epistle on astronomy but it features in the one that they devote to human characters, within a brief epigraph on the influence of the planets.³ Likewise, *turābiyyah* features in ABŪ MAʿŠAR’s description of Capricorn alongside *arḍī*, but it is not to be found in Taurus (just *arḍī*) or Virgo (no qualification in this regard). Libra and Aquarius, in turn, are just *hawāʿī* (and so is Gemini at least in one of the Latin translations).⁴ The status of *turābiyyah* is, therefore, dubious as far as the early eastern tradition is concerned: it features as a hapax in the most comprehensive extant astrological summa and in the IḤWĀN’s *Rasāʾil* it is used apparently also only once as a qualification of one of the triplicities. Moreover, this partial eastern precedent notwithstanding, so far I have found only a few late non-Andalusī texts that share the double terminology *turābiyyah* and *riḥiyyah*. One of them is a north-western African version of the story of the slave-girl TAWADDUD from the cycle of *Thousand and one nights*.⁵

¹ Cf. *Anwāʿ* 142₄, 157₆, 243₅. Mark the inconsistency of the description, which seems to be original (nowhere does *Tafṣīl* transmit a more complete passage in the pertinent loci). As a matter of fact, there is a noticeable reduction of this astrological information in *Anwāʿ* that can be perceived already in the months of April and May, and by the time December is introduced not even the taste (*maḍāqah*) of its planet is mentioned.

² As late as the beginning of the 15th c. ALBAQQĀR still refers to *turābiyyah* and *riḥiyyah* zodiacal signs in his *Amṭār*.

³ Cf. IḤWĀN, *Rasāʾil* IX.4 (M I 43₂₅ | D 40₂₁₅), where it is nonetheless *hawāʿiyyāh* (not *riḥiyyah*) that expresses ‘airy’ (M I 43₂₇ | D 40₂₁₇). It is also only *turābiyyah* (but, again, not *riḥiyyah*) that is used by ALBŪNĪ (d. 1225?) in his explanation of triplicities in *Afāq* II.1 (Q 62₁₁₄).

⁴ Cf. ABŪ MAʿŠAR, *Madḥal* VI.1 (B–Y 548₁₀–598₁), specifically Capricorn 590₄, Taurus 554₄, Virgo 572₅; and Gemini 558₈, Libra 576₉, Aquarius 594₁. Let it be noted that the only locus in which *turābiyyah* can be found in *Madḥal* is actually within a sequence of three adjectives «*arḍiyyun turābiyyun ḥarrāṭī*» that the Latin translators either simplified or found diversely transmitted in their respective Vorlagen (for *ḥarrāṭī*, cf. Capricorn being qualified as γεωργικόν in the anonymous Περὶ ἐνεργείας τῶν ἰβ’ ζφδίων 108₁₅).

⁵ Cf. SANAGUSTIN 2012: 4 for the reference to the Timbuktu manuscript from which this story is edited (mark, however, that the fact that the months are named “d’après le calendrier grégorien” does not mean that the manuscript must be dated to the 19th c. as suggested by the editor). For the signs classed as *turābiyyah* and *riḥiyyah*, cf. *Tawaddud* 172₂₃–173₅. This text, which also shows the western names of the signs (*Alkabš*, *Attawʿamān*, *Alʿadrāʿ*?), refers indeed to the elements of earth and air as *turāb* and *rīḥ* respectively, cf. *Tawaddud* 173_{4|5}. In the text printed in Kolkata, in turn, TAWADDUD alludes to earthy signs as *turābiyyah* and to airy

With regard to the nomenclature of winds, the classification echoed by our text is the simplest one in the Helleno-Islamic tradition, which happens to be also the best suited to the tetradic doctrine that underpins the whole exposition. It was available in AṬṬABARĪ's *Firdaws* (where it is explicitly borrowed from HIPPOCRATES)¹ as well as in the IḤWĀN's encyclopaedia, both of which retain a partially archaicising (and probably Syriacising) nomenclature.² It must be stressed, however, that this medical and philosophical tradition overlaps largely with some exegetical and philological accounts that draw from pre-Islamic Arabic terminology. The same names for the four main winds are transmitted almost universally across epistemic disciplines (Sunnah, lexicography, *Anwāʾ*, astrology) and the standard quaternary classification of winds can be arrived at, indeed, by simply omitting the intermediary wind (*nakbāʾ*) that does not blow from any fixed region:³

ḌAMRAH B. ḤABĪB C ABUŠŠAYḤ, *Ṣaḍamah* XXVII.39 [835] (M 1332₇₋₉)

signs as *hawāʾiyyāh*, cf. *Alflaylah* [night 457] (K II 527₂₋₅).

¹ Cf. *Firdaws* VII.1.8 (§ 513₁₈₋₂₂), where the four “popular [*šammīyah*] winds” are the one that descends from the east (= *qabūl*), the one that descends from the west (= *dabūr*), the one blowing from *attayman* (= *ḡanūb*), and a fourth one from *alḡirbiyāʾ* (= *ḡanūb*). Mark that *attayman* and *alḡirbiyāʾ* (reflecting *شمال* and *جنوب* respectively, cf. BAR BAHLŪL, *Lexicon* 513₅₋₆ and especially 2059₁₂₋₁₃, where the two are collocated) are used here as cardinal directions, as also when AṬṬABARĪ refers to the ‘right’ (*yamīn*) of the world as *attayman* and to its ‘left’ (*yasār*) as *alḡirbiyāʾ* in *Firdaws* II.1.8 (§ 43₃) and VII.1.10 (§ 518₂₂₋₂₃, 519₁₉); but *šamāl* and *ḡanūb* are also sporadically used in a non-quotational context. The IḤWĀN, on the contrary, hand them down as names of the corresponding winds (see the next footnote); cf. also ALBĪRŪNĪ, *Tanḡīm* [130] (W 49₇₋₉).

² The names of the four winds are *šabā*, *dabūr*, *ḡirbiyāʾ*, and *tayman* in IḤWĀN, *Rasāʾil* III.1 (R–M 14₃₋₄); but these are affirmed to be just the ones (out of a total of fourteen different winds) known to most people in *Rasāʾil* XVIII.7 (B 210₂₋₉), where the names of the latter two winds are transmitted as *ḡirbī* (vocalised «جربي» in the main witness, but three of the manuscripts read «غربي») and *taymī*, respectively. The description of *ḡirbī* as wind blowing from north to south and of *taymī* as blowing from south to north makes their identification unproblematic and despite the remark in BAFFIONI 2013: 200 n. 41 about the lack of lexicographic support for these two words, RAGEP and MIMURA 2015: 29 n. 13 point towards a Syriac origin (for which see the previous note); cf. also *ḡirbiyāʾ* defined as “the wind that descends between the southern [*alḡanūb*] and the eastern [*aššabā*] winds” or alternatively equated to the northern wind (*aššamāl*) according to ABŪ ḤUBAYD and ABŪ ḤANĪFAH, respectively, *apud* IBN SĪDAH, *Muḥaššaṣ* IX 84₂₃₋₂₄; cf. also IBN MANḌŪR, *Lisān* I 262b 26 – 263a 3 s.r. *جرب*.

³ The editor of *Ṣaḍamah* reads «الجنوبية» against «الحرفية» in S and «الحوفية» in K, both of which point towards *الجوفية** (which is in fact the name for the northern wind mentioned below in *NatPhil* 3.5). This classification seems to have been prevalent in the proto-Islamic period and it is the one alluded to also by ALBĪRŪNĪ in the aforementioned epigraph *Tanḡīm* [358]. Needless to say, the more standard terminology is transmitted quite universally by lexicographers, cf. *dabūr* / *qabūl* (= *šabā*) / *šamāl* / *ḡanūb* all defined with regard to the Kaʿbah and the Stone by ABŪ ḤUBAYD *apud* IBN SĪDAH, *Muḥaššaṣ* IX 84₅₋₇.

الدُّبُور: الريح الغربية؛ والقَبُول: الريح الشرقية؛ والشَمَال: الريح الجوفية؛ والبِان: الريح القبليّة؛
والنكباء: التي تأتي من الجوانب الأربع.

As far as the whole of *NatPhil* 3.4 is concerned, it is worth noting (1) the ambiguousness of the qualification *munāḍīr* (also *naḍīr*), which can convey affinity (and it is, thus, collocated with *munāsib* and *munqasim*) when describing universal correspondences, but it denotes also opposition (mark the collocation with *muqāwim*) between contraries in the discussion of the antagonistic effects of the four humours.¹ Also (2) that the south (*nāḥiyatu lǧanūb*) has unexplainably usurped the place of the north in the description of the correspondences assigned to watery signs. This is confirmed not only by all the other elements in the passage and by parallel loci in other texts but also by *NatPhil* 3.4 below, where the north (*šamāl*) is correctly associated to the northern wind. Once this mistake has been emended,² the fragment aligns entirely with an epistemic tradition placed north of Mecca, *alqiblah* representing naturally the south.

3.5 — “The sphere was then divided [*qusima*] with regard to the human being just like it had been divided with respect to the four cardinal directions and world regions. For they [ie the sages and philosophers] divided the sphere of the signs of the zodiac according to the four directions and winds. They put the head of the sphere (comprising Aries, Taurus, and Gemini) on the eastern side and connected [*√qrm*] it to the human head. Then they put the southern section as the breast of the sphere and compared it to the human breast. The norther section they put as the belly [*ǧawf*] of the sphere and compared it to the human belly. Finally, they put the western [*dabūri*] section as the rear [*dubur*] and end of the sphere and assigned and compared it to the human feet.”

This is, evidently, an amalgam of cosmic analogy, the idea of the human being as a microcosm, and a simplified (or rather redistributed) quaternary version of the traditional melothesia inherited from both Mesopotamia and the Hellenistic world.³ As can be seen in Tables 5.1–2, there is no significant divergence from

¹ This is, of course to be attributed to the semantics of the lexematic root *√ndr* and I have opted for an equally ambiguous translation as ‘counterpart’ which can also express some antagonistic nuances due to its first element *counter-*.

² Unlike “phlegm” for “blood” above, “south” for “north” is a rather unlikely misreading (the two words are quite different from each other in Arabic) and it looks more like the result of eyeskip or even a slip that in both cases might go back to the author himself—which is why I have not corrected it but marked it as a corrupt locus.

³ Cf. particularly FIRMICUS, *Mathesis* II.24 (K-S 73₂₋₈) and PAUL OF ALEXANDRIA, *Isagogica* [2] (B 3_{3-10,16}), both of which transmit a description virtually identical to the one commented below. Incidentally, PAUL OF ALEXANDRIA expresses the relationship between the signs and the organs in terms of dominion (κυριεύει ‘to be lord of’), which etymologically corresponds to *sultānuhū*

the standard melothesia transmitted by astrological texts, and the version reflected twice in *Nat* II.1 is in fact essentially a minimal expression (by reduction to one single organ of the body) of the same account. Now, it must be noted that astrological sources describe quite universally the anatomical correspondences *for each sign of the zodiac*,¹ whereas in *Natāʿiğ* the focus is not on the twelve individual signs but on the correspondences established between the four major regions of the sphere and human anatomy.²

Moreover, very much like above in *NatPhil* 3.4, where the element-related qualification of the signs is alluded to without explicitly mentioning them by name (the author speaks of fiery, airy, earthy, and watery signs but does not specify which signs are to be classed in each one of those categories), here ALʿILBĪRĪ only clarifies that the three zodiacal signs comprised in the head of the sphere are Aries, Taurus, and Gemini. They are, thus, not the focus of the exposition but rather a sort of gloss to the concept of ‘head of the sphere’ (as when in *NatPhil* 3.2 he mentions Aries and Pisces only as representatives of the head and the rear of the sphere). After that, reference is made exclusively to the remaining three parts of the sphere and to the cardinal points to which they were associated.³ In sum, our text is doctrinally closer to macrocosmic-microcosmic accounts than to the genuinely sign-centred astrological tradition. The author reports on melothesia only insofar as it is reflective of a quaternary analogy but he shows no interest in elaborating further thereon, nor shall he ever allude to it again.

If the essential coincidence of ALʿILBĪRĪ’s cosmic melothesia with the zodia-

— as related to the humours in the Islamicate tradition. Besides the overall dependence from the Graeco-Hellenistic tradition, especially (but not exclusively) when dealing with eastern sources a possible Indian contribution should not be disregarded. Thus, ALBĪRŪNĪ echoes a Hindu tradition that imagines the sphere as if it were a human being, cf. *Tanğim* [359] (W 216₁₋₈).

¹ All the following witnesses transmit essentially (and in some cases materially) the same sign-centred melothesia: ABŪ MAŠŠAR, *Madhal* VI.12 (B-Y 646₁-648₇) and *Muhtaşar* 1 (B-Y-Y 14₁₄₋₁₅, 16_{18|14-15}, 18_{3-4|10-11|18-19}, 20_{4|12} 22_{6-7|12}, 24₄₋₅); ALQĀBIŞĪ, *Madhal* 1₁₆₂₋₁₉₄ (B-Y-Y 34-36); ALBĪRŪNĪ, *Tanğim* [359] (W 216₁₋₈) and also the table in *Tanğim* [423-426] (W 248). For Andalus, cf. IBN FĀRIS, *Anwāʿ* [19] (F 197₁₃₋₂₀₀₅). The same report is found in the astrological section of the Syriac *Book of medicines* ASTROLOGY [83] (B 51₇₇₋₁₂), where to the zodiacal melothesia an association of the planets to particular human organs is appended (eg the Sun is allotted to the brain, the Moon to the skin, etc).

² In this regard a much closer term of comparison is *Hārūniyyah* I.II.9 «*waqad yuşbihu raʿsuhu ssamāʿ, wariğlahu lʿarḍ, waʿaynāhu ššamsa walqamar, wayamīnuhu lyaman [...] wyuşbihu wağhuhū wamustaqbaluhu lmaşriq, wağalfihu lmağrib*» (G 61₃₋₅).

³ It should be understood that the signs comprised in each one of the quarters of the sphere share the same cardinal characterisation (ie that they also are eastern, southern, western, and northern), but this is never stated in the text.

cal one is not particularly significant (a simple fourfold division does not allow for much variability), the linguistic form of the passage might be, once again, of some help for the task of source criticism. The use of *qarana* ‘to connect, to conjoin’, which adds to the rich lexicon for cosmological analogies used by the author, apparently has no parallel in the astrological corpus and, therefore, until some new witness should emerge it may be provisionally considered a possible indicator of the author’s own rewording of the material.¹ This plausibility of an authorial intervention may find additional evidence in the apparent duplication of adjectives for ‘eastern’, ‘southern’, ‘western’, and ‘northern’, which is, of course, closely related to the association to the four main winds and might be interpreted as a gloss, either by the author or by his source.

Regardless of the ultimate origin of the information gathered here, the insistence on etymological connections shows quite clearly that it has been compiled and paraphrased in a linguistically Arabic context. The fragment is also perfectly integrated, both in contents and in linguistic form, in the exposition, which means that is not a borrowed piece simply patched onto it.

3.6 — “The demonstration [*burhān*] and verification [*taḥqīq*] of it all is the fact that when someone faces the east, their face is opposing the head of the sphere, their right side stands towards the south [*qiblah*], their left towards the north [*ḡawf*], and their back and rear towards the end and rear of the sphere, which is the west. Such is the philosophical [*falsafiyah*], real [*ḥaqīqiyah*], apodictic [*burhāniyyah*] division that leads to firm realities and true proofs”.

Quite tellingly, all this philosophical jargon and the author’s insistent invocation of apodixis is applied to the most basic system of orientation known to humankind. Mark, nevertheless, that it is the *qiblah* (ie the south for any latitude over Mecca) that is mentioned rather than the Kaʿbah, which is a sensible choice against the practice of some Arabo-Islamic sources that transmitted the primitive instructions as if their readers were all living within sight of the Stone.² To be fair, IBN QUTAYBAH provides additional astronomical instructions

¹ It has nothing to do, to be sure, with the conjunctions (*qirānāt*). It may be a classification inherited from the astrological tradition, for in Hellenistic times the signs were classed into triads according to their association to one of the four main winds, cf. βόρεια / νότια / ἀπηλιωτικά / λιβυκά in Περὶ ἐνεργείας τῶν ἰβ' ζφδιῶν 106₂₁₋₂₄.

² Thus, Kaʿbah-centred descriptions of the cardinal points are transmitted in Andalus by IBN ʿĀṢIM (indirectly) from ALʿAṢMAʿĪ (cf. FORCADA 1993: 115–116). The face and the rear of the Kaʿbah are also taken as reference points in the description of the four cardinal directions by ALBĪRŪNĪ in *Tanjīm* [130] (W 49₄₋₁₀). I am aware that at some figurative level the Kaʿbah and the *qiblah* are one and the same thing (facing the latter *is* facing the former), but I find nonetheless worth noting that ALʿILBĪRĪ chuses not to reproduce verbatim a tradition that makes little sense for a readership that cannot materially look at the sides of the Kaʿbah in

for those living far from Mecca and in Andalus ʿARĪB B. SAʿĪD omits altogether the mention of the Kaʿbah just like our author:

ALḤASAN C ABUŠŠAYḤ, *Ṣaḍamah* XXVII.28 [824] (M 1326₅₋₉)

جُعِلَت الرِّيحُ عَلَى الكَعْبَةِ. فَإِذَا أَرَدْتَ أَنْ تَعْلَمَ ذَلِكَ، فَاسْنَدِ ظَهْرَكَ إِلَى بَابِ الكَعْبَةِ: فَإِنَّ الشَّمْلَ عَنْ شِمَالِكَ، وَهِيَ تَمَّا يَلِي الحِجْرَ؛ وَالْجَنُوبَ عَنْ يَمِينِكَ، وَهِيَ تَمَّا يَلِي الحِجْرَ الْأَيْسَرَ؛ وَالصَّبَا مُقَابِلُكَ، وَهُوَ مُسْتَقْبَلُ بَابِ الكَعْبَةِ؛ وَالدَّبُورُ مِنْ دَبْرِ الكَعْبَةِ.

ALʿAṢMAʿĪ C IBN QUTAYBAH, *Anwāʾ*? [188] (H 158_{11-159₂})

الشَّمَالُ تَأْتِي مِنْ قِبَلِ الحِجْرِ، وَالْجَنُوبُ تُقَابِلُهَا، وَالصَّبَا تَأْتِي مِنْ تَلْقَاءِ الكَعْبَةِ (يُرِيدُ أَنَّهَا تُسْتَقْبَلُهَا إِذَا هَبَّتْ)، وَيُقَالُ لَهَا أَيْضًا «الْقَبُولُ»؛ وَالذَّبُورُ تَأْتِي مِنْ دَبْرِ الكَعْبَةِ.

IBN QUTAYBAH, *Anwāʾ*? [216] (H 190₁₀₋₁₂)

فالشَّمَالُ تَأْتِي عَنْ يَمِينِكَ إِذَا اسْتَقْبَلْتَ القِبْلَةَ؛ وَالْجَنُوبُ تَأْتِي عَنْ بَسَارِكَ. وَالصَّبَا تُسْتَقْبَلُ الكَعْبَةُ، وَالدَّبُورُ تُسْتَدِيرُهَا.

ʿARĪB B. SAʿĪD, *Anwāʾ*? 129_{13-130₅}

فَجَعَلُوا أَمْتِهَاتِ الرِّيحِ أَرْبَعَةً: فَإِذَا اسْتَقْبَلْتَ مَشْرِقَ الشَّمْسِ، فَالرِّيحُ الَّتِي تَهَبُ مِنْ مُقَابِلَتِكَ هِيَ الصَّبَا، وَهِيَ تَأْتِي مِنْ وَسْطِ المَشْرِقِينَ، وَيُقَالُ لَهَا الْقَبُولُ — قَالَ النَّبِيُّ ﷺ: «صُرْتُ بِالصَّبَا وَأَهْلَكَتُ عَادَ بالدَّبُورِ». وَمَا جَاءَ عَنْ يَمِينِكَ مِنْ نَاحِيَةِ القُطْبِ الْأَسْفَلِ، فَهِيَ الْجَنُوبُ، وَفِي الْحَدِيثِ: «مَا هَبَّتِ الْجَنُوبُ إِلَّا أَسَالُ اللّٰهَ بِهَا وَادِيًا». وَمَاءُ جَاءَ عَنْ شِمَالِكَ مِنْ نَاحِيَةِ القُطْبِ الْأَعْلَى، فَهِيَ الشَّمَالُ. وَمَا جَاءَ مِنْ خَلْفِكَ، فَهُوَ الدَّبُورُ، وَهِيَ مِنْ وَسْطِ المَغْرِبِينَ.

3.7 — After this brief show of philosophy-clad common knowledge, a return to the initial course of the discussion of days and seasons is explicitly marked by the typical connector *nargʿiṣu*. “Days”, explains the author, “are divided according to the degrees of the great sphere (which is their element and cause) as the sun occupies them”. In like manner, months are divided according to the twelve signs of the zodiac. The week (ie the days of the week), in turn, is divided according to the seven planets, which are the Sun, the Moon, Mars (*Alʿaḥ-mar*), Mercury (*Alkātib*), Jupiter (*Almuštārī*), Venus (*Azzuharah*), and Saturn (*Almuqātil*).¹ These planets are described by the author as “the instruments of nature that serve it with regard to what lies beneath and above it”. The Islamicness of this doctrine is ensured by a new reference to the creator having deputed and “adorned” (*zayyanahā*, cf. Q 15:16, 37:6, 41:12, 67:5) them thus in the sphere for their benefits and profit to knowledgeable humans.²

order to find any given direction.

¹ For the correspondences that obtain between the days of the week and the planets, see below *NatPhil* 3.10.

As in the case of some of the zodiacal signs above, the synonyms *Alʿaḥmar*, *Alkātib* and *Almuqātil* are characteristically western and they are well attested in Andalus since at least tenth-century IBN MUṬARRIF’s *Hayʾah*. Given that they are a geolectal marker (a stronger one, in fact, than the names of the zodiacal signs) they shall be dealt with separately in Chapter 9. Incidentally, there is no evident criterion for the order in which the planets are mentioned by ALʿIL-BĪRĪ, other than he seems to accord preeminence to the two luminaries. If he is just enumerating from memory, he is certainly did not learn his list from an astronomical or astrological source, since in both genres planets are universally listed according to their distance from the Earth, in either ascending (= A) or descending (= D) order:¹

<i>Nat</i>	Sun	Moon	Mars	Mercury	Jupiter	Venus	Saturn
A	Moon	Mercury	Venus	Sun	Mars	Jupiter	Saturn
D	Saturn	Jupiter	Mars	Sun	Venus	Mercury	Moon

² Godly deputation (*ḥallaḥa*) is also Qurʾānic, but in the scriptural text it has exclusively humankind (or otherwise some particular group or individual) as an object, humans (or some of them) being placed on earth as successors, deputies, or vicegerents (cf. particularly Q 2:30, 35:39, 38:26).

¹ The ascending order ٢٩٠٢٩٢ is followed by AṬṬABARĪ, *Firdaws* VII.III.2 (§ 543₁₇–544₃); IḤWĀN, *Rasāʾil* XVI.3 (B 73₈–74₇); ALBĪRŪNĪ, *Tanḡīm* [121] (W 43₁₁–44₁). The descending order ٢٩٢٩٢, in turn, seems to be characteristic of astronomical (including *Anwāʾ*) and astrological texts, cf. ABŪ MAʿŠAR, *Madḥal* II.1 (B–Y 178₅₋₆) and also *Muḥtaṣar* 1 (B–Y–Y 146–7); ALQĀBIŠĪ, *Madḥal* 1.45–48 (B–Y–Y 22); IBN QUTAYBAH, *Anwāʾ* [141] (H 126₁₀₋₁₂).

“The nights of the month too are divided according to the mansions (*manāzil*) of the signs of the zodiac, which are twenty-eight, so that to each sign correspond two and one-third mansions.¹ The degrees of the sphere are three hundred and sixty, which are the mansions of the sun, so that to each sign of the zodiac correspond thirty degrees,² and the month has likewise thirty days.”³

Despite some interesting hints that certainly need further exploration (as, for instance, the reference to the vernal equinox below in *NatPhil* 3.8), ALʿIL-BĪRĪ’s astronomical doctrine reflects extremely simplified Graeco-Arabic models and is thus several degrees removed from the archaic and mostly undigested accounts collected by the early exegetes, which do nevertheless include a reference to three hundred and sixty subdivisions:⁴

¹ Cf. twenty-eight mansions for the motion of the Moon through the zodiacal sphere in IḤWĀN, *Rasāʾil* XXXVI (C 157₄₋₅); also ABŪ ḤANĪFAH *apud* IBN SĪDAH, *Muḥaṣṣaṣ* IX 96–9 (all their names are reported from him a little later in that text); ʿARĪB B. SAʿĪD, *Anwāʾ* 136₁ ≡ *Tafṣīl*. The full explanation is found in the IḤWĀN’s epistle on astronomy, where each sign of the zodiac is assigned two and one-third lunar mansions and the Moon is affirmed to stay at each sign for two and one-third days, in each mansion for a day and a night, cf. *Rasāʾil* III.22 (R–M 74₁₋₂, 75₃₋₆). This data, as well as the names of all the mansions, are recorded by IBN QUTAYBAH, *Anwāʾ* [6|8|133] (H 4₁₅₋₁₆, 6₁₀₋₁₁, 12₁₃₋₄); in Andalus, by ʿARĪB B. SAʿĪD, *Anwāʾ* 127₁₋₂ ≡ *Qurṭubah Calendar* 5₁, where the Moon is likewise stated to remain in each sign two and one-third nights, and in each mansion one night, cf. *Qurṭubah Calendar* 11₈₋₉; also one two and one-third mansions for each sign in IBN FĀRIS, *Anwāʾ* [17] (F 196₉), who further notes down the names for all twenty-eight mansions in *Anwāʾ* [14] (F 174₇₋₁₇₅₃). The complete list of names was transmitted already by MĀLIK B. ANAS (d. 795) according to IBN ḤABĪB, *Nuǧūm* 173₉₋₁₅, then again in *Nuǧūm* 174₁₁₋₂₀; cf. also there “each sign has two and one-third mansions” in *Nuǧūm* 174₈. On the other hand, a difference in reckoning between the Indians (who considered them to be twenty-seven in number) and the Arabs (twenty-eight) is reported by ALBĪRŪNĪ, *Tanǧūm* [164] (W 81₆₋₉). For a dense and still valid overview of Islamicate (including Jewish) reflections of the Hindu *nakṣatra* (नक्षत्र) system, cf. STEINSCHNEIDER 1864, which must be complemented with the remarks in VARISCO 1991.

² Cf. IḤWĀN, *Rasāʾil* III.1 (R–M 11₇₋₈), where the total sum is further divided into minutes, seconds, thirds, etc. Probably before them, cf. ABŪ MAʿŠAR, who affirms that the division can be conducted *ad infinitum* in *Madḥal* II.2 (B–Y 188₅₋₁₀) and *Muḥtaṣar* 1 (B–Y–Y 14₁₋₅); thence ALQĀBIṢĪ, *Madḥal* 1.18–23 (B–Y–Y 20).

³ Which would amount a total of 360 days for the year. The Sun stays also thirty days in each sign according to AṬṬABARĪ, *Firdaws* II.I.18 (§ 58₂) and VII.III.2 (§ 544₈₋₉); but one month, for a total of 365 days, in *Firdaws* VII.III.3|4 (§ 547₂₋₃, 548₁₋₂). This is, of course, a silent rounding down of the figure: the whole rotation is said to take three hundred and sixty-five days and one quarter of a day, with the sun remaining in each sign for thirty days *and a fraction*, in IḤWĀN, *Rasāʾil* III.12 (R–M 55₁₋₅); ALBĪRŪNĪ, *Tanǧūm* [270] (W 162₅₋₁₃). The fraction is affirmed to be one fourth of a day in the calendrical tradition, cf. ʿARĪB B. SAʿĪD, *Anwāʾ* 136₃ ≡ *Tafṣīl* ≡ *Qurṭubah Calendar* 11₁₀₋₁₂; IBN FĀRIS, *Anwāʾ* [10] (F 172₁₁). A more accurate figure was usually handed down by astronomical sources, cf. the solar year being three hundred and sixty-five days, five hours, and forty-seven minutes in ALBĪRŪNĪ, *Tanǧūm* [175] (W 91₁₋₂). Mark that even MĀLIK B. ANAS knew each sign to correspond to “thirty days and one third”, cf. IBN ḤABĪB, *Nuǧūm* 174₉₋₁₀.

① ʿALĪ B. ABĪ ṬĀLIB C ABUŠŠAYḤ, *ʿaḍamah* XXI.26 [638] (M 1158₃₋₇)

≅ ASSUYŪṬĪ, *Hayʾah* IV [28] (H 18₈₋₁₁)

وفي السماء ستون وثلاثمائة برج، كلّ برج منها أعظم من جزيرة العرب. للشمس في كلّ برج منها منزلٌ تنزله حتى، إذا وقعت في قطبها، قام ملكٌ بالشرق في مدينةٍ يُقال لها بلسان، وقام ملكٌ بالمغرب في مدينةٍ يُقال لها سبان. فقال المشركي: «اللّهم، أعط مُنْفِقًا خَلْقًا»؛ وقال المغربي: «اللّهم، أعط ممسكًا تَلْقًا».

② IBN ʿABBĀS C *ʿaḍamah* XXI.34 [646] (M 1183₆₋₉) ≅ *Hayʾah* IV [30] (H 18₁₇₋₂₀)

إنّ الشمس كلّ سنة في ثلاثمائة وستين كوةً، تطلع كلّ يوم في كوةٍ فلا ترجع إلى تلك الكوة إلى ذلك اليوم من العام المقبل؛ ولا تطلع إلا وهي كارهة، تقول: «ربّ، لا تُطعنني على عبادك، فإنّي أراهم يعصونك، يعملون بمعاصيك».

③ SAʿĪD B. ʿABDIRRAḤMĀN B. ANBARĪ C *ʿaḍamah* XXI.32 [644] (M 1181₄₋₁₁₈₂₃)

≅ *Hayʾah* IV [31] (H 18₂₁₋₂₃)

مشارك الصيف مشرقان، ومغارب الشتاء مغربان. تجري فيها الشمس ستين وثلاثمائة يوم في ستين وثلاثمائة برج، لكلّ برج مطلع، لا تطلع يومين من مكانٍ واحد؛ وفي المغرب ستون وثلاثمائة برج، ولا تغيب يومين في برجٍ واحد.

④ YAḤYĀ B. ĀDAM C *ʿaḍamah* XXI.57 [669] (M 1199₆₋₉)

≅ *Hayʾah* IV [32] (H 18₂₄₋₂₆)

الشمس تمكث في كلّ برج شهرًا، والبرج ثلاثون مطلعًا بين كلّ مطلعين شعيرة، تزيد في كلّ يوم شعيرةً وتنقص حتى تستكمل الساعة في ثلاثين يومًا، ثم تتحوّل من ذلك البرج إلى البرج الآخر.

The explanation of days and nights includes a description of the phases of the moon in a twenty-eight-day cycle,¹ from the first crescent (*hilāl*) to the full moon (*badr*, which is said to happen at the fourteenth mansion). As most astronomical information provided by ALḤILBĪRĪ, his summary of this matter represents a simplification (apparently an original one) of information that was already conveniently compiled in secondary sources:

⁴ For tradition ② a close Midrashic parallel and an interpretation that suggests an Egyptian origin are provided by HEINEN 1982: 216–217. As for the explanation ④ transmitted by YAḤYĀ B. ĀDAM, it is the only one, as pointed out by HEINEN 1982: 217, reconcilable with the standard description of the signs of the zodiac.

¹ The figure is again an approximate one, cf. twenty-seven days, thirteen hours, and eighteen minutes in ALBĪRŪNĪ, *Tanḡīm* [190] (W 100₈₋₉). ALBĪRŪNĪ's manual includes not only an extensive analysis of the lunar phases but also some very well-known diagrams, cf. ALBĪRŪNĪ, *Tanḡīm* [154–155] (W 64₆₋₆₅₁₁).

IḤWĀN, *Rasāʾil* III.22 (R–M 73₉–75₂)

والقمر يدور في البروج في كل سنة عربيتة اثنتي عشرة مرة، في كل شهر مرة؛ يُقِيم في كل برج يومين وثلاث، في كل منزل يوماً وليلاً، وفي كل درجة ساعتين بالتقريب. ويُقَابِل الشمس في كل شهر مرة، ويُزَيِّعُهَا مَرَّتَيْنِ، مَرَّةً يَمْنَةً وَمَرَّةً يَسْرَةً. وَيُقَارِنُهَا فِي كُلِّ شَهْرٍ مَرَّةً، فَلَا يُرَى يَوْمَيْنِ، ثُمَّ يَظْهَرُ فِي الْمَغْرَبِ بَعْدَ مَغِيبِ الشَّمْسِ وَمِيَلٌ. ثُمَّ يَزِيدُ فِي نُورِهِ كُلَّ لَيْلَةٍ نِصْفَ سَبْعٍ إِلَى أَنْ يَسْتَكْمَلَ وَيَمْتَلِئُ النُّورَ لَيْلَةَ الْبَدْرِ الرَّابِعِ عَشَرَ مِنْ كُلِّ شَهْرٍ. ثُمَّ يَأْخُذُ فِي النِّقْصَانِ فَيَنْقُصُ كُلَّ لَيْلَةٍ نِصْفَ سَبْعٍ إِلَى أَنْ يَتَمَحَقَّ فِي آخِرِ الشَّهْرِ.

3.8 — “The nights of the month are completed when the Moon has passed through [all] the mansions of the sphere; the days of the month, in turn, when the Sun has passed through [all] the degrees of the sign in which it stays. A full year is completed when the sun has passed through all the signs of the zodiac.¹ For, when the Sun occupies the head of Aries at the beginning of Nisān (which is April), it is spring, which lasts the three months of April, May, and June, and to which correspond the signs of Aries, Taurus, and Gemini. Then, when it occupies the head of Cancer, it is summer (July, August, and September); when it has passed through Cancer, Leo, and Virgo and reaches the head of Virgo at the beginning of October, it is autumn (October, November, and December). Finally, when it occupies the head of Capricornus at the beginning of January, it is winter, which lasts January, February, and March. When the sun reaches the twenty-fourth degree of Pisces the season of winter is completed and spring begins (that is on the twenty-fourth day of March), then the sun hangs from the head of Aries, the cold and languor of winter recede, and spring blossoms with its light and flowers—all of which is accomplished by God’s grace and beautiful creation”.

The mention of the beginning of Nisān as the moment in which the Sun enters the head of Aries is the only instance of a non-Roman name for a month in the whole book and clearly implies an ultimate eastern source. Yet, the so-called Syriac names of the months were regularly transmitted also in Andalusī calendars, and, in at any rate, all other months are referred to exclusively by their Roman names. The date 24 March for the vernal equinox may be of some significance and it is the object of a digression in the Appendix to this chapter.

¹ The sentence (including *qaṭʿ*) is virtually identical to AṬṬABARĪ, *Firdaws* II.1.18 (§ 58₂₋₃).

3.9 — Within a redundant recapitulation on the seasons, months, days of the week, nights of the month, an etymological explanation is provided for the name of Sunday (*alʔaḥad* ‘[day] one, the first’), which is said to have been the first day of the world (*dunyā*) just like spring was the first season of the world, and that is the reason why it was called so.¹ “For when the creator”, quoth ALʔILBĪRĪ, “wished to cause the hours, days, months, and seasons to appear, he created these signs of the zodiac, and the mansions, and the planets, and the Sun, and the Moon, and he placed them as intermediaries [*wasāʔiṭ*] in the atmosphere [*alǧaww*], as tools for the sphere, and as causes for the hours, days, months, seasons, etc that lie beneath them. The Moon he put as a cause for night, and the Sun as a cause for day”. Further details are noted down regarding the creation of the Sun (which “was made of fire and light and created in the beginning of the head of the sphere, that is Aries”) and the Moon (for which no material is mentioned but it is said to have been created in Taurus).

This explanation may shed some light on the author’s stance regarding the philosophical debate on the modes of creation mentioned above. God’s creation, according to this passage, is volitional and immediate (that is unmediated), in perfect accordance to the Qurʔānic and more generally Abrahamic narrative. It is god that created (*ḥalaqa*) the signs, the mansions, the planets—and it created them so that they might become the causes of hours, days, etc. The latter point provides some clear examples of the sketch of a theory of causation discussed above for *NatPhil* 2.1 but differs a bit from a literal interpretation of Q 21:33, for instance, where the night and the day are affirmed to have been created just like the Sun and the Moon rather than indirectly caused to exist.²

3.10 — “The first day and night of the world came into being when the Sun begun its course through Aries and the Moon through Taurus. The first season of the world was spring, just like the first of the human ages is childhood [*ṣibā*] and the first nature blood, which are both assigned to the first season of the world”. Cosmological correspondences between the seasons, the signs of the zodiac, the

¹ This qualification of Sunday as the first day of the world may be inherited from exegetical sources, cf. «*ibtadaʔa llāhu ḥalqa yawma lʔaḥad*» reported by IBN ʔABBĀS *apud* IBN ḤABĪB, *Taʔrīḥ* 14.3. That Sunday was “the first day of the world [*addunyā*] in which God begun the creation of things” is inherited from authors of *Sīrah* texts by ALQAZWĪNĪ, *Ṣaḡʔāʔib* I.XIII (W 65₁₄₋₁₆). There was nonetheless also a Persian belief that the first Nawrūz was the first day of time in which the sphere started to revolve, cf. ALBĪRŪNĪ, *Tanǧīm* [302] (W 180₉₋₁₀).

² Cf. further Q 17:12 “We have appointed [*ǧaʔalnā*] the night and the day as two signs”; and Q 73:20 too, where “God determines [*yuqaddīru*] the night and the day”. Any apparent contradiction between these two explanations could be easily explained away, however, especially by reference to Q 6:96 “and has made [*ǧaʔala*] the night for a repose, and the sun and moon for a reckoning”.

ages of humans, and their natures (ie humours) are once again reiterated before introducing a description of the days of the week that may have some interest.

“Sunday was the first (and also the last) day of the world¹ and the night of Monday (which comes second) was assigned to the Moon. The first night of the world was marked by the Moon passing through one of the mansions of Taurus, namely the Pleiades [*Atturayyā*].² Monday, thus, was associated to the Moon; Tuesday, as the third day of the world, to Mars [*Alʔaḥmar*], which is the third planet”. This correlation is applied successively to Wednesday and Mercury (*Alkātib*), and to Thursday and Jupiter (*Almuštārī*).

According to ABŪ MAʿŠAR “all nations, regardless of their different languages and religions” shared an arithmetical nomenclature of the days of the week:

ABŪ MAʿŠAR, *Madḥal* VI.33 (B–Y 712_{12–15})

أَنَّ الْأُمَّمَ كُلَّهَا، عَلَى اخْتِلَافِ أَلْسِنَتِهَا وَمَبَايِنَةِ مَلَلِهَا، سَمَّوْا يَوْمَ الْأَحَدِ بِاسْمِ الْوَاحِدِ، الَّذِي هُوَ
ابْتِدَاءُ الْأَعْدَادِ. وَالَّذِي بَعْدَهُ، سَمَّوْهُ بِاسْمِ الْعَدِّ الثَّانِي، وَهُوَ يَوْمُ الْاِثْنَيْنِ. وَكَذَلِكَ سَاءَرِ الْأَيَّامِ،
سَمَّوْهَا عَلَى تَأْلِيفِ الْأَعْدَادِ الطَّبِيعِيَّةِ الَّتِي هِيَ الْأَحَدِ، وَالْاِثْنَيْنِ، وَالثَلَاثَاءِ، وَالْأَرْبَعَاءِ، وَالْخَمِيسِ.

However, in an Arabo-Islamic context as the one reflected by our text, the name of Friday (*alġumuṣah*) necessitates a non-ordinal etymology,³ which is found in a proto-Islamic tradition according to which all creatures would have gathered on Friday.⁴ Finally, for Saturday (*assabt* ≡ שַׁבָּת / عَصَلَاء) it is the Jewish

¹ For Sunday, which is labelled here the “day of the sun” (*yawmu ššams*) as the first day of creation, see above. The statement (twice) that Sunday is (= shall be?) also the *last* day of the world, on the other hand, may echo, perhaps even inadvertently, some non-Islamic eschatological doctrine.

² According to the author the Moon was created in Taurus (see above *NatPhil* 3.9 and also the preceding paragraph in 3.10), to which the mansion known as *Atturayyā* (≡ Πλειάδες) belongs. In the Islamicate tradition *Atturayyā* is the name of the third mansion of the Moon, cf. IḤWĀN, *Rasāʔil* III.22 (R–M 75₇); actually the best known of them all, cf. IBN QUTAYBAH, *Anwāʔ* [29–45] (H 23_{5–37}). It comprises six stars (“although the populace and particularly the poets hold the wrong opinion that they are seven in number”) resembling a bunch of grapes according to ALBĪRŪNĪ, *Tanġūm* [164] (W 81_{14–82}). The etymology of the name is reported (no doubt from lexicographical sources) by IBN ʿĀŠIM, *Šuhūr* 28_{2–6}.

³ The deviation at this point is not induced by any religious prejudice (planetary associations have been reported for all preceding days of the week) but is a logical consequence of the etymological criterion according to which the days are described. In the astrological tradition Friday is associated to Venus and Saturday to Saturn; cf. IBN FĀRIS, *Anwāʔ* [20] (F 200_{6–203}) and the references mentioned next. A more complex distribution of the *hours* of day and night amongst the planets is recorded in astrological sources, in which the first hour of the first day (ie Sunday) is assigned to the planet that is the closest cause of day and night, namely the Sun (which is styled its “lord”); the second hour to Venus, and so on, cf. ABŪ MAʿŠAR, *Madḥal* VI.33 (B–Y 710_{1–712}) and *Muḥtaṣar* 5 (B–Y–Y 66_{13–68}); ALBĪRŪNĪ, *Tanġūm* [390] (W 237_{7–14}). According to ALBĪRŪNĪ, it was a simplified version of that system that established the planetary correspondences of each day with regard to their first hour.

tradition that is alluded to: on the seventh day all aspects of creation were completed and Jewish authorities (*aḥbāru lyahūd*) instituted this day as a holiday on which they rest. On a tangential note the author explains also that Christians (*annaṣārā*) established Sunday as they holiday because it was the first day of the world, whereas Muslim authorities (*aḥbār*) indicate the necessity to celebrate Friday as the day in which creation was perfected. Like most of the information garnered in this epigraph, this community-defined disagreement as to the weekly holiday was available in early traditionistic accounts:¹

IBN ʿABBĀS C ABUŠŠAYḤ, *Ṣaḍamah* XXVIII.3 [877] (M 1362₃₋₅)

فعظمة اليهود يوم السبت لأنه سبت فيه كل شيء؛ وعظمت النصارى يوم الأحد لأنه ابتداء فيه خلق كل شيء؛ وعظم المسلمون يوم الجمعة لأن الله ﷻ فرغ من خلقه، وخلق في الجنة رحمة، وجمع فيه آدم، وفيه هبط من الجنة إلى الأرض، وفيه قبلت توبته، وهو أعظمها.

3.11 — An explicit ending is put then to these prolegomena, which are said to comprise as much of intellectual conclusions, rational premises, apodictic evidence, and medical canons as may suffice to whoever ponders over them and considers their meanings. Now the four natures are to be described with their ailments and their treatment, as well as the most suitable regimen, briefly and succinctly. The best and most methodical treatment is affirmed to follow that description, which must probably be understood as a reference to the next section of the book, namely *Nat* II.2 THERAPEUTICS.

⁴ Cf. «*ḥalidālika summiya “yawma lǧumuṣah”, liʿanna llāha ʿazza waǧalla ǧamaʿa fithi ḥalqa ssamāwāti walʿarḍ*» IBN ḤABĪB, *Taʿrīḥ* 15₁₄₋₁₅; also IBN KAṬĪR–ALʿASKALĀNĪ, *Nubalāʾ* 61₉ (cited in the critical apparatus *ad loc.*); also ASSUYŪṬĪ, *Hayʾah* III [8] (H 10₉₋₁₀).

¹ Cf. «*ibtadaʿa llāhu ḥalqa yawma lʿahadi wafariǧa minhu kullihī yawma lǧumuṣah*» according to IBN ʿABBĀS *apud* IBN ḤABĪB, *Taʿrīḥ* 14₁₃₋₁₄. Also WAḤB B. MUNABBIḤ would have transmitted that god rested on the seventh day: «*tunna fariǧa ʿani ḥalqi lyawma ssābiʿ*» in ABUŠŠAYḤ, *Ṣaḍamah* IX.41 [230] (M 60₁₂). Essentially the same report, with an explicit mention of MOSES, is transmitted from ALKALBĪ by ALQAZWĪNĪ, *Ṣaǧāʾib* LXIII (W 65₈₋₁₀). An alternative etymology related to the Greek language is transmitted in *Hārūniyyah* I.1 «*walǧumuṣatu tusammā bilyūnāniyyati “almusbiʿata” bitamāmi sabʿati ayyām*» (G 49₁₋₂).

5.5 *NatPhil* 4–5 — *Natural philosophical principles of medicine*

The focus of the discourse turns to human physiology and to the correspondence between its four natures (blood, phlegm, yellow bile, and black bile) and the regions, cardinal points, elements, winds, and seasons of the earth—all of which correspond in turn to the constellations and divisions of the greater sphere. This textual unit is clearly distinguished by a rubricated and quite exhaustive title *Chapter on the four seasons, on the four human natures and their ailments and remedies, and on the regimen, diet, and medicinal treatment that is suitable in each of those seasons*, which is followed by a recapitulation of the preceding paragraphs. Despite the remarkable similarity of the chapter title to the rubric for the preceding subsection, the segment is thematically well-defined, human physiology and hygiene (both understood in the widest and most rudimentary sense) taking the place of cosmogony in *NatPhil* 2 and of astronomy in *NatPhil* 3. Moreover, the overall layout of the chapter is clear and the distribution of its contents systematic except towards the end, where a tendency towards digression interrupts the logical sequence of the epigraphs.

Given that the four textual units devoted to the four humours are fairly homogeneous both in pattern and in contents, and since the aim here is not to provide an exhaustive and line-by-line commentary to the text, a paraphrase of *NatPhil* 4.1–4 (excluding the digression *NatPhil* 4.4.2–4 on the seasons) shall be provided first with only minimal annotations and then some general observations shall be appended before proceeding further with the paraphrase and abridged commentary of the remaining epigraphs.

4.1 *Blood* — According to the doctrine expounded by the author “blood is hot, moist, and airy [*hawāʿi*]. It was created from air, which is its foundation and element. Its abode [*bayt*] is in the liver and the veins [*ʿurūq*]; its dominion [*sulṭān*], over the forehead and the surface of the body. Its taste is sweet. It is the relative [*nasīb*] of the spirit, the inseparable companion [*ḥalīf*] of nature, the counterpart [or brother, *ṣaqīq*] of the soul. The philosophers said, indeed, that good pure blood is to the spirit like clean oil to the lamp”.

The characterisation of blood goes on by stating its resemblance to the east wind (*ṣabā*, glossed as *qabūl*), to the east, to windy (*riḥiyyah*) signs of the zodiac,¹ to the elemental air, to childhood (*ṣibā*), and finally to spring.

A detailed catalogue follows containing the foodstuff that makes blood grow and increase: everything sweet in taste and hot and moist in nature (which are, let it be recalled, the primary qualities of blood as described above). Ultimate

¹ For *riḥiyyah* ‘airy’ (literally ‘windy’) as a qualification of three of the signs of the zodiac, see above *NatPhil* 3.4. Mark that the airy nature of blood is qualified, on the contrary, as *hawāʿi*.

dependence from an eastern source may be inferred from the unglossed use of *iğğāṣ* and *kummatrā*.¹

4.1.2–3 — A rubric signals a new epigraph that includes the description of the physiology (*tarkīb* ‘composition, structure’ ≡ σύνθεσις / σύστασις) and character of those in whom blood is dominant (*ṣāhibu ddam*). Physiognomical features precede the mention of their most typical ailments, which are noted down in a separate paragraph on the symptoms and diseases of blood. Significantly, many of the sicknesses registered here are nowhere to be found in the specifically therapeutic section *Nat* II.2, for the compilation of which the author used a different source. Such afflictions include whitlow (*dāḥis*), pleurisy on the right side (*aṣṣawṣatu lyumnā*),² and the lion’s disease (*dāʔu lʔasad* ≡ λεοντίασις).³

A reference is made to uroscopy (*annaḍaru fi albawl*) and also to sphygmology (*mağassatu lʔurūq*) that contrasts with the absence of these two diagnostic instruments in *Nat* II.2. Then a new text unit is introduced by *faṣl* in which further physiognomical information is collected before providing a remarkably extensive exposition on regimen. It is worth noting that this first segment on blood-related matters is much lengthier than the following ones and shows a somewhat less organised structure.

4.2 *Yellow bile* — A new epigraph marker *faṣl* is combined with the connector *tumma* to signal the transition to the second nature, namely yellow bile (*aṣṣafrāʔ*). The exact same schedule-like pattern is applied as previously for blood: yellow bile is hot, dry, and fiery (*nāriyyah*); its abode is in the gallbladder (*marārah*); its taste, bitter; its dominion, on the bregma (*yāfūḥ*) and the right side of the body; its cardinal point is the *qiblah* (ie the south); its wind, the southern wind; its zodiac signs, the fiery ones; of human ages, youth; of seasons, summer (*qayḍ*).⁴ General dietetic advice follows on food and drinks; then, after a

¹ Incidentally, acid or sour pears (*kummatrā muzzah*) are rarely mentioned in the Islamicate tradition. In Andalus a particular variety of pears was known in Saraquṣṭah as *ağītyāl* (ie *ačetyél*, cf. CORRIENTE 2001: 103) on account of its sourness (*mazāzah*) according to *ṣumdah* [2556] (B–C–T 278_{7–8}).

² In *Ther* 2.1.1, in turn, pleurisy is referred to as *dātu lğanb*.

³ In our text this disease is glossed as “corrugating red leprosy” (*alğudāmu lʔaḥmaru lmu-tağafʔid*) and its symptoms are described as a feverish seizure (the rare term *waʔk* is used here, for which see the note in the critical apparatus), hair loss, and a generally wrinkled appearance (*tağafʔudu ssaḥnah*). This is in fact the first of four different skin conditions mentioned in the text, one for each humour, which are all four of them named after an animal: *dāʔu lkalb* (so in both manuscripts, but it may be an apomorphic reading for **dāʔu ttaʔlab* ≡ ἀλωπεκία, see below) for yellow bile, *dāʔu lfil* ≡ ἐλεφαντίασις for black bile, and *dāʔu lḥayyah* ≡ ὀφίασις for phlegm.

⁴ Being rather archaic, the word for summer is glossed in the text by the common synonym *ṣayf*.

faṣl boundary, in *NatPhil* 4.2.2 the most suitable pastilles (*aqrāṣ*) and purgatives are listed.¹

An aphoristic saying attributed collectively to the sages (*alḥukamāʾ*) closes the epigraph stating that everything that avails against blood avails against yellow bile, and everything that avails against yellow bile avails against blood; and everything that avails against phlegm avails against black bile; and everything that avails against black bile avails against phlegm—by reason of the correspondence (*munāsabah*) existing between these pairs in nature and temperament. The exact same maxim is ascribed to GALEN by IBN ALĠAZZĀR when dealing with the treatment of headaches:

Zād I.10 (B–K 106₅₋₆ | T 85₁₋₃)

وقد ذكر جالينوس أنه، ما نفع من الدم، فهو نافع من المرّة الصفراء؛ وما نفع من البلغم، فهو نافع من المرّة السوداء — وليس ينفع تامّ جامع كما إذا قُصد به الشيء بعينه.

نفع [ينفع CDR | نافع] ينفع CDR، نفع I | كما – CDR.

In 4.2.3 a catalogue of sicknesses associated to yellow bile includes again many ailments that are not even mentioned in *Nat* II.2. Some of them may have been included in the now-missing chapters on disorders of the brain and of the eyes, as for instance hot phrenitis (*albīrsāmu lḥārr*), headache on the bregma and on the right side of the head, or dry ophthalmia. Others are either possibly referred to by different names or simply omitted in the respective chapters. The rarer nosonym “grey *bahaq*” (*albahaqu lʿaḡbar*) is glossed here as *ḥikkah*.

The presence of the dog’s malady (*dāʾu lkalb*), if it is to be identified with what was traditionally known as hydrophobia or rabies, is most suspect here. As pointed out above, four different kinds of skin diseases named after an animal are distributed amongst the four humours and hydrophobia (referred to most often simply as *kalab*) does not certainly qualify as a dermatitis. Moreover, the aetiology of *kalab* is related to *black* bile. It is quite probable that the two manuscripts of *Natāʾiḡ* (and perhaps even the original text itself) transmit a misreading of *داء الثعلب**, ie alopecia, which is an ailment of the skin and is furthermore caused by yellow bile according to its traditional description.²

¹ Amongst the latter, the lesser and middle *buḥtaḡ* and the lesser pill of gold are mentioned, for which see Chapter 8.

² For hydrophobia caused by black bile and alopecia by yellow bile, cf. *Zād* I.1 (B–K 56₁₃ | T 68₁₋₂) and VII.13 (T 638₃₋₅), respectively. It is not impossible that the author may have either inherited this apomorphy or misread the original word, cf. a similar palaeographical confusion *كزاث* > *غراب* in *Nat* III that goes back to the original compilation and which is passed on to a number of descendants.

Just like in the preceding discourse on blood, two separate and slightly different physiognomical descriptions of patients suffering from yellow bile are provided, first as an appendage to 4.2.3, then as a separate rubric 4.2.4.

4.3 *Black bile* — Some consistency is shown by the author in the use, once again, of a combination of *faṣl* and the connector *tumma* to mark the transition to a third major text unit in which black bile is defined as “cold, dry, heavy, earthy [*ardīyyah*], turbid [*kadirah*], and dark. Its abode is in the spleen; its taste, sour. To it belong the earthy [*turābiyyah*] signs of the zodiac, the west, the western wind (*dabūr*, which is *jarbiyyah*), adulthood, and autumn”.

Its ailments are, unsurprisingly, mostly related to blackness and to the left side: “black water” (*almaʿu lʿaswad*), dimness (*ḍalmah*) of sight, pains in the occiput and the left side of the head as well as on the left flank, melancholy (*mal-ihūliyā*, which is glossed in psychological terms «*tībatu lʿaqli waḍahābuhū*»), epilepsy during a waning moon, “melancholy” (*malankūniyah*) in the legs, cancer (*saraṭān* ≡ *καρκίνος*), elephantiasis (*dāʾul-fil* ≡ *ἐλεφαντίασις*), varicose veins (*dawālin* ≡ *κίρσοί*), black *bahaq*, etc. All these diseases are said to be exacerbated at night, especially in autumn.

A brief characterisation of melancholic patients follows in that includes small bits of physiognomy (they are taciturn and anxious, their colour leans towards green and gloomy)¹ and ethology: they find some sourness in their mouth and take pleasure in sweet, hot, greasy things; they suffer from cold and enjoy being next to a fire. Dietetic recommendations include everything that is cold and dry, and the best drugs from them are the hiera logadion, the hiera theodoretus, Rufus’ hiera, and Galen’s hiera when five drams of any one of them are taken with half a dram of scammony diluted in six ounces of a decoction of dodder (*ἐπίθυμον*, *Cuscuta epithymum* L.).

The epigraph ends with a quite exhaustive physiognomical description of the persons in which black bile is dominant in 4.3.2.

¹ The Arabic lexematic root \sqrt{kmd} conveys the basic meaning of a change in colour, particularly with a loss of clearness, but *kamad* has also a psychological connotation ‘sadness’ (especially deep, concealed, sorrow), which may be pertinent here.

4.4 *Phlegm* — The four and last nature of the human being is phlegm, which is “cold, moist, and watery. It has its abode in the lung and its dominion in the chest and the joints. Its dregs [*atfāl*] (that is raw phlegm [*hām*]) collect in the backbone.¹ Its taste is sweet; its essential element, water; its cardinal point, the north [*alġawf*];² its wind, the northern wind; its age, senescence; its season, winter, which is the last and most severe of seasons just like phlegm is the last of natures”.

Then, instead of going on with either physiognomic or dietetic material related to phlegm, the humoral exposition gives way to a lengthy demonstration (*burhān*) that has been invoked by the mere mention of winter as the last season. After that digression, however, *NatPhil* 4.4.5 represents a most natural continuation of the epigraph on phlegm and follows the exact same pattern seen for the previous humours. It offers a detailed catalogue of phlegmatic ailments, including a noteworthy mention of the archaic nosonym *ibridah* (which is significantly collocated with urinary incontinence)³ and of “the leprosy [*ġudām*] known as the snake’s malady [*dāʔu lḥayyah*];⁴ as well as an accurate description of “sudden death” (*mawtu lfaġʔah*).

Physiognomical data are noted down also in two separate blocks, the second of which (= *NatPhil* 4.4.6) is marked by a specific rubric, and dietetic advice is limited to a scarce two lines of text.

¹ In the text as transmitted by both manuscripts this is a curious case of a dislocated gloss: «*wahuwa lḥām*» is written after the word «*aṣṣulb*» but there can be no doubt that it refers to the *atfāl* of phlegm.

² Mark this use of *ġawf* as ‘north’, which has already been found above in *NatPhil* 3.5. The word is rather archaicising in this meaning and it is further particularly well documented in the west. Its presence may indicate a common source exploited by the author for more than one subsection in *Nat* II.2. Cf. «*walġawfu huwa albaḥru lġawfiyyah, wahiya nāḥiyatu ššām*» in *Hārūniyyah* I.1 (G 47₉₋₁₂), also in reference to the winds: «*waššamālu (wahiya riḥu lġawfiyyah)*» in *Hārūniyyah* I.1 (G 47₁₂₋₁₃).

³ Cf. AṬṬABARĪ, *Firdaws* VII.IV.38 (§ 594.8).

⁴ The pseudo-Galenic origin of much of the material garnered for the compilation of this subsection is confirmed by this ὀφίσις that reflects, according to the description provided by the text, the variety of leprosy described in PSEUDO-GALEN, *Introductio* (K XIV 757₁₂₋₁₃), rather than the homonymous skin condition related to the scalp mentioned by GALEN, *Meth. med.* XIV.16 (K X 1004₈₋₉) and *Sec. loc.* I.2 (K XII 38₁₁₋₃₈₄₉). It must be noted that in the pseudo-Galenic passage of the *Introductio* the four aforementioned skin ailments (namely ἐλεφαντίασις, λεοντία, ὀφίσις, and ἀλωπεκία) are all mentioned, and defined, alongside leprosy (K XIV 757₅₋₁₄), which may provide a further clue about the origin of these materials.

Observations on NatPhil 4

As pointed out above, the sequence of epigraphs devoted to the characterisation of the four humours is remarkably consistent as a textual unit, which betokens either the use of one single main source of data for most of it or otherwise an intense and effective authorial compilation from diverse materials. ALḤILBĪRĪ's occasional intervention in the text can hardly be denied, especially (but perhaps not exclusively) in the less medical and more ethical passages that punctuate the humoral exposition, and it is also possible that at least some of the glosses scattered throughout the text might be his own additions. However, the existence already by the mid-9th c. of a full-blown hygienico-dietetic literature in Arabic (in the form of Graeco-Arabic translations and also original compositions) and, most importantly, the strong resemblance of the contents of *NatPhil* 4.1–4 to some of the representatives of that literature, added to the fact that GALEN is explicitly quoted three consecutive times at the end of the section (see below *NatPhil* 5.2–4)—all of this leads to the suspicion that the author may be drawing extensively (and quite probably also literally) from some unknown source. That he may be doing so is in agreement with his compilatory strategy for *Nat* II.2, III, IV, and V (and even the “originality” of *Nat* I might be an illusion); that he does not simply reproduce his copy-text but rather enriches it and glosses some of its obscure words, in turn, appears to be equally characteristic of *Nat* II.1–2 and possibly IV too, but not so much of *Nat* III and V. This differential strategy and the problematic identification of the possible sources of the text is dealt with elsewhere in this dissertation; hereunder a choice of precedents and parallels is to be found that may open an avenue for future research.

Description of the humours — A basic characterisation of the four humours in the lines of the one transmitted by our author is, of course, entirely unoriginal. All the elements of humoral description are already present in ninth-century medical texts and they certainly derive from Greek sources. An early and less developed reflection of this feature is found in AṬṬABARĪ's pandect:¹

Firdaws II.1.8 (§ 42_{11–23})

ولكلّ مزاج من المزاجات الأربعة خاصية من لون وطعم وقوة وحركة ومسكن. فالصفراء مّزة، شبيهة بالنار في قوتها وحركتها، ومسكنها المرارة في ذات اليمين لاصقة في أسفل الكبد، ومنها تكون الحدة والنزق والخفة، وهي تُسخن الكبد والمعدة وتقويها على نضج الأغذية. فأما الدم، فخلو، شبيه بالهواء في قوته، وحركته معتدلة، ومسكنه الكبد (وهو موجود في كلّ موضع من البدن)، [...] .

¹ A further reason why each humour was placed in its respective abode is provided afterwards in *Firdaws* II.1.8 (§ 43_{1–7}).

والبلغم شبيه بالماء في قوته وحركته، ومسكنه الصدر [...] والسوداء شبيهة بالأرض في قوتها وحركتها، حامضة، مسكنها ذات اليسار (يعني الطحال) [...].

Here as everywhere else, *Firdaws* is not however a plausible source for our text. It is rather an early cognate (an older sibling so to speak) in the sense that it transmits a primitive paraphrase of the same Graeco-Hellenistic materials that emerge, in a more developed and undoubtedly mediated form, also in *Natāriḡ*. A survey of the medical corpus shows, moreover, that the strictly physiological characterisation of the humours transmitted by AṬṬABARĪ seems to be as far as medical authors in the Islamicate tradition would arrive in their reports of this doctrine. No winds, no cardinal points, and particularly no astrological correspondences are mentioned in *Firdaws* in this description, even if such analogies are reported elsewhere in the text. As for later physicians, they usually record the basic characterisation of the humours regarding their basic qualities (hot and dry, cold and moist, etc; also their taste) and some of them may even retain the reference to their see or abode. In any case, cosmological and astrological data are absent from the standard medical description of the humours, which contrasts strongly with the conspicuous presence of such information in *Natāriḡ*. Not only did ALḤILBĪRĪ gain access to a more complete source for his physiology (this is borne out by additional evidence found in this subsection), he also reproduced it with a less restrictive criterion.

An illustrative term of comparison can be found, nonetheless, in non-medical literature, and the fact that this particular segment of each epigraph in *NatPhil* 41-4 is far closer to ABŪ MAṢṢAR's (ie an astrologer's) account than to any known medical text must be taken into consideration for a correct assessment of our author's possible sources and also of his approach to this matter:¹

Madḡal VI.31 (B-Y 704₁₋₁₆)

في قسمة الطبائع الأربعة للأشياء
 إن الطبائع أربع، والجهات أربع، والرياح أربع، والأزمنة أربعة، والبروج مقسومة على أربعة أقسام، والفلك مقسوم على أربعة أقسام، والنهار والليل كل واحد منهما أربع، وأسنان الإنسان أربعة أحوال.
 فأول الطبائع: الدم، وهو حار رطب. وله من الجهات: المشرق؛ ومن الرياح: الصبا (وهي القبول)؛ ومن الأزمنة: الربيع؛ ومن البروج: الحمل والثور والجوزاء؛ ومن أرباع الفلك: من الطالع إلى وسط السماء؛ ومن النهار والليل: الربيع الأول؛ ومن أسنان الإنسان: الحدائة. ثم طبيعة الثانية: وهي المرة الصفراء؛ وهي حارة يابسة. ولها من الجهات: التيمين؛ ومن

¹ An alternative characterisation is registered also by ABŪ MAṢṢAR that comprises the colour, taste, nature, specific property, and action for each humour in *Madḡal* IV.2 (B-Y 360₁₁₋₁₈).

الرياح: الجنوب؛ ومن الأزمنة: الصيف؛ ومن البروج: السرطان والأسد والسنبلة؛ ومن أرباع الفلك: من وسط السماء إلى درجة الغارب؛ ومن النهار والليل: الربع الثاني؛ ومن أسنان الإنسان: الشباب.
 ثم طبيعة الثالثة: وهي المزة السوداء، وهي باردة يابسة. ولها من الجهات: المغرب؛ ومن الرياح: الدبور؛ ومن الأزمنة: الخريف؛ ومن البروج: الميزان والعقرب والقوس؛ ومن أرباع الفلك: من الغالب إلى درجة وتد الأرض؛ ومن النهار والليل: الربع الثالث؛ ومن أسنان الإنسان: الكهولة.
 ثم طبيعة الرابعة: البلغم، وهو بارد رطب. وله من الجهات: الشمال؛ ومن الرياح: الشمال؛ ومن الأزمنة: الشتاء؛ ومن البروج: الجدي والدلو والحوت؛ ومن أرباع الفلك: من وتد الأرض إلى الطالع؛ ومن النهار والليل: الربع الرابع؛ ومن أسنان الإنسان: الشيخوخة.

With regard to this iatromathematical interface it is also worth noting that some of these data were also transmitted within the descriptions of the seasons and the months in the calendrical genre. Thus, in his initial account on the four seasons of the year IBN MĀSAWAYH, himself a physician, includes a reference to the essential traits of blood, yellow bile, black bile, and phlegm that is quite close to the passage in *Firdaws* quoted above but remarkably simpler than both *Natāʾiḡ* and ABŪ MAʿŠAR's astrological isagoge:

Azminah 239₃₋₅, 240₁₋₃ 8-10, 241₁₋₃

الربيع — [...] يهب في الدم — وهو أطيب الأزمنة رائحةً وأهنأ وأمرأه. والدم حار رطب؛ وطعمه: الحلاوة؛ ولونه: الحمرة؛ ومجسته: اللين؛ ورايحه: منتنة؛ وبيته الكبد؛ وسلطانه: الدماغ. وهو مشاكل للهواء، لأنه حار رطب.
 الصيف — [...] تهب فيه المزة الصفراء، وهي حارة يابسة؛ وطعمها: المرارة؛ ولها لون الدم والنار؛ ومجستها: الحشونة؛ وريحها حديدية؛ وبيتها: المرارة؛ وسلطانها: المعدة. وهي مشكلة للنار، لأنها حارة يابسة.
 الخريف — [...] تهب فيه المزة السوداء؛ وهي باردة يابسة؛ وطعمها: الحموضة؛ ولونها: الخضرة؛ ومجستها: الحشونة؛ وريحها طيبة؛ وبيتها: الطحال؛ وسلطانها: الكليتان. وهي مشكلة للأرض، لأنها باردة يابسة. الشتاء — [...] يهب فيه البلغم؛ وطعمه: الملوحة؛ ولونه: البياض؛ ومجسته: اللوزجة؛ وريحه سهكة؛ وبيته: الرئة؛ وسلطانها: بين الوركين. وهو مشاكل للماء، لأنه بارد رطب.

ورايحه [ms، وريحه S.

Incidentally, in the Andalusī *Anwāʾ* tradition the humoral dominion (*sultān* ≡ δεσποτεία) is not recorded for the seasons but for every single month by both ʿARĪB B. SAʿĪD and IBN FĀRIS. There may be some reason to presume that this item might have been extracted from its original context and relocated in the

monthly calendar (IBN MĀSAWAYH does not include it in his descriptions of the months).¹

Humoral nosology — Another ingredient of the humoral characterisation expounded by ALḤILBĪRĪ are the diseases associated each humour. If one compares, again, our text with AṬṬABARĪ's account of the same subject, the same conclusion as above is reached: either the Andalusī physician had in his hands a far more exhaustive source or his Iranian predecessor was abridging his materials quite drastically. The coincidences between the two texts, on the other side, are far below what might be expected from two texts echoing some Galenic (or pseudo-Galenic) catalogue of ailments caused specifically by each one of the four humours. As shall be discussed in Chapter 9, the genetic link between *Natāʾiḡ* and *Firdaws* exists, for sure, but its is a rather distant one:²

Firdaws IV.1.4 (§ 124₂₃–125₅)

في ما يهيج من الأخلاط الأربعة إذا فسدت وهاجت
فكل مزة وطبيعة من هذه، إذا فسدت أو هاجت، حدثت منها أمراض.
فمن علل الدم: الجذري والحصبية، وحمى الدم، وأورام حادة محمزة الألوان، ونوع من النقرس.
ومن علل الصفراء: اليرقان، وحمى الغب، والآكلة.
ومن علل البلغم: حمى كل يوم، وأنواع الاستسقاء، وبرد الأعضاء، وقروح رطبة قبيحة،
وأورام <م> بيض في ألوانها لينة رهلة.
ومن علل السوداء: الجنون، واليرقان الأسود، والسرطان، وحمى الربع، ونوع من الآكلة،
وداء الفيل.

Symptoms — The same observation applies to humoral physiognomy, which is also significantly included by both authors in their respective expositions. Our

¹ The clearest piece of evidence in support of this assumption is IBN FĀRIS, *Anwāʾ* [9], where the correspondences signalled by the author (namely Jan–phlegm; Mar|Apr–blood; Jun–yellow bile; Sept–black bile) actually follow a seasonal pattern (F 162₆, 165₁₁, 166₅, 167₂, 168₅₋₆, 170₃₋₄). The picture is far more complex regarding the different versions of ṢARĪB B. SAṢĪD's treatise: if a fairly consistent pattern can be noticed in the *Qurṭubah Calendar* (Nov|Dec|Jan|Feb–phlegm; Ap–blood; Jun|Jul|Aug–yellow bile; Sept|Oct–black bile), *Anwāʾ* stops mentioning any dominion after March (the humoral adjectives found afterwards qualify the zodiacal sign of the month); cf. *Qurṭubah Calendar* 17₃₋₄, 26₃, 42₅, 51₁, 59₈, 68₅, 76₇, 85₄, 93₃, 102₂, 110₅ and *Anwāʾ* 142₇, 157₈, 169₈, 180₅, 192₄, respectively. Mark, moreover, that these two texts do not share the same phraseology: IBN FĀRIS expresses humoral dominion by the phrase «*wasultānuhū* —», whereas IBN SAṢĪD has rather «*wafīhi sultānu* —».

² An analogous correspondence between the humours and some particular ailments is transmitted from Indian sources by AṬṬABARĪ, *Firdaws* VII.IV.7 (§ 563₂₀–564₄). Despite several similarities (some of which may be a result of the homogenising paraphrase of the author), the system is quite different, as Ayurvedic medicine recognises three (rather than four) humours, namely bile, phlegm, and wind, cf. *Firdaws* VII.IV.5 (§ 561₇₋₁₇).

Andalusī author goes into much greater detail in his (borrowed) description of the character and the nature of patients whose temperament is unbalanced towards a given humour. His inclusion of two noticeably different and yet partially overlapping accounts for each humour may betray a work of compilation from at least two different sources somewhere in the transmission of these materials. As for AṬṬABARĪ, he collects only a few bits of information related to this matter and actually shows (or echoes) a particular interest in the consequences of humoral unbalance on sexual behaviour and reproduction:

Firdaws IV.1.5 (§ 126_{11–24})

يبيّن العلماء الدالة على هيجانها
 [...] ومن الدلائل على اهتياج الصفراء: صفرة الوجه، ومرارة الفم، وعطش، وغثيان.
 ومن الدلائل على هيجان الدم: حمرة اللون، وسخونة البدن، وامتلاء العروق، وحلاوة الفم،
 وكثرة النوم. [...] ومن الدلائل على غلبة السوداء: أن يسودّ اللون، ويصغر النبض، ويعتري دوار الرأس
 وغضب مثل غضب السباع، وكثرة التوحّش والتشوّف إلى حرّ الهواء.
 ومن الدلائل على غلبة البلغم: استرخاء البدن، وكثرة النوم، وتجلّب الريق في الفم، وفتور
 النبض، وقلة العطش، وثقل الرأس، والجشاء الحامض.

Physiognomy — A minimal physiognomy for the humours is included also by AṬṬABARĪ in his description of physiology, drawing perhaps from GALEN, who is cited at the beginning of the chapter. This information in *Firdaws* is limited to a few lines, whereas in *Natāʾiḡ* it is developed in remarkable detail, and a vague similarity in contents (without any exact lexical coincidences) suggests that the link between the materials transmitted in these two texts is not a close one:

Firdaws II.III.1 (§ 85_{3–8})

ومن الدلائل على المزاج أيضًا: أنّ من غلب عليه الدم وصفي دمه، كان كثير الضحك، جميل
 الوجه، حسن اللون، حريصًا على الجماع واللهو. ومن غلبت عليه المزة <الصفراء>، كان
 نرقًا جزئيًا خفيفًا، كثير الانتشار، قليل الزرع. ومن غلبت عليه السوداء، كان جبانًا حزينًا،
 كثير الفكر والأسقام، قليل الزرع وقليل الانتشار. ومن غلب عليه البلغم، كان ثقيلًا، باؤًا،
 بطيئًا في الأمور، قليل الانتشار، كثير الزرع.

In view of all the above parallels, the next logical step (which cannot not be taken here) is to try to pinpoint the most probable origin of all this information in the Galenic corpus and then to attempt an exploration of the possible paths through which it may have reached Andalus.

4.4.2–4 *Spring, summer, autumn, winter* — This allegedly apodictic excursus is prompted, as shown above, by the comparison of phlegm, the last of the four humours, to winter, the last of the four seasons. The three epigraphs are fairly consistent in the data that the record, yet winter is not dealt with separately but rather as a seamless prolongation of the description of autumn. Towards the end of the segment the tone changes from natural philosophical to sapiential, then closes in a purely Qurʾānic note—a tendency that is, once again, quite characteristic of the whole of *Nat II.1* and which should, therefore, be presumed to reflect the author’s own style even if the pieces brought together are certainly drawn from pre-existing sources.

Spring lasts, according to our text, three months, from April to June. Its signs of the zodiac are Aries (*Alkabš*), Taurus, and Gemini (*Attawʾamān*). It begins with the Sun entering the head of Aries and ends when it arrives in the end of Gemini. Spring is hot, moist, and airy. It is the first, most splendid, and most pleasing to the soul and to nature of all seasons. The changes that it brings in nature are depicted in a fashion that is well attested in parallel literature (more on this below). In accordance to an implicit cosmic analogy, its corresponding nature is the best and most pleasing one, namely blood. Its age, childhood, which is the first, most splendid, and most pleasing to the soul.

There follows summer (*ṣayf*), which is hot, dry, and fiery. Its three months are July, August, and September; its signs of the zodiac, Cancer, Leo, and Virgo (*Alṣadrāʾ*). It begins with the Sun entering the head of Cancer and finishes when it arrives in the end of Virgo and “hangs” (*tataʿallaqu*) from the head of Libra. Its nature is the second one, namely yellow bile. Its age, youth, the qualities of which are compared to those of summer and its effect on the world to that of fire. The dominion of yellow bile on the bodies is analogous to the dominion of summer on the universe.

Then summer (*alqayḍ*) is followed by autumn (*ḥarīf*), which is the third season of the year and is cold, dry, and earthy. Its nature is the third and middle one, namely black bile; its age, likewise, the third and middle one: adulthood (*iktihāl*). It lasts three months (which are not named) and its signs of the zodiac are Libra, Scorpio, and Sagittarius. It begins with the Sun entering (the head of Libra and ends when it arrives in) the end of Sagittarius (the text is defective in both copies). Autumn is then depicted in quite praising terms that translate, by explicit comparison, in a positive assessment of adulthood (defined now as the age between forty and fifty years) as the collecting stage regarding reason, education (*adab*), knowledge (*ʿilm*), and experience (*taʿrībah*). After that, human beings just recede and their strength wanes until the worst (*ardal*) of ages is reached. “For after autumn there is nothing but winter, the last of seasons. The

year is completed and passes away, then a new year begins. In like manner, after seniority (which is the fourth age and the bloom of phlegm) there is nothing but passing away and evanescence. At this point the author addresses the recipient of the book and reminds him that there is no fifth age for humans, just like there is no fifth nature or fifth season—“Therefore do not hope, oh human, in unaging life, especially once thou hast entered this age and once this phlegmatic nature has taken full power over thee. Then turn to thy creator before thy days are over, for after completion there is nothing but decrease, nothing after rising but descent—in like manner after adulthood, which is the equator and completion of the human being, there is nothing but old age, recession, decrease, accidents, ailments, and perishing. Afterwards He shall produce you *as another creature*. So blessed be God, the fairest of creators [= Q 23:14]”. The epigraph closes, still in the form of a direct address, with a rather pessimistic depiction of elderly age and a catalogue of its sicknesses, which leads to a renewed non-medical and non-sapiential but purely Islamic exhortation to a spiritual return to the creator “before thy time is over, lest thou should say: *Alas for me, in that I neglected my duty to God, and was a scoffer* [Q 39:56]”.

Observations

There is a number of tenth-century texts that share a more or less standard description of the four seasons of the year and which may thus be taken into consideration as possible sources for ALṬILBĪRĪ. The comparison involves several different genres (astronomical, calendrical, propaedeutic) and may have heavy implications regarding intertextuality and chronology for a number of those texts. This is neither the place nor the time for such an examination, of course, and I shall limit myself to a few remarks mainly from the perspective of *Natāʾiğ*. As far as my current exploration of the corpus goes, the provisional conclusion is that (1) all the informational data contained in this segment (to the exclusion of ethical and religious advice) was available to the author in a variety of texts; (2) this information was already compiled and arranged in such a manner that required very little authorial intervention (or none at all) on the part of the borrower; (3) notwithstanding the striking resemblance to some of those accounts (which certainly points towards some ultimate common source for this tradition), none of the texts consulted so far transmits a wording of these data that can be considered identical to the one found in *Natāʾiğ*. A sample of the ongoing source criticism is provided hereunder with special attention to both verbatim coincidences and contentual differences.

On the one hand there is the description of the four seasons transmitted in the pseudo-Aristotelian *Sirr* (= *Secretum secretorum*) and also in a partially abridged but otherwise word-by-word identical form by the IḤWĀN (see Tables

5.4–7). This characterisation of each season includes [1] the astronomical indication of its beginning, stating the first degree of which sign is entered by the Sun and the duration (in days, hours, and fractions of an hour) of the season according to the physicians, as well as the calendrical limits (first and last days) expressed in the common eastern Syriac months. Then [2] equinoxes and solstices are mentioned and [3] the consequences of these astronomical changes are specified with regard to the atmosphere and unanimated nature (snow, waters), then plants, animals, and finally human life. Each unit closes with [4] a simile drawn between the changing world and the life cycle of a woman (child, bride, mature, elderly). The original context in *Sirr* being a medical one, all four descriptions are immediately followed in that text by [5] dietetic advice in a form that is strongly reminiscent and yet contentually different from what has been commented above for *NatPhil* 41–4.

If *Sirr* and the *Rasāʾil* are compared, the latter show a simplification of the introductory calendrical data [1] (which, after all, is reported from the physicians and is superfluous to the exposition of the IḤWĀN) but in all other respects (most especially [3–4]) it can be described as an indirect witness for the manuscript transmission of the pseudo-Aristotelian treatise.¹ A digression on the genesis and development of the several extant versions of *Sirr* would be totally unwarranted here;² suffice it to note that the circulation in Andalus of a version in eight books (*maqālāt*) appears to be attested for the late 10th c., as this treatise is not only ascribed to ARISTOTLE but actually quoted from by IBN ĞULĞUL in his history of physicians.³

¹ It is quite unlikely that the borrowing should have happened the other way round, and exploring the third possibility (namely that the two texts may draw from a common source) would require an examination of ninth-century Arabic literature on natural philosophy, which for obvious reasons cannot be done here. A brief comparison of a few Neoplatonic elements shared by these two texts is conducted by GUERRERO 2016: 64–68 and a more systematic analysis might yield interesting results.

² I have myself devoted some time and energy to that text and a critical edition of its Catalan translations awaits more favourable circumstances to see the light. For a thorough introduction to the fascinating history of *Sirr*, cf. the masterly analyses by MANZALAOUI 1974; GRIGNASCHI 1976; and most recently STEELE 2003: 7–30. While there is a long and solid scholarly tradition that focuses on the fortunes of its Latin translations (cf. particularly the monographic STEELE 2003) and also on their prolific vernacular offspring, the specifically Andalusī transmission of the text remains to be sketched.

³ Cf. IBN ĞULĞUL, *Ṭabaqāt* [9] (S 269–22). It may be of some consequence for the protohistory of this pseudo-Aristotelian book that the excerpt reproduced by IBN ĞULĞUL *before* mentioning the *Sirr* corresponds in fact to a passage included in its standard long version, cf. *Sirr* II (B 68₁₀–69₃).

Then, there is the *Anwāʿ* tradition represented in tenth-century Andalus by ʿARĪB B. SAʿĪD’s treatise and which provides some interesting pieces of information but no conclusive evidence for textual dependence regarding *Natāʾiḡ*. In its standard form (which is reproduced without noticeable alteration by later authors in the genre) the data related to the equal seasons of the solar year in Andalusī calendars record: that each season comprises three months (but mark that none of the known versions names them); how many days and fractions of a day (expressed in eighths) each one of the seasons lasts; also how many hours they last (only in *Anwāʿ* as transmitted by the Tehran manuscript, but not in the *Qurṭubah Calendar*); and finally their astronomical definition with regard to the signs of the zodiac and also the lunar mansions. Despite the promising *incipit* «وله ثلاثة أشهر» for each season, only the last segment (ie their astronomical limits) can be connected to our text—and even that as a similar but not identical parallel. Moreover, it is precisely in this last segment that the several presumable descendants of ʿARĪB B. SAʿĪD’s book differ most noticeably in their wording (see Tables 5,8–9).¹ As in the case of the date for the spring equinox (see Appendix 1), the Andalusī *Anwāʿ* corpus probably represents a *parallel* witness to the data accessed by ALʿILBĪRĪ (thence the pertinence of taking it into consideration in this survey) but none of its extant representatives appears to have been a direct source for that information.

Third and last in this limited overview, there is the dietetic genre, which in Andalus is represented rather late in the form of the “expanded *Aḡḡiyah*”² and could, at first sight, provide a useful parallel to our text given the general regimen-related context in which the description of the seasons is framed here and also there. Three excerpts from Andalusī dietetics may help the reader to gain an impression of the wide variability (more reflective of authorial design than of availability of data) shown by these materials and may also suggest to what limited extent they may (or rather may not) contribute to the clarification of ALʿILBĪRĪ’s sources.³

¹ In the synoptic tables appended to this chapter I abstain from quoting the Latin translation in parallel to the Arabic text as it does not add any valuable information (cf. *Liber anoe* 7₁–10₃). Mark in any case, that *qayḡ* is translated by GERARD OF CREMONA as *cauma*, just like everywhere else in this text.

² For this label and a more extensive exploitation of those materials, see below the survey of *Nat* IV in Chapter 7.

³ If IBN ZUHR (d. 1162) hardly needs introduction, both IBN ḤALŠŪN and MUḤAMMAD B. IBRĀHĪM ARRUNDĪ are to be added to the long list of authors for which we have nothing more than a name and a text. For the former, cf. GIGANDET 1996: 16–18, where no solid conclusion could be drawn from conflictive data that may not even be related to the author (the editor, however, favours a thirteenth-century date); for the latter, cf. AL-KHATTABĪ 1990: 31, who suggests a fifteenth-century chronology for the text based on onomastic data. This section of ARRUNDĪ’s

IBN ZUHR, *Aḡdiyāh* I (G 10₁₋₉)

وأما الربيع، فاعتداله معلوم، وهو أفضل الفصول، غير أن الأخلاط تتحرك وتتور فيه. كما أن الرطوبات التي في الأشجار تتحرك في زمن الربيع، كذلك الحال في أجسام الحيوان — كذلك يُستفرغ فيه ما يجب استفرغه من الأبدان لجري الأخلاط فيها. [...] وأما الصيف، فهو حار يابس؛ والهضم فيه ضعيف، والاستفراغ فيه غير ممدود، ولذلك يُجتنب إلا عند الضرورة. وأما الخريف، فمشتت المزاجت ذو اختلاف، وقد رأى بعض الأطباء استفراغ الأبدان فيه، وليس الأمر كذلك: فإن اختلاف المزاج يُضعف قوة الأبدان.

IBN ḤALṢŪN, *Aḡdiyāh* IV.1 (G 67₃₋₁₂)

الفصل الأول، وهو فصل الربيع — وأول هذا الفصل بإجماع إذا حلت الشمس بأول دقيقة من برج الحمل (وهو الكبش)، واختلفوا متى يكون ذلك [...]. وهذا الفصل حار رطب على طبع الدم وعلى طبع الهواء، وهو أعدل الفصول وأفضلها. فيه يستوي الليل والنهار الاستواء الربيعي، ويعتدل الزمان. وتنبت العشب والأزهار، وتورق الأشجار، وتتكون الحيوانات، وتمتد الأنهار. ويكثر الدم وتتحرك الأخلاط، وتقوى القوة الغذائية والمتمية وسائر القوى الحيوانية — وهو فصل الكون بالطبع.

ARRUNDĪ, *Aḡdiyāh* V.14 (W 119_v 9–20)

وهذا الفصل أعدل الفصول في سائر الأماكن وأقربها من الاعتدال بالمشاكله، صالح أيضاً بالأمزجة الباردة اليابسة بالمضادة. وفيه سلطان الدم وهجه وجميع أمراضه؛ ولذلك يعرض فيه لسائر الناس الجرب والحكة، لأن الدم يتحرك فيه في سائر البدن بجملة الفعل كما تتحرك الرطوبات التي في الأشجار فيه فتسير في سائر الشجر فتأخذ في القشر فتورق وتزهر وتثمر.

Although the use of a medical text (or at the very least one containing medical material) by our author is the most reasonable assumption, it must be noted that genuinely alternative descriptions of the seasons were also in circulation, which may be particularly relevant with regard to source criticism:

ALĠAZĀLĪ, *Hikmah* II (Q 20₁₃₋₂₁₆)

وأما ما في ذلك من المصلحة: ففي الشتاء تعود الحرارة في الشجر والنبات، فتتولد فيه موادّ الثمار، ويستكشف الهواء فينشأ منه السحاب والمطر، وتشتدّ أبدان الحيوان، وتوقى أفعال الطبيعة. وفي الربيع تتحرك الطبائع في المواد المتولدة في الشتاء، فيطلع النبات بإذن الله، ويُتور الشجر، وتبيح أكثر الحيوانات للتناسل. وفي الصيف يخمر الهواء فينضج الثمار، وتنحلّ فضول الأبدان، ويحجّ وجه الأرض، فتتهيأ لما يصلح لذلك من الأعمال. وفي الخريف

book is not included in AL-KHATTABĪ's partial edition and it is reproduced here from the London manuscript.

يصفو الهواء، فترتفع الأمراض، ويمتدّ الليل فيعمل فيه بعض الأعمال، وتحسن فيه الزراعة
— وكلّ ذلك يأتي على تدرّج وبقدر، حتّى لا يكون الانتقال دفعةً واحدةً.

Whether one interprets ALĠAZĀLĪ's version of this motif as evidently inherited from a source other than *Sirr-IḤWĀN* (after all, meteorological-physiological depictions of the seasons like these must have entered the written tradition by more than one single way) or as an original and quite intensive rewording of that text, either scenario would be equally applicable to *NatPhil* 4.4.2–4.

5.1–6 — The discourse turns rather abruptly, with a simple rhetorical imperative “Know”, to yellow bile and blood, then to spring and summer and to the regimen to be kept during these two seasons. Dietary and therapeutic advice goes on with autumn, where the aphoristic style of this new segment becomes a distinguishing feature when compared to the preceding epigraphs. Instructions for the regimen to be kept are overall simple and generic rather than specific. Thus, since phlegm has grown thick in spring after the cold of winter, an intelligent person should try to bring it out in that season by purging, dissolving, and cutting drugs, as well as by gargaring, and inducing sweat in the bath through hot ointments. One should also take the theriac assiduously during bath, and the sagzenea and oxymel too.

Judging from the wording and from the medical contents, the passage could be simply considered another one amongst so many paraphrases of some Hippocratic or Galenic treatise on δίαίτα and this intuition would appear to be confirmed by the explicit mention of GALEN no less than three times introducing the dietetic exposition in *NatPhil* 5.2–4—yet the presence of sagzenea («شجنز نايا» P, «شكر نايا» D) betrays the pseudepigraphic nature of the whole segment. This pseudepigraphy is corroborated by the presence of additional post-Galenic drugs such as the great *buhtağ* and the hiera logadion, the pills of turpeth and of pearls, the purple pill, the blessed remedy, all of which are intermingled with less conspicuously suspect preparations (eg the middle pill of anise, the stomachic made of ten ingredients) and with actually Galenic ones (the bitter hiera, for instance). Without the help of external parallels it is impossible to define the limits of each quotation and one cannot rule out the possibility that the whole text comprised in *NatPhil* 5.1–4 might be a long continuous excerpt from some pseudepigraphic treatise on hygiene.

Now, the excerpts ascribed to GALEN include a definition of the beginning of spring, which is said to last from the twenty-fourth day of March (the same date given for the vernal equinox above in *NatPhil* 3.8) until the twenty-fifth of April. It also provides an archaicising (or perhaps geolectal) gloss *ṣaṣīr* for *ḥarīf* ‘autumn’,¹ which is quite intriguing. It is hard to imagine in which context

ḥarīf (a word that has by now appeared no less than thirteen times without ever being glossed) would need a synonym in a text written in standard Classical Arabic—unless, that is, the referential context were the pre-Islamic Arabian one, in which the six seasons did not overlap, either in name or in length, with the four ones inherited from the Graeco-Roman tradition, but this is a rather unlikely scenario. It would be easier to postulate that an original gloss “in *ṣaṣīr* (that is *ḥarīf*)” may have been inverted at some point in the transmission of the book, and that would furthermore tally with the fact that in the remainder of the text it is only *ḥarīf* that is mentioned. Be it as it may, these pseudo-Galenic quotes (particularly *NatPhil* 5.2–3) feature a few additional lexical peculiarities such as *rand* ‘laurel’, *fayḡan* ‘rue’, and most significantly the Amazighic synonym *tāḡandast* for ‘pyrethrum’,² which would prima facie suggest a localism that seems incompatible with their being included in a pseudo-Galenic work that should have been translated in the east. As shall be seen below when commenting on THERAPEUTICS 1.4, the inclusion of a few characteristically western words (to be interpreted perhaps as glosses) appears to be a major feature of the pseudo-Galenic quotations collected by ALḤILBĪRĪ at the beginning of that section. There is a possibility, indeed, that the source might be the same one in both cases and given the implications of the matter, the combined analysis of this material shall be conducted in Chapter 9.

Regardless of the exact origin of the elements of this exposition, which evidently requires further scrutiny, *NatPhil* 5 belongs entirely to the Helleno-Islamicate tradition of preservation of health and regimen (as opposed, basically, to restoration of health or healing, either through drugs or surgical operation). As in the case of philosophy, the phraseology itself is an unmistakable feature of the genre:

AṬṬABARĪ, *Firdaws* II.IV.3 (§ 100₂₋₆)

وقد قال الحيم أبقراط إن من أراد حفظ الصحة، فلا يأكل حتى يتعب قليلاً، ويأكل
بحيث لا يشبع؛ ثم يستريح.
وقال جالينوس: ينبغي أن يبدأ بغسل وجهه في الصيف بماء بارد، وفي الشتاء بالحار؛ ثم
يمشي قليلاً، ويغمر رقبته ورأسه نِعْمَان، ويمسح ويتمسح بدهنٍ يُوافق الزمان.

In AṬṬABARĪ’s genuinely Hippocratic-Galenic dietetics, however, instructions are overall generic, except for a particular chapter on the regimen according to the organs, in which a few specific compound drugs (the bitter hiera, *diyāsquḷīṭūs* ≡ *διοσπολίτης*) and some food (figs and nuts) are mentioned.³ Moreover, the

¹ On this word, see Chapter 9.

² For the latter, which substitutes here for the common name *ṣāqirqarḥā*, see also Chapter 9.

³ The initial two chapters on the preservation of health, from which the above quote is excerpted,

longest segment in that compilation is devoted to seasonal regimen, whereas a humour-centred exposition is nowhere to be found. Now, it is precisely the four chapters on spring, summer, autumn, and winter that are most similar in tone and contents to our text.¹ Dietetic terminology and even phraseology were so standard already by the mid-9th c., nonetheless, that even an originally Ayurvedic text might have been mistaken for a Graeco-Arabic one after being paraphrased by AṬṬABARĪ:

AṬṬABARĪ, *Firdaws* VII.IV.8 (§ 56_{53–10})

إِنَّ أَوَّلَ مَا يَنْبَغِي لِلرَّاعِبِ فِي دَوَامِ الصَّحَّةِ أَنْ يَقُومَ عَنْ فَرَاشِهِ فِي السَّبْعِ الْأَخِيرِ مِنَ اللَّيْلِ
[...] ثُمَّ يَغْسِلُ الْغَمَّ فِي أَيَّامِ الصَّيْفِ بِمَاءٍ بَارِدٍ، وَأَيَّامِ الشِّتَاءِ بِمَاءٍ حَارٍّ.

5.6 — After the three passages ascribed to GALEN it is the turn for the collective sages (*alḥukamāʿ*) to be quoted on the stomach, then the words of the most excellent philosophers are reported on the analogy of the human composition to the universe: “the structure [*tarkīb*] of the human being follows the structure of the world [*dunyā*]”. This version of the microcosmic analogy describes the world as divided into three parts: the inhabited land (*ṣumrān* ≡ οἰκουμένη), the desert, and the seas. Intelligent people should therefore divide their stomachs accordingly:² one third for food, one third for drink, one third void so that digestion can be completed and “nature” (*aṭṭabīṣah*, meaning here ‘the stomach’ or ‘the digestive tract’ in general) can breathe and be fanned.³ “For therein lies the well-being of the body [*ḡism*], the perfection of the intellect and the understanding, the balance of the soma [*badan*], the soundness of structure, and the safety from the dangers of surfeit [*tuḥam*] and the calamities of sickness”.

This new tripartite description of the world contrasts strongly with the prevalence of tetradic analogies throughout *Nat* II.1–2 and particularly with the anatomical one attested in the early Islamicate tradition and also reflected in the basic plan of *Nat* II.2. And yet there is an undeniable similarity to the quadripartite

yield almost no elements for comparison, cf. *Firdaws* II.IV.3–4 في حفظ الصحّة (§ 99_{14–102}₁₈). For the organ-centred regimen, cf. *Firdaws* II.IV.5 تدبير الأعضاء (§ 102_{21–103}₂₅).

¹ Cf. AṬṬABARĪ, *Firdaws* II.V.1–4 (§ 105_{21–109}₁₈).

² Mark the repetition of the exact same phrase «*fayanbaḡī lilṣāqili an*» here and previously in *NatPhil* 5.1, which is, no doubt, an indicator of consistency and homogeneity. If there were no any other hints, it would be impossible to ascertain whether this ought to be interpreted as an *authorial* trait or rather as evidence the whole segment being borrowed from one single source. Evidence for the former hypothesis (namely, that it is ALḤILBIRĪ writing here) shall be analysed below in the *Remarks* that close this chapter.

³ The process of digestion is alluded to by three different synonyms in just two lines of text. First as *ṭabḥ*, then as *naḡḡ*, finally as *haḏm*, all of which are well-attested renderings of Greek πέψις. This may be interpreted as an additional token of the author’s own rhetorical voice.

division of the world described by the Iḥwān that is based on the nature of the places that each quarter comprises: deserts and the like of them, seas and other masses of water, mountains, and finally inhabited and cultivated land.¹ On the other hand, some exegetical reports were in circulation that transmitted a division of the world into *three* parts:

MUGĪT (ie ALṬAWZAṬĪ) ⊂ ABUŠŠAYḤ, *Ṣaḍamah* XXXII.6 [943] (M 1431-5)

الأرض ثلاثة أنواع: ثلث فيها الشجر والنسيم؛ وثلث البحور؛ وثلث قاع صنف ليس فيها نبت ولا نسيم. والخلق ثلاثة: السمك ثلث، والخل ثلث، وسائر الخلق ثلث.

IBN ṢAṬIYYAH (through ALṬAWZAṬĪ) ⊂ *Ṣaḍamah* XXX.17 [932] (M 14123-6)

بلغني أنّ مسيرة الأرض خمسمائة سنة: بحورها منها مسيرة ثلاث مائة سنة أو مائتي سنة؛ والخراب منها مسيرة مائة سنة أو مائتين؛ والعمران مسيرة مائة سنة.

There is, therefore, a distinct possibility that our passage might represent an authorial blending (yet another one) in which elements stemming from different epistemic genres coalesced into a simile that suited his ultimate purpose.²

¹ Cf. *Rasāʾil* XIX.3 (B 2574-8). The inhabited world (*alṣāmīr*) is said to be contained within the norther quarter, which includes all seven climates (*aqālim* ≡ κλίματα), in *Rasāʾil* XVIII.4 (B 1963-8) and this point is developed separately in the description of the inhabited quarter (*arrubʿu lmaskūn*) in the epistle on geography, cf. especially *Rasāʾil* IV.3 (D 628-642 | M 12915-13217).

² Once again, if the segment were proved to be a borrowing rather than an original composition, this consideration would still apply to ALṬILBĪRĪ's source.

5.6 NatPhil 6 — Epilogue

The author recapitulates the whole of *Nat* II.1 and affirms that, having begun his book with the indispensable praise to god and the contemplation of the wonders of Its creation and the subtlety of Its wiseness, in the proem (*ṣadr*)¹ he has sketched the principles and methods to be taken as guidelines and parameters, so that those endowed by enough interest and understanding may extrapolate this knowledge to such matters as are not mentioned or comprised in the book. He has intentionally avoided lengthy and verbose exposition in favour of briefness and conciseness, mentioning only the medical methods (*manāhiġ*) that lead to the knowledge of the temperaments (*amzāġ*),² specific properties (*ḥawāṣṣ*), and diseases (*amrād*) of human organs, aiming at the shortest and easiest possible treatment. “For this book is for the likes of thee [...] and for those that are trained in the medical art”. The recipient of the text is exhorted to apply himself to the principles laid in that art, to follow its methods, and to get acquainted with its ways, so that he can come to know what the author leaves unmentioned through what he does mention (= extrapolation and inference) and eventually confirm and prove what is said therein by that which is not said (= supplementation with external sources). Apparently ALṢILBĪRĪ shows (not without a dose of flattery) great confidence in the addressee’s training,³ which makes writing longer than he has simply unnecessary.

It may be worth pointing out, more as parallel than as an actual direct influence, that a similar didactic (and in part also self-justificatory) strategy is implemented by the IḤWĀN, who more than once express their wish “to mention a portion” of a given matter for it to spur analogical thought (*√qys*, which features twice in the epilogue of our text):⁴

¹ This is explicit proof that *Nat* II was conceived by ALṢILBĪRĪ as a textual unit of which the whole *Nat* II.1 is a proemial introduction.

² The same rarer plural as in the title is used here, rather than the much more usual *amziġah*.

³ The coordination «*liḥitlika [...] waliman yarūdu...*» should probably be interpreted as not-inclusive (ie not “for thee and for those [like thee] that train...” but actually “for thee and for those that train...”), which would mean that the reader may not have been a physician. However, the series of imperatives that follow are a clear exhortation to the study of medicine—to a layman, perhaps even a student? Incidentally, *√rwḍ* in the basic form complemented by a prepositional phrase introduced by *fi* is quite exceptional and may be a secondary development from *rāḍa* (*naḥṣahū*) *fi* (unless, of course, one reads a perfective form *tarawwaḍa*). Cf. «*wayanbaġī liṭṭabībi an yarūḍa naḥṣahū bilmabāḍīfi walkayy...*» in AṬṬABARĪ, *Firdaws* VII.IV.4 (§ 560₁₁).

⁴ This propaedeutic device was certainly not particular to the IḤWĀN, cf. for instance «*faqisi stiḥālāti lḥaṣyāʿi kullihā ṣalā mā bayyantū*» in AṬṬABARĪ, *Firdaws* I.I.6 (§ 16₁₄).

Rasāʾil XIX.9 (B 289₁₀₋₁₁)

وَتُرِيدُ أَنْ نَذَكَرَ طَرَفًا لِيَكُونَ دَلَالَةً عَلَى الْبَاقِيَةِ وَقِيَاسًا عَلَيْهَا.

Rasāʾil XIX.11 (B 330₁₁₋₁₂)

وَلَكِنْ نَذَكَرُ مِنْ خَوَاصِّ بَعْضِهَا طَرَفًا لِيَكُونَ دَلِيلًا عَلَى الْبَاقِيِ الَّذِي لَمْ نَذَكَرْهُ مِنْهَا.

This rhetorical device was indeed an instrument shared across genres and a quite elegant apology for non-exhaustiveness.

5.7 Complementary remarks on NATURAL PHILOSOPHY

The limited selection of precedents and parallels that have been pointed out throughout the above survey that has hopefully showcased the most evident affinities (and even possible affiliations) that obtain between *Nat* II.1 and several different epistemic traditions. Multiplying the references would only add redundancy to this preview. In this concluding section I would like to draw special attention to some salient features of the text and I shall also provide some hints for future inquiry.

A request?

There appears to be a tendency to interpret proemial addresses to an unnamed second person singular as a mere literary topos even in the case of epistemic genres. This interpretation is obviously precluded whenever the addressee is mentioned by name, which shows that in the end it is not anything in the text but rather our own ignorance of its circumstances that may induce us to surmise that the author's words are a mere rhetorical contrivance. Needless to say, the explicit mention of the recipient's name was hardly required in the original context.¹ This is not the place nor the time to discuss either the prevalence of such suspicious hermeneutics or the actual frequency of this topos in Islamicate medical literature (why may be lower than supposed). As far as *Natāʿiḡ* is concerned, the proem and the epilogue of *Nat* II.1 are too specific and the mention of the request too explicit to justify a non-literal interpretation of the author's express motivation. The book was probably intended to be a medical pandect (which does not necessarily equate, of course, with a practical vademecum) for some member of the Andalusī elite, either intellectual or more probably political, in a context in which such items may not have abounded.

This assumption can be substantiated, moreover, by a number of unambiguous examples of actual written exchange between scholars (or at least between one scholar and an educated recipient) that resulted in the compilation of a whole treatise. To limit the scope of the comparison to Islamicate north-western Africa and Europe, in Qayrawān ṬUWĀNĪŠ/DŪNAŠ B. TAMĪM (*fl.* 955) compiles a treatise on cosmology (probably the earliest Maḡribī representative of this discipline) in response to a consultation («בתשובת שאילות»)² and in tenth-century

¹ In this regard it would be important to distinguish categorically between texts that are *dedicated* to someone (usually a patron) and those that are actually *fwritten or* someone, either *motu proprio* or more often as the result of a previous request. Our text might belong in the latter category.

² One of his two books on *hayʿah* is “envoyé [ושגרנותו] à [Abū Yūsuf Ḥasdāy b. Ishāq] en réponse aux questions qui nous étaient parvenues de Constantinople” (VAJDA 1946: 140, Hebrew text

Andalus IBN MUṬARRIF's book on the same matter is likewise addressed to an unnamed requester.¹ A formula most similar to the one used by our author is found in IBN ḤALṢŪN's prologue to his *Ağdiyah*, which opens with the words: "You have asked me... to compose for you..."² The list could be easily enlarged.

On the other hand, correspondence between scholars was an epistemic genre of which most examples must have disappeared with the private belongings of their protagonists. Leaving aside well-known examples from the Islamicate east, in Andalus some echoes have been preserved of the early epistolary exchange between ALḤARRĀNĪ and IBN ĞULĠUL,³ and a happy chance has saved from oblivion an epistle that MANṢŪR wrote to a certain physician named IBN ṬAYFŪR who had recently arrived in Baṭalyaws from Almarīyyah. In that letter MANṢŪR took upon himself a thorough examination of the depth of the newcomer's knowledge in order to know whether his forte was philosophy (*falsafah*) or rather natural science (*ʿilmu ṭṭabīʿah*). No less than twenty different questions were addressed to IBN ṬAYFŪR, whose reply is also preserved in an acephalous excerpt from his letter:⁴

ALḤĀŠIMĪ, *Mağālis* III (K 1557–22)

فمن ذلك رسالة كتب بها منصور إلى بعض إخوانه من الأطباء بطليوس يُقال له ابن طيفور، وكان قد قدم من المرية، فبلغ ذلك منصور وأنتى عليه بعلمٍ عظيم، فكتب: بسم الله الرحمن الرحيم، أدام الله عزَّ الحكيم الفاضل والفيلسوف الكامل: إته بلغني، أبتاك الله، قدومك من لقاء أشياخك، فسررتُ بقربتك متي: ولقد علمت أن صناعة الطب وحواليج الناس غاية لا تُدرَك؛ ومع ذلك، إته وصل إلي ما أوصلته من نفسك النفيسة مع همتك الرئيسة، أته لا يُقتدا من المراتب إلا بأعلاها، وإلى الخطط إلا بأسناها، وقد دَعْتَنِي نَفْسِي

on page 145, text no. 7, segments 36–37); the passage is translated into English from VAJDA's account in MIMURA 2015b: 93. The other treatise he *dedicated* to the Fāṭimī caliph ALMANṢŪR (r. 946–953). Instead of קטשנשינה FENTON 2022: 8 proposes reading "Qurṭubah" (which may be a sensible emendation), and on the other hand modern scholars appear to be rather vague in their reference to these titles as being *dedicated to* or *written for* the figures involved in the narrative. On ṬUWĀNĪŠ/DŪNĀŠ' astronomical output, cf. MIMURA 2015a and 2015b; and especially SAMSÓ 2020: 353–368, 499–502). Previous reports on this disciple of IBN SULAYMĀN must be complemented with data from FENTON 2002: 6–10 (where further references to earlier literature can be found on page 6 n. 10), and BOS, KĀS, LŪBKE, and MENSCHING 2020: 127–129.

¹ Cf. CASULLERAS 1994: 76, SAMSÓ 2020: 502.

² This proemial formula is enough grounds for GIGANDET 1996: 18 to class IBN ḤALṢŪN's *Ağdiyah* in the 'genre épistolaire'.

³ A brief fragment is transmitted in the Escorial copy of ALḤĀŠIMĪ's medical treatise, cf. *Mağālis* 163_{4–12}.

⁴ Mark that the name of the addressee is nowhere to be found in the letters and that IBN ṬAYFŪR's response provides an interesting typological parallel for ALḤILBĪRĪ's proem. An entire multi-section medical pandect is not, of course, the same as a series of *quaestiones*, but this evidence may be of some help to understand the possible prehistory of *Natāʿiğ*.

الشائقة إلى استطلاع ما منحك الله من هذه العلوم التي أنت عمادها وقطبها. ولم نعرف أفي الفلسفة جعلت همتك أم في علم الطبيعة أشغلت نفسك، وقد دعيتني نفسي إلى لمسائلتك [...] وقد وجهت كتابي مع عشرين مسألة.

ALHĀŠIMĪ, *Maǧālis* III (K 157₁₇-158₂)

فكتب ابن طيفور إليه رسالة [لا يعرف صدرها]، ثم قال: أما بعد — يا كبير ومحلّ أبي، فإني رأيت ما به بعثت، وأنا أعلم [أنه] لا لا محبتك وخلوص مودتك. ما خاطبتني، لأنك تمن لا يقاس غوره — إذ أنت البحر الذي يعرف أنا وغيري منه، وقد جاوبت فيما عرفت على أنّ معرفتي تقصر عن بلوغ غاية ما جوانبتك، لكن إنا هو على قدر باعي وزماني.

Instances of asymmetric intellectual correspondence (which might actually be the case reflected in the proem to *Nat* II.1) are found, for example, in the Fāṭimī minister ALʿAFḌAL ŠĀHANŠĀH's questions on philosophy and physics addressed to ABUŠŠALT ADDĀNĪ at the beginning of the 12th c, which caused the Andalusī polymath to write his *Aǧwibah*.¹

I should insist that written intellectual exchange (philosophical and otherwise) is an epistemic genre on its own and our text belongs rather to the *kunnāš* or medical pandect. However, with regard to the *motivation* for the compilation of *Natāʾiǧ*, while there may never emerge new evidence to answer the question of its exact origin (and the identity of its alleged recipient is probably the least of the mysteries that surround this text), there is no compelling reason not to admit a literal interpretation of its proem.

Heterogeneous and composite: Andalusī Islamic natural philosophy

There is no need to lay further emphasis on the multithematic and quite probably also polygenetic nature of *Nat* II.1. In this summary conclusions, however, I would like to touch, even if it is only cursorily, upon one particular aspect of the author's synthesis: its Islamic and at the same time philosophical nature. The preceding survey has shown that two historically very different epistemic layers or strands converge in our text. Traditionistic materials are coordinated with "foreign" ones, Islamic and non-Islamic dogmas are juxtaposed, and sporadically even blended, without any perceptible hierarchisation and according to all appearances with the same noetic attitude. Revelation and Greek philosophy are brought together, in fact, in a remarkably axiomatic way. Their compatibility is taken for granted by the author (and probably also by his reader) and no explicit effort is made to justify this collocation. The origin, structure, and

¹ Cf. MILLÁS 1931: 80–81; COMES 2000: 836–837; SAMSÓ 2020: 498–499.

mechanics of the universe can be described—and are indeed described—in Islamic and overtly *falsafī* terms. His explanation of cosmogony and cosmology is presented by the author as a universal consensus reflecting the combined *iǧmāʿ* of sages and philosophers—and also, implicitly by his resort to the Qurʾān and ḥadīth material, of religious authorities. There is no room in his exposition for alternative arguments or for different views, let alone for any debate.

None of these features is, of course, by any means exclusive to ALḤILBĪRĪ and I am simply not qualified to assess the originality or unoriginality of this approach in the Andalusī context. I would argue, nevertheless, that in this and other respects *Nat II.1* is much easier to characterise negatively (ie to say what it is *not*) than to link it to any particular tradition or to class it into any epistemic genre. From the point of view of its contents, its cosmology is neither strictly astronomical (ie Ptolemaic) nor traditionistic (inspired exclusively by the questions opened by the Qurʾānic text and limited to the reports handed down in the Sunnah). By the same token, its philosophy is far more rudimentary than even the simplest representatives of Helleno-Islamicate *falsafah*, but its unconcealed adhesion to the forms and the content of that tradition distinguishes it radically from anti-*falsafī* traditionalism. The focus and, above all, the ultimate aim of the exposition separates the text also from *religious* philosophy as represented by the *Kalām*.¹

While it was certainly deeply felt and also bitterly voiced in some circles, the “threat” of *falsafah* to the basic tenets of the Islamic faith was probably large and by an interested construct.² In caliphal Andalus, some members of the intellectual elites appear to have understood this “foreign” tradition (which in fact arrives mostly in Arabo-Islamic garb) more as an instrument and even as a challenge. In any case the large list of tenth-century Andalusī philosophers does not seem to betoken a generalised perception of incompatibility between faith and *falsafah*—despite the contemporary stress laid on the alleged heretic nature of such individuals. Moreover, even in later times inimicality may have been

¹ This definition of *Kalām* I borrow from SABRA 1994: 23 n. 24, who claims, not without compelling arguments, a less biased interpretation of *Kalām* as “an argumentative approach to religion which sought, through discussion and discursive thought, to interpret and transform the content of the Islamic revelation into a rationally-based doctrine” (SABRA 1994: 11).

² This perception was obviously not shared by ALKINDĪ, who typifies one of the earliest projects of Islamicisation of Greek philosophy, even if in the end he may have failed to “make the First Principle of Greek philosophy into the Creator described in revealed texts” (ADAMSON 2002: 312). His philosophy has been described also as “an ontology compatible with the creed of those who, like him, agreed with the *tawḥīd* or the Koranic religion” (MARTINI 2013: 48). Nor was any incompatibility feared by the IḤWĀN, whose central aim was no other than “to demonstrate that philosophy is fundamentally in accordance with the prophetic revelation” (DE CALLATAÏ 2015: 221).

largely unidirectional and often only selective:¹

IBN RŪŠD, *Maqāl* 27¹³⁻¹⁸

فإن الغرض من هذا القول أن نفحص، على جهة الن.ع.ر الشرعي، جل النظر في الفلسفة وعلوم المنطق مباح بالشرع أم محظور به، إتما علا جهة الندب وإتما على جهة الوجوب؟ فنقول: إن كان فعل الفلسفة ليس شيئاً أكثر من النظر في الموجودات واعتبارها من جهة دلالتها على الصانع (أعني من جهة ما هي مصنوعات)، فإن الموجودات إتما تدل على الصانع لمعرفة صنعها. وإته كلما كانت المعرفة بصنعها أتم، كانت المعرفة بالصانع أتم؛ وكان الشرع قد ندب إلى اعتبار الموجودات، وحث على ذلك.

In what concerns our author and his text, despite some shared elements inherited from the exegetical corpus, *NatPhil* 2 bears little resemblance to the genre of Islamic cosmology represented in an embryonic shape by ninth-century IBN ḤABĪB's *Nuḡūm* and in full-blown form by tenth-century ABUŠŠAYḤ's *Kitābu l'raḍamah*. Even in the latter no foreign source (and particularly not one single philosopher) is ever invoked as a source of information, and all reports are limited exclusively to pre-Islamic and proto-Islamic traditions collected and filtered by early exegetes.²

On a side note, "Islamic cosmology" is a useful label that permits to differentiate quickly IBN ḤABĪB's, ABUŠŠAYḤ's, or ASSUYŪṬĪ's treatises from the strictly parallel tradition of standard Ptolemaic cosmology. Now, there are several other traditions that break that perfect geometry and manifest themselves in the form of intersections, and *Nat* II.1 is to be located at some point of that interface. Moreover, the difference between the two main traditions with regard to the admitted sources of authority should not be interpreted in the sense that ALḤIL-BĪRĪ's (or, for that matter, any other Muslim author's) cosmology was any less Islamic than the one transmitted by traditionalists. Islamicate knowledge with a Muslim agent is still Islamic, although it may not be (and often it is not) based exclusively in the traditions selected, fixed, and handed down by religious sources.

It is important to bear in mind that, despite all the protestations of the self-appointed guardians of religious orthodoxy, the multiple traditions related to the *falsafah* ought to be considered, from a non-partisan perspective, "als eine Symbiose von aristotelisch-neuplatonischer Philosophie und Islam – als islamische Philosophie",³ and the same consideration applies to most other epistemic traditions.

¹ It was SABRA 1994: 18 n. 19 that called my attention to this "definition whose purpose was to smooth the way towards the reconciliation of falsafa and religion".

² This is already pointed out by HEINEN 1982: 43.

³ DAIBER 1986a: 298.

All in all, the uniqueness of *Nat II.1* lies not so much in its philosophical-theological mixture as in the particular ingredients that enter it and in the amounts in which each of them are combined in order to compound a coherent explanation of natural phenomena. In this regard and *mutatis mutandis* (especially with regard to the format), HEINEN's judgement on ABUŠŠAYḤ's *Ṣaḍamah* might be applied to the natural philosophy transmitted in *Natāʾiğ*: "the peculiar amalgam of the natural phenomena as subject matter, the strictly traditional form, and the pious spirit give [it] a remarkable originality".¹

A new western reflection of the primitive kunnāš tradition?

I have signalled a limited number of parallel loci from the *Hārūniyyah* as edited by GIGANDET. The resemblance and occasionally even striking coincidence in contents and terminology between *Natāʾiğ* and the text ascribed to MASĪḤ B. ḤAKAM go far beyond what those annotations suggest. They are not limited, moreover, to *Nat II.1* but extend to other sections of the book, most particularly to *Nat III* on the specific properties of things. Only a global comparison will allow to draw any clear conclusions as to the exact nature of their relationship. That comparison shall have to take into consideration not only other extant versions of the *Hārūniyyah* excluded from the aforementioned edition, but also the pseudepigraphic *Tuḥfatu lʾaṭibbāʾ* and even a late-eighteenth-century text as *Dahābu ḍḍulmah*. The examination of this fascinating constellation of texts ought to be the object of a dissertation (or a monographic volume) in its own and I am quite persuaded that the study of this tradition (which is particularly linked to the Mağrib regarding its transmission and to the eastern context of AṬṬABARĪ's *Firdaws* with respect to its contents) may be instrumental for the reconstruction of the diffusion of learned medicine in the early Islamicate west. In order to spare the reader a most unwelcome excursus at this point let me reproduce BRUNING's conclusions as to the place of the *Tuḥfah* in the history of Islamicate medical literature. With some slight changes or nuances, the reader may substitute *Natāʾiğ* for the original titles and the description would still hold true:

The *Tuḥfa* is a composite and complex medical text of which the first two parts seem to be the most original. [...] the *Tuḥfa* cannot be composed by Ḥunayn b. Ishāq and it even appears—despite the presence of some chapters of which the sources go back to the ninth century at least—that its composer has to be sought in approximately post-ninth-century Andalusia or North Africa.

Similarities between the *Tuḥfa* and the *ar-Risāla al-Hārūniyya* do not

¹ Cf. HEINEN 1982: 39.

point at a dependence between the texts. The various sources used, sometimes literally, in the *Tuḥfa* [...], the false ascription of the *ar-Risāla al-Hārūniyya* to Masīḥ b. al-Ḥakam [...], and the very fact that the texts do not entirely overlap but only do so about fifty percent of the time, indicate that neither text were a model for the other. Rather, both texts have been based upon an original text that probably consisted of the overlapping parts of the *Tuḥfa* and the *ar-Risāla al-Hārūniyya*. [...] Thus we can speak of a textual tradition of medical knowledge taken from various sources after the ninth century in al-Andalus or North Africa[.]

In the next chapter a new text will be added to this complex transmission of medical lore: IBN MĀSAWAYH's *Nuḡḥ/Munḡiḥ*, which appears to have provided the copy-text for ALḤILBĪRĪ's therapeutic section *Nat* II.2. On the other hand, in Part III of this dissertation the analysis of *Nat* III, which deals with the medical applications of the specific properties of things (*ḥawāṣṣ*) shall reveal yet another textual tradition that intertwines with the primitive *kunnāš*-core. The big picture, however, for which there is no shortage of materials of all sorts and colours, remains to be drawn.

Appendix 1: date of the vernal equinox

Let me close the overview of the contents of *Nat* II.1 with some remarks regarding one of the non-linguistic cruces that it includes, namely the date of 24 March for the beginning of spring (see *NatPhil* 3.8 and 5.2). While all other astronomical and astrological data in the section has almost exclusively philological value (ie it can be of some help in establishing intertextual relations of dependence and it can also contribute to some extent to the study of the Andalusī lexicon), this date is probably the only datum, as far as astronomy is concerned, that may have some informational value.¹

The clarification of this subject involves two questions that are related but yet need to be considered separately. On the one hand, (1) the division of the year and the definition (either meteorological or astronomical) of the seasons. On the other hand, (2) the exact date in which spring begins and day and night become equal in duration (although the latter bit of information is actually nowhere included in *Natāʾiḡ*).

1 — Several divisions of the year in seasons (*azminah* / *fuṣūl*) coalesced in the Islamicate tradition that differ as much in their criteria as in their geographical origin. There is, of course, the one related to the astrometeorological lore prevalent in a large part of pre-Islamic Arabia and which is widely transmitted in lexicographical sources and also in the *Anwāʾ* genre. Then there is the reckoning of the seasons that Islamicate sources report quite consistently as the one propounded by physicians and also by computists.

Some Arabs (mostly Bedouin ones, probably to the exclusion of much of southern and northern Arabia) appear to have followed, according to traditional reports, a meteorological division of the year based on such features as the arrival and departure of cold and heat, seasonal rains, or the growth of graze. The first season they called *ḥarīf*, but also *rabiʿ* as this is the time of the first rains (*rabiʿ*). Then there followed *ṣitāʾ* and the blooming season of *ṣayf* (which people styled also *rabiʿ* or ‘the second *rabiʿ*’). Last there came *qayḍ* (the one that people later called *ṣayf*). An alternative division (or rather terminology) distinguished two main seasons, which were further subdivided into two halves: *ṣitāʾ* (comprising *ṣitāʾ* and *rabiʿ*) and *ṣayf* (consisting of *ṣayf* and *qayḍ*). Such is the standard account established in *Anwāʾ* texts.² A third-hand passage from a no longer ex-

¹ For the sake of briefness the analysis below focuses mainly on the vernal equinox, but a complete survey should include, of course, the autumn equinox and the solstices as well. I also leave untackled the question of the author’s reference to Pisces 24°. Moreover, discussion is deliberately biased in that it is centred on Andalusī sources, as they are, for obvious reasons, the most pertinent ones in this context.

² Cf. the full explanation in IBN QUTAYBAH, *Anwāʾ* [117–112] (H 1037–1098). An exhaustive anal-

tant treatise on *Anwāʾ* by MUḤAMMAD B. KUNĀSAH (d. 823/824) can be quoted here as an illustration of the diffusion of four-season divisions in the region. His testimony is extremely interesting, moreover, regarding the inclusion of dietetic recommendations in the genre:¹

IBN MANḌŪR, *Lisān* VIII 103a 24 – 103b 8 s.r. ربيع

حكى الأعزهرى عن أبي يحيى بن كناسه في صفة أزمنة السنة وفصولها، وكان علامةً بها، أن سنة أربعة أزمنة: الربيع الأول (وهو عند العامة الخريف)، ثم الشتاء، ثم الصيف (وهو الربيع الآخر)، ثم القيظ. وهذا كله قول العرب في البادية. قال: «والربيع الأول (الذي هو الخريف عند الفرس) يدخل لثلاثة أيام من أيلول». قال: «ويدخل الشتاء لثلاثة أيام من كانون الأول؛ ويدخل الصيف (الذي هو الربيع عند الفرس) لخمس أيام يخلو من آذار؛ ويدخل القيظ (الذي هو الصيف عند الفرس) لأربعة أيام تخلو من حزيران». قال أبو يحيى: «وربيع أهل العراق موافق لربيع الفرس، وهو الذي يكون بعد الشتاء، وهو زمان الورد، وهو أعدل الأزمنة، وفيه تُقطع العروق ويُشرب الدواء».

An early Andalusī witness to these ancient Arabian usage is IBN ḤABĪB, who does not draw his knowledge from either lexicography or *Anwāʾ* but rather from traditionistic sources (purportedly from MĀLIK B. ANAS himself), and who further reflects a purely *astronomical* definition of the seasons:²

Nuġūm 176₂₋₉

قال عبد الملك بن حبيب: الشتاء مجمل شتاء وصيف، ثم تصرف الشتاء فصار صيفًا وقيظًا. ثم صرفت العرب هذه الأزمنة الأربعة ستة أزمنة بالنجوم التي عليها تدور السنة، وهي ٢٨ نجمًا التي هي منازل القمر وبروج الشمس، وبها يُعرف دوران أزمنة السنة وحسابها وحساب الدهر كله. فجعلوا هذه الأزمنة الأربعة جعلوها بالنجوم ستة: ثلاثة منها شتاء وثلاثة صيف. فأول أزمنة الشتاء الثلاثة: الوسمي (وهو فصل الشتاء وأوله)، ثم الشتاء ثم الربيع — وكلها شتاء. وأول أزمنة الصيف الثلاث: الصيف (وهو فصل الصيف وأوله)، ثم الحميم ثم الخريف (وهما قيظ) — وكله صيف.

ysis of the different reckonings of the seasons from a philological perspective can be found in FORCADA 1993: 121–132 (summarised in FORCADA 2005: 54–55).

¹ A problematic interpretation of the calendar dates that feature in this passage shall be mentioned below. Cf. also ABŪ ḤANĪFAH *apud* IBN SĪDAH, *Muḥaṣṣaṣ* IX 82₅₋₇, where a different fragment from the same locus is registered, and further excerpt from this lost *Anwāʾ* in IBN MANḌŪR, *Lisān* IX 202a 19–24 s.r. ربيع (a meticulous search might yield some additional fragments). For a bibliographical references to IBN KUNĀSAH and a sample of his less well-known poetic output, cf. McDONALD 1994: 107–115.

² According to ABŪ IŠḤĀQ AZZAĞĠĠĪ, the Arabs also knew a quaternary division of the year into four seasons comprising each one of them seven *anwāʾ* (each *nawʾ* lasting thirteen days) with an addition of a supplementary day in order to make a total of 365 days, cf. ALQAZWĪNĪ, *fağāʾib* LIX (W 51₂₈₋₃₀).

A different quaternary division of the year was known, however, as early as the 8th c. (and quite plausibly even earlier) that related the beginning of each season to the path of the Sun through the zodiac—reflecting thus a solar year. The beginning of spring (*rabiʿ*, but also *ṣayf* according to local terminology) was defined in this reckoning by the arrival of the Sun in the head of Aries marking the vernal equinox at which the duration of day and night becomes equal. This system is ascribed to computists (*aṣḥābu ḥisāb*) already by IBN QUTAYBAH in a form that also includes a date according to the so-called Syriac months:¹

Anwāʾ? [113] (H 101₄₋₇)

وإذا حلت الشمس برأس الحمل، اعتدل الليل والنهار، فصار كل واحد منها اثنتي عشرة ساعة يومًا واحدًا وليلاً واحدةً، ثم يزيد النهار وينقص الليل إلى أن يمضي من حزيران اثنتان وعشرون ليلةً.

The same division IBN MĀSAWAYH affirms to have been agreed upon by people of science, philosophers, and physicians from Persia, India, and Rome:²

Azminah 238₃₋₆

ذكروا أهل العلم والفلسفة وأطباء فارس والهند والروم أن السنة مقسومة إلى أربع أجزاء: ربيع، وصيف، وخريف، وشتاء. وجعلوا لكل الأجزاء من البروج ثلاثة، ومن الأنواء سبعة. ثم يتنوا ما يصلح (أن) يُعمل في كل جزء منها.

A similar system of four equal seasons comprising three months and three stars (*nuḡūm*) each and being delimited by the equinoxes and the solstices is the one that AṬṬABARĪ ascribes to GALEN, although in his account the beginning of summer and of winter is signalled by the rising and the setting of the Pleiades (*Atturayyā*) respectively.³

¹ Cf. IBN QUTAYBAH, *Anwāʾ*? [112] (H 100_{9-102₁}) for the description of the astronomical seasons. By the same principle, summer (*ṣayf*) begins with the arrival of the Sun in the head of Cancer, autumn (*ḥarīf*) when it arrives in Libra, and winter (*ṣitāʾ*?) is marked by its arrival in Capricorn. For a hemistich by an eight-century poet alluding to “the Sun’s arrival in the quarters”, cf. IBN QUTAYBAH, *Anwāʾ*? [116] (H 103₁₅₋₁₆).

² I silently revert some of the editor emendation’s as either unnecessary or unwarranted (the edition is based on one single manuscript) and further provide editorial marks for his addition.

³ Cf. AṬṬABARĪ, *Firdaws* II.1.18 (§ 56₁₁₋₁₄). Elsewhere he ascribes to HIPPOCRATES a division of the year into seven seasons, in accordance to a general heptadic division (*bissawābiʿ / qasama* [...] *ṣalā sabʿatin sabʿah*) of the foundations of the world, the planets, the climates, the days, ages of humans, seasons of the year, parts of the body; whereas the four-season system he attributes to the populace (*ṣammah*), cf. *Firdaws* II.1.2 (§ 34₄₋₈). The latter doctrine is an obvious borrowing, most probably through GALEN’s commentary, from the Hippocratic Περὶ Ἑβδομάδων; particularly for the seasons, cf. «(ὦ)ραὶ δ’ ἐνιαύσιοι ἑπτὰ· εἰσι δὲ αὐταὶ σπορητός, χειμῶν, φυταλία[ι], ἔαρ, θέρος, ὀπώρ(η), μετόπωρον» (quoted from JOUANNA 2021: 29).

In the foremost Andalusī representative of the *Anwāʾ* genre, in turn, the division of the solar year (*assanatu ššamsiyyah*) into four equal seasons is attributed to *the Arabs* and the computists (see Tables 5.8–9), whereas the system of for unequal seasons is affirmed to be particular to physicians and philosophers:

ʿARĪB B. SAʿĪD, *Anwāʾ* 1358–12 ≡ *Qurtubah Calendar* 1010–115

والأوائل من علماء الطب والفلسفة يقسمون السنة على أربعة أزمنة غير معتدلة، ويقضون بأن القيظ والشتاء أطول زمانًا وأزيد مُدَّةً من الربيع والخريف. ويجدون القيظ أربعة أشهر، والشتاء أربعة أشهر؛ والربيع شهرين، والخريف شهرين — إذ كانا واسطين بين الحر والبرد، وليس في مدتها طولٌ ولا في زمانها اتساع، وهما وصلتان إلى القيظ والشتاء وسببان لهما.

والفلسفة [والطب] (والفلسفة *Doxy*) | أزمنة [أزمنة] | القيظ [القيظ] | واسطين [واسطين] | Q
Q | وهما ... لهما] - Q.

It is important to note here that the conflict between an astronomical and a medical definition of the seasons is echoed still in the 13th c. by IBN ḤALṢŪN in his treatise on regimen, where he advises strongly against following, in medical matters, the division established by astronomers and expressed in “days” (in clear reference to fixed calendar dates):

Aḡḍiyah IV.5 (G 7712–16)

وينبغي أن لا تأخذ الفصول على مذهب المنجمين معتبرةً بالأيام، بل على مذهب الأطباء — وهو أن الصيف: إذا اشتد الحر، وظهر الوباء؛ والشتاء: إذا اشتد البرد، وكثرت الأمطار؛ والربيع: إذا ظهرت الأزهار، وارتفع النبات، وامتدت الأنهار، وانكسرت سورة البرد، واعتدل الزمان والحر والبرد؛ والخريف: إذا اشتد البرد واليبس، وخرفت الثمار، ولم تتمكن الأمطار.

This uneven distribution of the seasons is, indeed, inherited from the Hippocratic-Galenic tradition. Its origin is found in HIPPOCRATES' *Περὶ διαίτης*, where the author sets to write a regimen for the great public, those that must toil, those who travel and sail for a living, those in sum that are exposed to the sun and the cold. He establishes, following general knowledge, a division the year (*ἐνιαυτός*) into four periods the temporal limits of which are defined by astronomical phenomena, namely the rising (*ἐπιτολή*) and setting (*δύσις*) of the Pleiades and of Arcturus, as well as the spring equinox (*ισημερία*):¹

¹ Cf. a superb and extensively documented analysis of HIPPOCRATES' division of the seasons (including the divergent septenary system *De septimanis*) against the background of the ancient Greek tradition is conducted by JOUANNA 2021, who further alerts about the ambiguity of the reference to the rising and setting of Arcturus and the Pleiades, since both the heliacal and the acronycal rising of Arcturus are mentioned in the same text signalling two different seasons

Dieta III [68] (J–B 194₂₂–196₂ | L VI 594_{9–15})

τὸν μὲν οὖν ἐνιαυτὸν ἐς τέσσερα μέρεα διαιρέω, ἅπερ μάλιστα γινώσκουσιν οἱ πολλοί, χειμῶνα, ἦρ, θέρος, φθινόπωρον· χειμῶνα μὲν ἀπὸ πηλιάδων δύσιος ἄχρι ἰσημερίας ἡαρινῆς, ἦρ δὲ ἀπὸ ἰσημερίας μέχρι πηλιάδων ἐπιτολῆς, θέρος δὲ ἀπὸ πηλιάδων μέχρι ἀρκτούρου ἐπιτολῆς, φθινόπωρον δὲ ἀπὸ ἀρκτούρου μέχρι πηλιάδων δύσιος.

Here, as usually in the ancient Greek tradition, dates are provided according to an astronomical calendar, which unlike the multiplicity of civil calendars, “provided a precise, long-term chronological framework that was at once stable and commonly known”.¹ This and other similar passages in the Hippocratic collection are, in fact, the first attestation (at least in the medical tradition) of the use of the equinoxes as season-markers. However, regarding to the point that concerns us here, it is important to note that no calendar date (ie month and day) is provided there, which left the question open as to *on which day* the vernal equinox (and therefore the beginning of spring) was to be determined.

2 — Now, the original purpose of the Hippocratic astronomical dates seems to have been defeated by the accumulation the heterogenetic and blatantly contradictory data shown by Andalusī calendars. A look at the constellation of texts associated to ʃARĪB B. SAʃĪD’s *Anwāʃ* shows quite clearly that while the “medical” definition of the seasons may have been quite accurately (but yet not invariably) fixed at an early date, the phrases “the beginning of spring”, “the spring equinox”, and “the arrival of the Sun in Aries” may not have conveyed an univocal meaning for a local audience or readership.²

Leaving aside the divergences within the several “versions” of this calendar, the testimony of Andalusī *Anwāʃ* is unquestionable in two relevant respects. First, the data that are ascribed to HIPPOCRATES and GALEN are indeed a faithful reflection of the astronomical definitions of the seasons in the Hippocratic collection and in the Galenic commentaries thereon.³ Then, ALʒILBĪRĪ, who must

of the year. On a tangential note, a whole epigraph is devoted by JOUANNA to the examination of the names for ‘autumn’ in the Hippocratic collection as a possible indicator of a plurality of authors—which, in on an much more limited level might be applicable to the possible significance of the alternation *ḥarīf* / *qayḍ* (coincidentally also for ‘autumn’) in our text.

¹ STERN 2012: 54, who further quotes GALEN’s justification for this practice.

² Cf. ʃARĪB B. SAʃĪD, [A] *Anwāʃ* 173_{8–11}+175₂, 197_{8–9}+198_{4–5}, 236_{12–13}+239₃, 257_{6–9}+258₅ (≡ *Tafṣūl* [T]) ≡ [Q] *Qurṭubah Calendar* 38_{1–4}[9–10], 55₁, 88_{6–8}9₂+90_{3–4}, 105_{3–4}[8–9]+106₅; also [F] IBN FĀRIS, *Anwāʃ* [9] (F 165_{1–6}, 167_{5–7}, 169_{15–17}, 171₄[10–11]); [B] IBN ALBANNĀʒ, *Anwāʃ* 6₁₀[13], 9₁₈, 14₁₅, 17₁₆.

³ The exact correspondence between the dates recorded in the *Qurṭubah Calendar* for the risings and settings of the Pleiades and Arcturus (*Assimāku rrāmih*) and the limits of the seasons as registered in the same text were clearly shown almost half a century ago by SAMSÓ 1976: 472 (then 1978: 180–181, which actually preceded chronologically the aforementioned paper).

have drawn most of his dietetic materials from a (pseudo-)Galenic source, gives a date for the beginning of spring that is one week later than the vernal equinox according to local tenth-century calendars—and does so twice in two separate epigraphs within *Nat* II.1.

	Physicians	<i>Almumtaḥan</i>	<i>Sindhind</i>
vernal equinox	March 16 ^{ABT} 17 ^{FQ}	March 16 ^T 17 ^Q 15 ^F	March 20 21 ^F
summer solstice	May 16	May 16	May 19 22 ^F
autumnal equinox	Sept 16	Sept 18	Sept 23
winter solstice	Nov 16 ^{ABT} 14 ^{FQ}	Nov 17 ^A 16 ^F	Nov 21 ^A 17 ^T 19 ^Q

Table 5.1: Equinoxes and solstices according to early Andalusī calendars.

If not calendars, what texts do, then, transmit an identical date (ie March 24) or at least an approximate one for the vernal equinox? There is the early calendrical tradition reflected by IBN MĀSAWAYH in his *Azminah*, where he provides the calendar dates for the beginning of the seasons first in the description of the divisions of the year, then in the monthly calendar proper.¹ His dates are much closer to the tradition echoed by our author (23 Āḍār / 24 March) than any of the ones provided by Andalusī *Anwāʾ*:

vernal equinox	23 Āḍār
summer solstice	22 Ḥazīrān
autumnal equinox	22 Aylūl
winter solstice	23 Kānūn ¹

¹ Cf. *Azminah* 239₂ 239₁₃–240_{1|7–8|12–13}; then 245_{1–2}, 248_{14–15}, 252_{13–14}, 256_{8–9}.

Yet a precedent was available in Andalus since the mid-9th c., when in an orthodoxy-concerned context IBN ḤABĪB transmits 24 March and 24 September as the dates of the equinoxes.¹ In the next century in a more conventional astronomical treatise IBN MUṬARRIF records the same dates in his *Hayʿah*.² Still in Andalus and writing in the first half of the 13th c. IBN ALṢAWWĀM includes a mention of the vernal equinox (*al-ʿitidālu r-rabiʿi*) occurring on 24 Āḍār (= March) in his great geponic compendium. In this case, his debt is duly acknowledged as this datum is contained within an explicit quotation from ṢAĠRĪT in *Nabaʿiyyah*.³

There certainly existed parallel traditions in which the same date 24 March was transmitted as the beginning of spring. Thus, the astrological section of the Syriac *Book of medicines* includes an epigraph on how to find out when the day and the night are equal, which is affirmed to happen first on 24 Āḍār (= March):⁴

¹ Cf. 24 Aylūl as the date of the autumn equinox, 24 Kanūn¹ for the winter solstice, 24 Āḍār for the vernal equinox, in IBN ḤABĪB, *Nuǧūm* 176_{15|20} an 177₅, respectively. The date for the spring equinox is repeated in *Nuǧūm* 177₁₇₋₁₈, that of the summer solstice is given as in 24 Ḥazirān in *Nuǧūm* 177₂₃₋₂₄, the autumn equinox again 24 Aylūl in *Nuǧūm* 178_{8|14}. In FORCADA 2005: 54 (but not in FORCADA 1993: 125) IBN KUNĀSAH is affirmed to be the only author of *Anwāʾ* to mention 24 March and 24 September as the dates of the equinoxes. His reconstruction of IBN KUNĀSAH's locus is based on the passage transmitted by ALʿAZHARĪ and reproduced in LANE, *AEL* 1018c–1019a s.v. معراج, and a quoted by ABŪ ḤANĪFAH registered in IBN SĪDAH, *Muḥaṣṣaṣ* IX 82₅₋₇. Now, as can be seen in the excerpt provided above, the only calendar dates mentioned there by IBN KUNĀSAH are 3 Aylūl, 3 Kānūn¹, 5 Āḍār, and 4 Ḥazirān.

² Cf. CASULLERAS 1994: 92. The origin of this information might be, at least in what concerns the astronomers, PTOLEMY's report on HIPPARCHUS' observations, according to which the date for the spring equinox of the year 145 BCE was 23/22 March, cf. PTOLEMY, *Almagest* III.1 (H I 196₅₋₂₁). The interpretation of these data can be conveniently consulted in a table in PEDERSEN and JONES 2010: 130 containing all the solar observations recorded by PTOLEMY and which determines the vernal equinox on 23/22 March for the years 134/127 BCE (= HIPPARCHUS) and 140 CE (= PTOLEMY' own observation). I could not check this locus against the Arabic translation of the *Almagest*, as it remains unedited and the only manuscript available to me does not contain the first books.

³ Cf. IBN ALṢAWWĀM, *Filāḥah* II.19 (B II 43₅). The same calendar date is mentioned (without any reference to the equinox) when explaining the best season for millet, a summer crop that according to the same source is best sown "from 24 Āḍār to 24 Nisān", cf. *Filāḥah* II.20 (B II 80₃₋₅).

⁴ Cf. BUDGE's translation of the passage: "On the twenty-fourth day of the First Kānōn at the sixth hour of the night, the day beginneth to take [time] from the night. On the twenty-fourth day of Āḍār, at the sixth hour [of the night], the durations of day and night are equal. On the twenty-fourth day of Khazirān, at the sixth hour of the night, the night beginneth to take time the day. On the twenty-fourth day of Īlūl, at the sixth hour of the night, the durations of the day and night are equal" (BUDGE 1913: I 607).

Book of medicines ASTROL. [76] (B 506₁₄₋₁₉)

١٥٥٦ كز١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦
 * ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ *
 ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦
 * ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ ك١٥٦٦ *

After all, 24 March is almost coincident with the traditional Julian date of March 25 for the spring equinox, which in turn is a prolongation of a much earlier Roman tradition to date all equinoxes and solstices eight days before the *calendae*.¹

At any rate and even if the above sketchy survey must be corrected and properly elaborated on, ALṬILBĪRĪ must now be added to the exiguous list of Andalusī sources that record 24 March as the date for the spring equinox.²

¹ Cf. STERN 2012: 292 n. 162. Incidentally, the same author refers how the Christian historian SOZOMEN (d. ca 450) registered the use amongst Montanists of a calendar of thirty-day months that started from the spring equinox on March 24 (cf. STERN 2012: 419), which is quite a curious coincidence with the calendar data echoed by our author.

² As of 2005, the only other authors transmitting this date were IBN ḤABĪB and IBN MUṬARRIF, cf. FORCADA 2005: 54.

Appendix 2: tables and synoptical excerpts

Table 5.2: Cosmic melothesia according to *Natāʔiğ*.

Sphere	Signs	Cardinal point	Gloss	Wind	Anatomy
head	ʔϣΠ	<i>šarqī</i>	<i>qabūlī</i>	<i>qabūl</i>	head
chest		<i>ğanūbī</i>	<i>qiblī</i>	<i>ğanūb</i>	chest
belly		<i>šamālī</i>	<i>ğawfī</i>	<i>šamāl</i>	belly
rear		<i>dabūrī</i>	<i>ğarbī</i>	<i>dabūr</i>	feet

Table 5.3: Zodiacal melothesia according to astrological texts.

Sign	Anatomy
Aries	ʔ head, face
Taurus	ϣ head, epiglottis
Gemini	Π shoulders, forearms, hands
Cancer	Ϟ chest, breasts, heart, stomach, ribs, spleen, lung
Leo	Ϡ upper stomach, heart, sinews, side, both sides of the back, back
Virgo	Πʔ belly, intestines (<i>amṣāʔ</i> and <i>maṣārīn</i>), diaphragm (<i>hiğāb</i>)
Libra	♎ backbone, lower belly, navel, pudenda (<i>ṣawrah</i>), hips, buttocks, flank (<i>ḥāširah</i>)
Scorpio	♏ penises, testicles, bladder, rump, perineum (<i>ṣağānah</i>)
Sagittarius	♐ thighs
Capricorn	♑ knees
Aquarius	♒ shanks below the knees
Pisces	♓ feet

IBN FĀRIS ʔ head | ϣ neck | Ϟ – heart | Ϡ – sinews, side

Πʔ “belly and what it contains” | ♎ flanks and hips | ♏ penises

Sirr II (B 92₈₋₁₉)

فأول أرباع الزمان، فصل الربيع — ¹ إذا حلت الشمس أول دقيقة من برج الحمل، فهو أول زمان الربيع. ومدته على رأي الأطباء ثلاثة وتسعون يوماً وثلاث وعشرون ساعة وربع ساعة — وذلك من عشر تبقى من آذار إلى ثلاث وعشرين يوماً تخلو من حزينان. ² وهو الاستواء الربيعي — فإذا كان هذا، استوى الليل والنهار في الأقاليم. ³ واعتدل الزمان، وطاب الهواء وهبّ النسيم. وذابت الثلوج، وسالت الأودية، ومدت الأنهار، ونبعت العيون، وارتفعت الرطوبات إلى فروع الأشجار، ونبت العشب، وطاب الزرع، ونشأ الحشيش، وتلاّأ الزهر، وأورق الشجر، وتفتح النّوار، واخضّر وجه الأرض. وتكوّن الحيوانات، وتنجت البهائم، ودرّت الضروع، وانتشر الحيوان في البلاد عن أوطانها. وطاب عيش أهل الدير. وأخذت الأرض زخرفها وأزيتت. ⁴ وصارت الدنيا كأنها جارية شابة قد تزيتت وتجلّت للناظرين. ⁵ وهذا الفصل حاز رطب معتدل نسبة الهواء والدم، وينفع فيه كلّ شيء معتدل [...]

IḤWĀN, *Rasāʾil* III.13 (R-M 57₃-58₂)

¹ إذا نزلت الشمس أول دقيقة من برج الحمل، الليل والنهار في الأقاليم. ² استوى الليل والنهار. ³ واعتدل الزمان، وانصرف الشتاء ودخل الربيع. وطاب الهواء، وهبّ النسيم. وذابت الثلوج، وسالت الأودية، ومدت الأنهار، ونبعت العيون. ونبت العشب، وطال الزرع، ونما الحشيش، وتلاّأ الزهر، وأورق الشجر، وتفتح النور، واخضّر وجه الأرض. وتنجت البهائم، ودرّت الضروع، وتكوّن الحيوانات، وانتشرت على وجه الأرض. وأخرجت الأرض زخرفها وأزيتت، وفرح الناس واستبشروا.

⁴ وصار الدنيا كأنها صبية شابة تزيتت وتجلّت للناظرين.

Rasāʾil XXXVI (C 172₁-173₅)

¹ إذا نزلت أول دقيقة من برج الحمل، ² استوى الليل والنهار في الأقاليم. ³ واعتدل الزمان، وطاب الهواء وهبّ النسيم. وذابت الثلوج، وسالت الأودية، ومدت الأنهار، ونبعت العيون. وارتفعت الرطوبات إلى أعلى فروع الأشجار، ونبت العشب وطال الزرع ونما الحشيش، وتلاّأ الزهر وأورق الشجر، وهاج/وتفتح النور، واخضّر وجه الأرض. وتكوّن الحيوانات والديبب، وتنجت البهائم، ودرّت الضروع، وانتشر الحيوان في البلاد عن أوطانها. وطاب عيش أهل الدير، وطلب أهل المدن أعلى السطوح. وأخذت الأرض زخرفها، وفرح الناس والحيوان أجمع بطيب نسيم الهواء، وأزيتت الأرض. ⁴ وصارت الدنيا كأنها جارية شابة قد تزيتت وتجلّت للناظرين — ولا تزال تلك حال الدنيا وأهلها من الحيوان والنبات إلى أن تبلغ الشمس رأس أوجها، وهو آخر الجوزاء.

Table 5.4: Description of spring according to the *Sirr* and the *Rasāʾil*.

Sirr II (B 93₅₋₁₂)

فصل الصيف —¹ إذا حلت الشمس أول دقيقة من السرطان، فهو أول زمن الصيف. ومدته أثنان وتسعون يوماً وثلاث وعشرون ساعة وثلث ساعة — وذلك من ثلاث وعشرين يوماً تمضي من حزيران إلى أربعة وعشرين يوماً تمضي من أيلول.

² فإذا كان هذا، تنهى طول النهار وقصر الليل في الأقاليم كلها، وأخذ النهار في النقص والليل في الزيادة.

³ واشتد الحر، وحمى الهواء، وهبت السائم، ونقصت المياه.

ويبس العشب، واستحکم الحب، وأدرك الحصاد ونضجت الثمار وسمنت البهائم واشتدّت قوة الأبدان.

⁴ وصارت الدنيا كأنها عروس منعمة بالغة تامة كثيرة العشاق.

⁵ وهذا الفصل حازّ يابس، سلطانه المزة الصفراء — فينبغي أن [...]

IḤWĀN, *Rasāʿil* III.14 (R-M 58₃₋₅₉₂)

ذكر دخول الصيف —¹ إذا بلغت الشمس آخر الجوزاء وأول السرطان² تنهى طول النهار وقصر الليل، وأخذ النهار في النقصان، وانصرف الربيع ودخل الصيف.

² واشتدّ الحر، وحمى الهواء، وهبت السموم، ونقصت المياه.

ويبس العشب، واستحکم الحب، وأدرك الحصاد، ونضجت الثمار.

وسمنت البهائم، واشتدّت قوة الأبدان، وأخصبت الأرض وكثر الريف، ودزت أخلاف النعم، وبطر الإنسان.

⁴ وصار الدنيا كأنها عروس غنيّة منعمة.

Rasāʿil XXXVI (C 173₆₋₁₇₅₄)

¹ فإذا بلغت الشمس أول السرطان،² تنهى طول النهار وقصر الليل في الأقاليم كلها، وأخذ النهار في النقصان والليل في الزيادة، وانصرف الربيع ودخل الصيف.

³ واشتدّ الحر، وحمى الجوّ، وهبت السائم، ونقصت المياه.

ويبس العشب، واستحکم الحب، وأدرك الحصاد الثمار.

وأخصبت الأرض وكثر الريف، ودزت أخلاف النعم، وسمنت البهائم.

وأتسع للناس القوت من الثمار وللطير من الحب وللبهائم من علف.

⁴ وصارت الدنيا كلها كأنها عروس منعمة بالغة تامة كاملة كثيرة العشاق — فلا تزال ذلك دأبها ودأب أهلها إلى أن تبلغ الشمس آخر السنبلّة وأول الميزان.

Table 5.5: Description of summer according to the *Sirr* and the *Rasāʿil*.

Sirr II (B 94₃₋₁₂)

فصل الخريف

- ¹ إذا حلت الشمس أول دقيقة من الميزان، فهو أول زمن الخريف. ومدته ثمانية وثلاثون يوماً وسبع عشرة ساعة ونصف سدس ساعة — وذلك من أربعة وعشرين يوماً تمضي من أيلول إلى اثنين وعشرين يوماً من كانون الأول.
- ² فإذا كان هذا، استوى الليل والنهار مرة أخرى، ثم ابتداء الليل في الزيادة على النهار، وانصرف الصيف ودخل الخريف.
- ³ وورد الهواء، وهبت الشمال، وتغير الزمان، ونقصت المياه، وجفت الأنهار، وغارت العيون. وجفت النبت، وفنيت الثمار، وخرن الناس الحب والتمر، وعُزي وجه الأرض من زينته. وماتت الهوام، وانجحرت الحشرات، وانصرف الطير، والوحش يطلب البلدان الدفنة. وخرن القوت للشتاء وتغير الهواء..
- ⁴ وصارت الدنيا كأنها كهلة مُدبرة قد تولت عنها أيام الشباب.
- ⁵ وهذا الفصل بارد يابس، سلطانه المزة السوداء — فينبغي أن [...]

IḤWĀN, *Rasāʾil* III.15 (R-M 59₃-60₄)*Rasāʾil* XXXVI (C 175₅-177₂)

- ¹ ذكر دخول الخريف — ¹ وإذا بلغت الشمس آخر السنبله وأول الميزان، ² استوى الليل والنهار مرة أخرى، وأخذ الليل في الزيادة، وانصرف الصيف ودخل الخريف.
- ³ وبرد الهواء، وهبت ربح الشمال، وتغير الزمان، ونقصت المياه، وجفت الأنهار، وغارت العيون. وجفت النبت، وفنيت الثمار، وديست البيادر. وأحرز الناس الحب والتمر، وكري وجه الأرض من زينتها.
- ⁴ وصارت الدنيا كأنها كهلة مُدبرة قد تولت عنها أيام الشباب.
- ⁵ وهذا الفصل بارد يابس، سلطانه المزة السوداء — فينبغي أن [...]

Table 5.6: Description of autumn according to the *Sirr* and the *Rasāʾil*.

Sirr II (B 95₁₋₈)

- ¹ إذا حلت الشمس أول دقيقة من الجدي، فهو أول زمن الشتاء. ومدته تسعة وثمانون يوماً وأربع عشرة ساعة — من تسع تبقى من كانون الأول إلى إحدى وعشرين يوماً تخلو من آذار.
- ² فإذا كان هذا، تنهى طول الليل وقصر النهار، ثم أخذ النهار في الزيادة، وانصرف الخريف ودخل الشتاء.
- ³ واشتد البرد، وخشّن الهواء، وتساقط ورق الشجر، ومات أكثر النبات.
- وانحجر أكثر الحيوانات في باطن الأرض وكهوف الجبال من شدة البرد وكثرة الأنواء.
- وتواترت الغيوم، وأظلم الجو، وكلح وجه الزمان.
- وهزلت البهائم، وضعفت قوى الأبدان.
- ⁴ وصارت الدنيا كأنها عجوزٌ قد هرمت ودنا منها الموت.
- ⁵ وهذا الفصل بارد رطب، سلطانه البلغم — فينبغي أن [...]

Iḥwān, Rasāʾil III.16 (R-M 60₅-62₂)

- ذكر دخول الشتاء¹ وإذا بلغت الشمس آخر القوس وأول الجدي،² تنهى طول الليل وقصر النهار، وأخذ النهار في الزيادة، وانصرف الخريف ودخل الشتاء.
- ³ واشتد البرد، وخشّن الهواء.
- وتساقط ورق الشجر، ومات أكثر النبات.
- وانحجرت الحيوانات في باطن الأرض، وضعفت قوى الأبدان.
- وعري وجه الأرض من زينته، ونشأت الغيوم، وكثرت الأنداء، وأظلم الهواء، وكلح وجه الأرض، وهرم الزمان.
- ومنع الناس عن التصرف.
- ⁴ وصارت الدنيا كأنها عجوزٌ هرمة قد دنا لها الموت.
- فإذا بلغت الشمس آخر الحوت وأول الحمل، عاد الزمان كما كان في العام الأول — وهذا دأبه — وذلك تقدير العزيز العليم.

Rasāʾil XXXVI (C 177₃-178₃)

- ¹ فإذا بلغت الشمس آخر القوس وأول الجدي،² تنهى طول الليل وقصر النهار، ثم أخذ النهار في الزيادة على الليل، وانصرف الخريف ودخل الشتاء.
- ³ واشتد البرد، وخشّن الهواء.
- وتساقط ورق الشجر، ومات أكثر النبات.
- وانحجز أكثر الحيوانات في باطن الأرض وكهوف الجبال من شدة البرد وكثرة الأنداء.
- ونشأت الغيوم، وأظلم الجو، وكلح وجه الزمان.
- وهزلت البهائم، وضعفت قوى الأبدان.
- ومنع الناس البرد عن تصرف وتمرر كثير عيش الحيوان وضعفاء الناس.
- ⁴ وصارت الدنيا كأنها عجوزٌ هرمة قد دنا لها الموت.

Table 5.7: Description of winter according to the *Sirr* and the *Rasāʾil*.

Qurṭubah Calendar 77-102

السنة الشمسية تنقسم عند العرب وأهل الحساب على أربعة أزمان معتدلة الحدود، مستوية الأقسام. فأولها: الربيع، وله من السنة: ربيعها، وذلك ثلاثة أشهر. ومن الأيام: أحد وتسعون يومًا وثمان ونصف. وحدّه: من وقت طلوع الشمس بأول الحمل إلى خروجها من برج الجوزاء. وله من منازل القمر: سبعة، وهي النطح والبطين والثريا والبربان [...]]

ثم القيظ —

وله من السنة: ربيعها، وذلك ثلاثة أشهر. ومن الأيام: أحد وتسعون يومًا وثمان ونصف. تُمن.

وحده: من وقت

حلول الشمس بأول السرطان إلى خروجها من برج العذراء [...]

Anwāʾ 132₁₂ -135₄

السنة الشمسية تنقسم عند العرب وأهل الحساب على أربعة أزمنة معتدلة الحدود، متساوية الأقسام. فأولها: الربيع، وله من السنة: ربيعها، وذلك ثلاثة أشهر. ومن الأيام: أحد وتسعون يومًا وثمان ونصف. تُمن. ومن الساعات: ألف ساعة ومئة وأحد وتسعون ساعة، شطرها للنهار وشرطها لليل. ومن البروج: ثلاثة بروج، وذلك من حلول الشمس في أول الحمل إلى آخر الجوزاء. ومن منازل القمر: سبعة، وذلك من أول النطح إلى آخر الذراع [...]

ثم القيظ — وهو الصيف،

وله من السنة: ربيعها، وذلك ثلاثة أشهر. لها من الأيام: أحد وتسعون يومًا وثمان ونصف. تُمن.

ومن الساعات: ألف ساعة ومئة وأحد وتسعون ساعة. ومن البروج: ثلاثة بروج، وذلك من

حلول الشمس في أول السرطان إلى آخر العذراء [...]

Table 5.8: Division of the seasons according to ṢARĪB B. ṢAṢĪD and the QC.

<p><i>Qurṭubah Calendar</i> 77–102</p> <p>تمّ الخريف — وله من السنة: ربعها، وذلك ثلاثة أشهر. ومن الأيام: أحد وتسعون يوماً وثمان ونصف ثمن. وحده: من أول حلول الشمس برج الجدي إلى خروجها من برج الحوت [...]</p> <p>تمّ الشتاء — وله من السنة: ربعها، وذلك ثلاثة أشهر. ومن الأيام: أحد وتسعون يوماً وثمان ونصف ثمن. وحده: من وقت حلول الشمس برج الجدي إلى خروجها من برج الحوت [...]</p>	<p><i>Anwāʾ</i> 132₁₂–135₄</p> <p>تمّ الخريف — وله من السنة: ربعها، وذلك ثلاثة أشهر. لها من الأيام: أحد وتسعون يوماً وثمان ونصف ثمن. ومن الساعات: ألف ساعة ومئة وأحد وتسعون ساعة. ومن البروج: ثلاثة بروج، وذلك من حلول الشمس في أول الميزان إلى آخر القوس [...]</p> <p>تمّ الشتاء — وله من السنة: ربعها، وذلك ثلاثة أشهر. لها من الأيام: أحد وتسعون يوماً وثمان ونصف ثمن. ومن الساعات: ألف ساعة ومئة وأحد وتسعون ساعة. ومن البروج: ثلاثة بروج، وذلك من حلول الشمس في «أول» الجدي إلى آخر الحوت [...]</p>
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Table 5.9: Division of the seasons according to ʿARĪB B. SAʿĪD and the QC.

Nat II.2 Therapeutics

The (sub)section on the medical treatment of the individual organs represents, together with the natural philosophical introduction in *Nat II.1*, the core of *Natāʾiğ* as a medical treatise. The overview that follows is intended to provide a preliminary description of the contents of each chapter, as well as some cursory remarks on the medical doctrines reflected by the text. Items of special interest are highlighted and some precedents and parallels are pointed out, but no exhaustive analysis should be expected.

The author borrowed the overall architecture (from the level of chapters down to the lowest epigraphs) and much of the building materials for *Nat II.2* from IBN MĀSAWAYH's *Kitābu nnuğh* (also known as *Kitābu lmunğih*). Unfortunately, the confirmation of this massive indebtedness arrived too late, as it was only very recently (in summer 2023) that I gained access to digital reproductions of two manuscripts containing ZUHR's reworked version of that treatise.² The first chapter of the Iṣbīlī physician's *Kitābu nnuğhi nnuğh* is a sort of annotated edition of IBN MĀSAWAYH's book in the form of literal excerpts punctuated by authorial approval and enriched with several additions of uncertain origin. That ZUHR's text cannot possibly be an intermediary source for ALʿILBĪRĪ and that, therefore, it has no bearing on the chronology of *Natāʾiğ* is proved beyond doubt by comparison of the two texts. *Nat II.2* is both a more complete and more accurate reflection of the original treatise (see a comparison at the end of this

² The blame is entirely mine, for a description of this text had been available since ÁLVAREZ MILLÁN 1995. I seize the occasion to express once again my gratitude to Dr ÁLVAREZ MILLÁN for her kindness. Were it not for her quick and generous reply to my consultation, I would not have been able to correct my wrong assessment of the originality of *Nat II.2* and many an obscure locus would have remained in the dark.

chapter).

Although I have done my best to incorporate the data garnered from this “new” witness into the critical apparatus and also into this chapter, in the absence of a critical edition of ZUHR’s *Nuġh* and of a systematic analysis of IBN MĀSAWAYH’s original passages all my remarks must be considered provisional.¹ In any case, the reader should bear in mind that much of what is described here—under regarding *Nat* II.2 applies large and by to IBN MĀSAWAYH’s text unless explicitly stated otherwise.

6.1 Macro- and microstructure

Macrostructure

I have already said that there is nothing in manuscript P (not even a new *bas-malah*) that marks a strong boundary between the sections that have been labelled here, for ease of analysis, *Nat* II.1 and *Nat* II.2. A simple period (Δ) separates the ending of the natural philosophical preamble and the succinct introduction to the chapters on the treatment of the diseases and conditions of the human body:

P 48v 1–6

ويصل به إلى ما يرغبه من المصالح إن شاء الله، وبالله المستعان وعليه الانتكال ٥ وهذا حين
نصير إلى الأعضاء الجسائية وأمراجها وما يعرض لكل واحد منها من الآفات والأمراض،
وعلاج ذلك ومداواته بأيسر ما يكون وأقربه، إن شاء الله ٦ فمن ذلك جلدة الرأس

In view of this continuity, and especially given that the title of the book includes quite an explicit and accurate mention of the contents of THERAPEUTICS,² there can be no doubt that *Nat* II.2 formed part of the original plan of *Natāʾiġ*. In this regard manuscript D provides further confirmation: at fol. 55v 20 the string of words «في الأعضاء اللحمية والتحفُّظ من الأغذية السوداوية» represents an

¹ In this stage of my research the references that I provide relate to the whole epigraphs in *Nuġh*, even if some of the passages included there are unmistakably by ZUHR. A more accurate style of reference shall be possible only after a full reconstruction of the original is achieved through careful screening. On the other hand, whenever I provide only the reading of manuscript A the reader ought to understand that the corresponding locus in B is unreadable. The relevance of IBN MĀSAWAYH’s treatise to the development of the western (Qayrawāni and Andalusī) medical tradition shall be dealt with briefly in Chapter 9, where a much bolder hypothesis involving an even earlier source (namely AHRUN’s pandects) shall also be introduced.

² Let it be recalled that in manuscript P *Nat* II.2 is in fact the only part of the compilation actually mentioned in the general title.

almost perfectly seamless transition from the regimen recommended for phlegmatic individuals in *Nat* II.1 to the treatment of quartan fevers, which actually corresponds to P 74V 11, at the very end of *Nat* II.2.¹

Nat II.2 contains a complete, albeit overall sketchy and rudimentary, medical summa in which the different organs, their specific ailments, and the corresponding medical treatment are concisely discussed following the traditional head-to-toe order.² The only extant witness for the whole section, however, is incomplete and shows a large lacuna near the beginning at P 49r 11. There the prescriptions for the treatment of ulcers of the *scalp* break abruptly and what follows relates actually to pathologies of the *ears*. Just like in the case of the even larger lacuna in manuscript D, nothing in the text suggests that the scribe may have been aware that he was copying a faulty text and it is therefore probable that the lacuna was already present in his Vorlage. At what must be interpreted as the breaking point the syntax is admittedly awkward and the text verges on absurd, but is only after a few lines that the gap becomes evident. It is also possible, on the other hand, that some of the missing ailments might have been omitted by the author rather than lost (disagreement between the list of diseases and the actual epigraphs of the chapter is to be found more than once in this section), but this would bear only on the magnitude of the loss, not on the hardly disputable existence of a lacuna.

¹ If one assumes for the Vorlage from which the copyist of D was working a folio : text ratio and a quire structure similar to the ones exhibited by P, the missing text might roughly amount to two whole quinternions. At any rate, this remarkable blending (which must have gone unnoticed by the readers of the manuscript) confirms that the two sections belong together.

² This *a capite ad calcem* disposition had already become standard by the 1st c. CE with, for instance, SCRIBONIUS LARGUS' *Compositiones* and APOLLONIUS MYS' *Euporista* (cf. PRIORESCHI 1998:181, 571). Its canonical status became only enhanced by GALEN's model-setting monograph on the composition of drugs *κατὰ τόπους* (ie according to the place or organ of the human body for which the remedies are prescribed): «ἀπὸ τῆς κεφαλῆς ἀρχαμένοις, ὡς καὶ τοῖς πρὸ ἡμῶν ἄπασιν ἔδοξε», cf. *Sec. loc.* I.1 (K XII 379₄₋₅). This arrangement of the materials is as prevalent in the ninth-century Syro-Arabic medical corpus (cf. IBN MĀSAWAYH's *Nuḡh* itself, IBN SARĀBIYŪN's *Kunnāš*, AṬṬABARĪ's *Firdaws* IV.II–XI, and ĪŠŌŪ BAR ʿALĪ's *Kunnāšā* II–V as described in KESSEL 2017: 231–232) as it is in the later Islamicate tradition, and the plan of the text can be sometimes made explicit through several formulae, as for instance in the subtitle for ARRĀZĪ, *Manšūri* IX «fi lʿamrādi lḥādīṭati mina lqarni ilā lqadam» (B 377₂). As a matter of fact, the precedents of this format go far beyond the Greek tradition: an analogous *ištu muhhi adi šupri* criterion underpins the Nineveh Medical Encyclopaedia and also Part 1 of the Assur Medical Catalogue (cf. STOL 1991: 49, PANAYOTOV 2018: 94–110, STEINERT 2018: 172–178; also COUTO-FERREIRA 2017 for an analysis of the Sumero-Akkadian *Ugu-mu* vocabulary and the fortunes of head-to-toe narratives in different non-lexicographical genres).

How much text is lost can be only speculated. A good half of *Ther* 1.1 *On the scalp* is missing for sure, including particularly the treatment of alopecia and also of excessive sweating and wounds.¹ Judging from the source text, there must have followed *Ther* 1.2* *On the brain* and 1.3* *On the eyes*.² Then the beginning of *Ther* 1.4 *On the ears* is also wanting, which included the rubric, the introductory segment, and some epigraphs before what in *Natāʾiḡ* looks like a combined treatment for ringing and deafness.³

Considering the overall disparate lengths of the chapters throughout the section and that in the particular case of the chapter on the ears ALʿILBĪRĪ adds much material from alternative sources to the basic account of his copy-text, there is little sense in venturing any estimation as to how many folios may have been lost. Suffice it to note that once again the hazards of manuscript transmission seem not to have spared one single part of *Natāʾiḡ* and that we have been thus deprived of a non-negligible fragment of the original compilation.

Back to the macrostructure of THERAPEUTICS, a fourfold division is superim-

¹ Cf. IBN MĀSAWAYH, *Nuḡh* I.1 (A 103₂₂–104₂₂ | B 181₄–182₃). The “fox’s malady” needs no introduction as virtually no medical text in the corpus fails to discuss it. Arabic *dāʾu ttaʿṣab* is a loan-translation of ἄλωπεκία parallel to Syriac ܕܥܫܒܐܘܬܐ, which in turn is a synonym for the better attested ܕܥܫܒܐܘܬܐ (cf. BAR BAHLŪL, *Lexicon* 723_{13–15} and 2078_{5–8}, respectively). The original epigraph on hyperhidrosis in *Nuḡh* contains a most interesting reference to Book III of AHRUN’s pandect, in which he discussed head-related pathologies and provided the recipe for the mastic pill (cf. A 104₄₆ | B 181₂₉); for this condition, cf. also AZZAHRAWĪ, *Taṣrīf* II.1.8 العرق الكثير (S I 60_{24–26}). Arabic «*ṣalā ššiḡāḡi lhādītati fī rraʿs*» translates GALEN’s «τοῖς ἐν κεφαλῇ τραύμασι» in *Mufradah* VIII.110 ذكّر المرء (E 133v 9) ≡ *Simpl. med.* VIII.XVIII.30 Περὶ συμύρνης (K XII 127₅); cf. also «cicatric señal de herida *ḡeḡge ciḡég*» and «señal de herida *cégg cijégg* | señal de golpe o açote *ḡeḡge cijégg*» in PEDRO DE ALCALÁ, *Vocabulista arávigo* 167b 17 and 395a 35, respectively.

² See Table 6.1 in the appendices to this chapter for a concordance of epigraphs within these two chapters. The treatment of brain pathologies appears to have been surprisingly brief in *Nuḡh* and one single mental disorder is mentioned in it, namely some sort of dementia (*fasādu ddihn*). For a similarly arranged but far more detailed discussion of conditions of the scalp and the brains, cf. AṬṬABARĪ, *Firdaws* IV.II.1 في الرأس (§ 134₇–138₂), which deals with alopecia, ophiasis, hair dyes, and wounds, separated from the much wider array of brain diseases («*amrādu ddimāḡ*», which the author affirms to be thirteen in number) covered in *Firdaws* IV.II.3–14 (§ 138₃–158₂₀). An even closer parallel can be found in AZZAHRAWĪ, *Taṣrīf* II.I الأمراض التي تختص الرأس (S 54₂₄–60₂₉) opposed to the much more comprehensive *Taṣrīf* II.II أمراض الرأس (S 60₂₉–85₁₇). Different distributions were, of course, possible, as in IBN ALĠAZZĀR’s *Zād*, in which the whole of Book I is devoted to ailments of the head without any clearcut division between outer and inner conditions (B–K 56₁–236₈ | T 67₁–139₁₇), with a precedent in IBN SARĀBIYŪN, *Kunnāš* I ≡ *Breviarium* I (M 1ra 1 – 9vb 26 | V 2ra 1 – 10va 55). As for the eyes, I know of no general medical treatise in the Islamicate corpus, either in the *kunnāš* tradition or otherwise, that does not include an ophthalmological chapter, and it is hardly assumable that *Natāʾiḡ* should be the only exception to this rule, especially given that its source text covered the subject at some length, cf. IBN MĀSAWAYH, *Nuḡh* I.3 (A 105₂₆–107₂₁ | B 183₂–184₂₃).

³ In IBN MĀSAWAYH’s text bleeding and suppurating ears are mentioned before ringing, obstruction, deafness, worms, and earaches, cf. *Nuḡh* I.4 (A 107_{22–31} | B 184₂₄–185₁).

posed on the general overlay of the individual chapters. This does not become visible until P 59r 1, where a *basmalah* and a section mark *faṣl* give way to a brief explanation that informs the reader that the discourse on the first quarter of the human body (that is the head and the neck) is finished and that there follows the second quarter (namely the chest). This arrangement is justified, according to the author, by the ancients having divided the human body into four parts (*ağzāʾ*): the head, the chest, the belly, and the legs—which they associated with the four cardinal directions and the four seasons of the year. Then they wrote down whatever diseases and remedies corresponded to these four parts. This fourfold division, which is not introduced at the beginning of the treatise but rather a posteriori once the discourse on the first quarter is finished, is then explicitly applied to the whole of *Nat II.2*. Thus, the ending of the second part of the body is marked at P 61v 1 («تم الجزء الثاني من أجزاء الإنسان») and a new *basmalah* precedes the chapter on the liver. Finally at P 68r 7–8 the third part ends and there follows, now without any *basmalah*, the fourth and last part of the human body («تم الجزء الثالث، ابتداء الجزء الرابع من أجزاء الإنسان»).

There is however nothing in ZUHR's excerpts from IBN MĀSAWAYH's *Nuğh* that suggests that such a quaternary division featured in the original text.¹ On the other hand, this anatomical and at the same time cosmological division of the human body agrees entirely with the philosophical doctrine expounded in *Nat II.1*, which suggests that it might have been introduced by the author. As an addition to the standard head-to-toe arrangement of the Vorlage this supplementary division is entirely non-disruptive and it did not require any extra effort on the part of the compiler to harmonise the resulting text.²

In any case, the concept is certainly not unprecedented in medical literature. The most evident example of a similar division of the body is AṬṬABARĪ, who ascribes it to the “Babylonian physicians” and further provides an interesting account of the sign («*āyah*») that betokens the accumulation of superfluities (*fuḍūl*) in each of these parts.³ Now, the exact same text is transmitted in the

¹ External evidence from the indirect transmission of *Nuğh* is most unhelpful in this regard.

² To be sure, several other explanations are also possible but not equally plausible. The superimposition of the fourfold division of the human body might be ascribed to some intermediary source (but this would not solve the problem but only remove it one degree farther) or ALZIL-BIRĪ might be reproducing not *Nuğh* but IBN MĀSAWAYH's own source-text, which he would have copied so literally as to make any distinction virtually impossible except for this particular feature. Neither hypothesis can be backed with the evidence currently available.

³ In *Hifl* the segment bears the rubric «*fi ṣalāmāti(n) waṣūlāğāti aṭibbāʾi Bābila wağayrihim*» (with an apparent substandard *idafah*). Pace KAHL, who interprets that for the author *Bābil* may have referred to “the whole of southern Iraq” and wonders “[w]hich (group of) ‘scholars and physicians’ from that quarter Ṭabari actually had in mind” (KAHL 2020: 26), AṬṬABARĪ's ascription is historically correct and the roots of this idea can be traced back to actual Baby-

medical section of the pseudo-Aristotelian *Sirr*, which is certainly of some consequence with regard to the chronology of the so-called Long Version of that treatise:¹

<p><i>Firdaws</i> II.IV.5 في تدبير الأعضاء (§ 104₁₋₂₃) ≡ <i>Hifid</i> §41-44 (K 726-744)</p>	<p>PSEUDO-ARISTOTLE, <i>Sirr</i> II B 96_{1-97₁₀} K 42v 7 - 44r 5</p>
<p>واعلم أنّ بدن الإنسان فيما ذكروا أربعة أجزاء. فالجزء الأول: الرأس وما يليه. فإذا اجتمعت فيه فضول، كانت آية ذلك ظلمة العين وثقل الحاجبين وضربان الصدغين ودويّ الأذنين وانسداد المنخرين. فمن أحسّ بذلك، [...] . والجزء الثاني: الصدر وما يليه. فإن اجتمعت فيه فضول، [...] . والجزء الثالث: البطن وما يليه. فإن اجتمعت فيه فضول، [...] . والجزء الرابع: المتانة وما يليها. فإذا اجتمعت فيها الفضول، [...] .</p>	<p>اعلم أنّ البدن أربعة أجزاء. الأول منها: الرأس. فإذا اجتمعت فيه فضول، كان آفة ذلك ظلمة العينين، وثقل الحاجبين، وضربان الصدغين، ودويّ الأذنين، وانسداد المنخرين. فمن أحسّ بذلك، [...] . الجزء الثاني: الصدر. فإذا اجتمعت فيه فضول، [...] . الجزء الثالث: البطن. فإذا اجتمعت فيه فضول، [...] . الجزء الرابع: المتانة. فإذا اجتمعت فيها الفضول، [...] .</p>
<p>واعلم... أول [قالوا إنّ البدن أربعة أجزاء. الأول منها H ودويّ الأذنين - [F أحسن] حسن .F</p>	<p>اعلم - [K آفة [آفة كس اجتمعت] اجتمع .K</p>

However, as far as I am aware this doctrine never became fully incorporated into the Islamicate medical tradition and its presence as a constitutive element of the architecture of *Natāʾiḡ* may be interpreted as an additional archaic (or at least archaïcising) trait.² Now, a most interesting (and also quite unexpected)

lonian medical lore. An analogous (albeit admittedly different) division can be found in the Seleucid text *SpbTU* I 43, which lists several diseases according to their location in four parts of the body: “*libbu* (belly?), *karshu* (stomach?), lungs, and kidneys” (cf. STOL 1991: 49, question marks originally in the article, where further reference is made to KÖCHER 1978: 22 [n.v.]). The transmission was not a direct one, of course, but it may be ancient lore that surfaces here.

¹ According to BADAWI’s critical apparatus one of the manuscripts of *Sirr* (= §) even transmits the same word *āyah* rather than *āfah*, and so does MS K; cf. also *signa* in the corresponding locus in the Latin translation *Secretum* II.15-18 (B 83₂₃-87₁₀). Let it be noted that in the Latin version the four parts are rather the head (*caput*), the chest (*pectus*), the eyes (*oculi*), and the testicles (*testiculi*).

² For the diffusion of this doctrine in the early Islamicate period, cf. also PSEUDO-GALEN, *Dynam. ad Moec.* I «*Quatuor corporis partibus origo infirmitatis uel sanitatis ostenditur: capite, thorace, uentre, et uesica*» (B 72₁₈₋₂₀), which coincides entirely with the above witnesses. It is worth noting that neither the edited version of the *Hārūniyyah* nor the *Tuhfah* described by BRUNING show a similar arrangement. For the pre-Islamicate precedents in the Graeco-Byzantine tradition, cf. PSEUDO-SORANUS, *Isagoge* V «*Sicut corpus hominis in quatuor partes diuidimus, ita et*

testimony in this regard is contributed by IBN ḤABĪB's ninth-century compilation of archaic medical traditions. He reports a division of the human body into four quarters from some Madanī expert in the medicine of the Arabs:

Tibb 91₂₃–92₁₇ ≡ *Muḥtaṣar* 73₁₃–74₉

سمعتُ بعض المدتيين من أهل العلم بطبّ العرب والمعرفة بالداء والدواء يقول:
«الجسد أربعة أرباع.
فالرأس الربع الأول، وملاكه الدماغ، وهو رباط الجسد [...] .
والصدر الربع الثاني، وملاكه القلب، وهو بين الرئتين [...] .
والبطب الربع الثالث إلى المثانة، وملاكه الكبد [...] .
والمرارة وما تحتها إلى أسفل: الربع الرابع، وملاك ذلك الربع الكليتان [...]» — وكلّ ذلك
تقدير العزيز العليم.

أرباع [أنواع] M | تقدير [بتقدير] M.

In *Natāʾiḡ* the section on therapeutics closes with an explicit epilogue in which the book is referred to as *madḥal* (like in the Proem to *Nat* II.1) to the truths, the demonstration, and the cause conducive to the well-being of souls and bodies:¹

P 75r 16 – 75v 2 | D 56r 21 – 56v 1

وقد أتينا على أكثر الكتاب، بحمد الله الذي هو المدخل إلى الحقائق والبرهان والسبب في
إصلاح الأنفس والأجسام، واسأل الله إيزاع الشكر على تأييده وحسن عونه،
فإته جميلٌ مُنعمٌ .

The phrase “most of the book” clearly implies that the text is not over yet and that more material must come after THERAPEUTICS. The assumption that the section labelled here as *Nat* III ḤAWĀṢṢ, which follows *Nat* II.2 immediately (and actually *in medias res* in both manuscripts), was indeed originally conceived as *Nat* III has been already introduced above and shall be discussed at length in Part III of this dissertation.

anni circuli erit nobis quadripartita diuisio», those parts being the head, the chest, the belly, and the bladder (B 2v 18–21); cf. further FISCHER 2000: 28 for an identical division in PSEUDO-HIPPOCRATES' *Epistula ad Antiochum regem* β 2–9 «*Corpus igitur hominis diuisus est in quatuor partes: caput, pectus, uenter atque uessica*».

¹ Mark that in the proem it was rather *ṣalāḥ* (not *iṣlāḥ*) that was mentioned and that no allusion was made there to the souls. The accumulation of truths, demonstration, and cause, on the other hand, reflects the same philosophising parlance that is so characteristic of in *Nat* II.1 and which is mostly absent from the practice-oriented text of *Nat* II.2.

Microstructure

A noteworthy feature of *Natāʾiğ* is how accurately the general title reflects not only the structure of segments *Nat* II.1–2 but also the actual contents of the individual chapters of THERAPEUTICS.¹ Thus, the book is said to contain the “rational conclusions to arrive at the philosophical methods and medical canons” (corresponding to *Nat* II.1) and “the knowledge of the temperaments and utility of the organs of the human body” as well as “the mention and treatment of the diseases that afflict each organ”—which is indeed, with only rare exceptions, the pattern followed throughout *Nat* II.2.

For each one of the main organs (or combinations of organs) their utility (*manfaʿah*, or its plural *manāʿifi*), ailments (*amrāḍ*), and treatment (*ṣilāğ*) are mentioned in a quite systematic way.² This information is typically distributed as follows:

CHAPTER TITLE — Typically in the form «باب ذكر —» followed by the organ(s) in question, with highlighting rubrication.³

SUMMARY — A schematic survey of the contents of the chapter in which the temperament (*mizāğ* ≡ κρᾶσις), functions, and diseases of the organ are mentioned almost invariably following the pattern «أما ... ف—».

TREATMENT — Comprising several epigraphs that are most often rubricated and which correspond to the diseases and conditions mentioned in the summary. The level of correspondence between the ailments mentioned and those that are individually developed is remarkably high but far from perfect: some diseases are listed but never actually dealt with, while others are discussed without having been previously announced.⁴

Following the common practice of Helleno-Islamicate medical literature, a number of fully formatted recipes are appended, quite pertinently, to the individual epigraphs. None of the formulas included in THERAPEUTICS bears any

¹ This is all the more remarkable given that the structure reflected in this segment of the title is entirely borrowed from the source text.

² In this context the word *manfaʿah* corresponds to Greek χρεία (and could be therefore equally translated as ‘purpose’ or even ‘function’) as seen in ḤUNAYN’s translation of the Galenic treatise Περὶ χρείας μερῶν (= *De usu partium*) as *Kitābun fi manāʿifi lʾaṣḍāʾ*? (cf. ULLMANN 1970: 41). As for the ailments, a few alternative phrases can be found: *Ther* 3.5 «dāʾuhā» and 4.3 «waʾad-wāʾuhā» on the one hand, and the synonymical couples 1.5 «ṣilaluhumā waʾamrāḍuhumā» and 3.1 «dāʾuhā waʾamrāḍuhā» on the other.

³ With the exception of *Ther* 1.1 جلدة الرأس (merely rubricated) and the use of — وأما in *Ther* 2.1–3 (all three chapters within that subsection), then in 3.2|5 and 4.3.

⁴ See particularly *Ther* 3.4, 4.1. It does not seem that the copyist should be blamed for some of these discordances. A similar picture obtains in ZUHR’s *Nuğh*, but its excerpts are even less systematic (and also less trustworthy) than ALʿILBĪRĪ’s.

signs of being an interpolation, but the fact that most of them are not included in ZUHR's *Nuğh* leaves the question of their origin open to interpretation. The indirect transmission of IBN MĀSAWAYH's treatise shows beyond doubt that it did contain a great many recipes, and on typological grounds it can be assumed that most (if not all) of the formulas transmitted in *Natāʿiğ* may actually stem from the original compilation.¹

As far as can be ascertained from ZUHR's excerpts, most of the text is copied, with a few geolectal glosses and some occasional synonymical substitution, from IBN MĀSAWAYH's *Nuğh*. At some points ZUHR's text is defective (whole chapters are missing that do not coincide, to be sure, with the lacuna in P) and its testimony is sometimes silent when it would be most needed. As a consequence of this fragmentary and often inconclusive evidence, the extent to which ALʿILBĪRĪ manipulated his text (by abridging it but also by supplementing it with additional materials) cannot be fully assessed yet, but a preliminary examination reveals that authorial intervention ranges from virtually inexistent to remarkably drastic. For some chapters the text of ZUHR's *Nuğh* and *Nat* II.2 are essentially identical, for others (eg *Ther* 1.3 *On the ears* or *Ther* 1.8 *On the throat*) differences are remarkable. The long pseudo-Galenic quotation in *Ther* 1.3 suggests that the author may have resorted to at least a second source to complement his text.

¹ Cf. the full title of the work *Kitābu lmunğih fi şşifāt walʿilāğāt* as recorded in IBN ABĪ UŞAYBĪĀH, *Tabaqāt* 255_n (for further references to this treatise, see the *Concluding remarks* at the end of this chapter).

6.2 Contents

A list of chapters is provided in Table 6.1, in which a provisional concordance with the two manuscripts of ZUHR's *Nuǧh* is also included. The reader will also find some general remarks and a global assessment at the end of this chapter. In what follows a cursory review of the contents of *Nat* II.2 is offered that focuses primarily on the description (not so much on the analysis) of the structure, nosonomy, and botanical nomenclature of each chapter.¹ For the sake of clarity and in order to avoid absurd strings of numbers, the epigraphs of this section are unnumbered and only the numeration referring to the original text is provided.

I should stress once again that many of the observations below apply actually to ALḤILBĪRĪ's source text and that many essential features are not reflective of local particularism but are rather inherited, through *Nuǧh*, from the common Arabo-Islamicate stock. A selected list of items of particular interest with regard to locality and chronology is included in Chapter 9, where the dependence or independence of these words from *Nuǧh* is duly signalled.

On the other hand, given the bad condition of the manuscripts of *Nuǧh* consulted for this research and the ambiguousness of the ascription of each passage to either IBN MĀSAWAYH or ZUHR, I could not always arrive at a definitive conclusion regarding some of the data transmitted in *Nat* II.2. Whenever the reading of *Nuǧh* was sufficiently clear I have indicated the high probability of a borrowing (usually through the use of the combined reference "*Nuǧh/Ther*"), but an edition of at least Chapter I of ZUHR's treatise would greatly improve the quality of my remarks.

¹ No attempt is made to identify in modern terms the ailments and conditions mentioned in the text. In accordance to the prevailing criterion throughout this dissertation I adhere to uncompromising traditional terminology whenever possible. On the other hand, the partial paraphrase of the text offered hereunder cannot substitute for the proper translation that must be included in a future version of this draft.

Ther 1.1 — On the scalp

Some of the most salient features of *Nuǧh/Ther* with regard to its medical contents become evident from the very beginning of the section. Thus in *Ther 1.1.1* the ailments referred to as mange and dandruff (*ǧarab* and *ibriyah*, respectively) are never defined or explained and they are moreover dealt with in combination: no differential treatment is prescribed for each one of them.¹ This appears to have been one of the distinguishing traits of IBN MĀSAWAYH'S treatise, which, unlike his own *Alkamāl wattamām*, may have focused almost exclusively on therapeutics, with only secondary attention given to diagnostics.

Another remarkable characteristic of the text is pre-standard terminology.² Thus, dandruff is referred to here by the less common name *ibriyah* rather than *nuḥālah* (IṢṬIFĀN'S and ḤUNAYN'S shared loan-translation of πῖτρορα, which had indeed been specialised in the medical jargon as the name of 'dandruff' or 'scurf' from its original meaning 'bran, husks of corn') or *ḥazāz* (which actually corresponds to Greek ἄχωρ but was sometimes conflated with dandruff). In *Natāʔiǧ* the word is a paradigmatic example of source-bound item but nevertheless *ibriyah* seems to have been the main denomination of dandruff in Qayrawān and it is well documented in Andalus, where its use is not restricted to an early chronology, as *Taysīr* and the Latin-Arabic glossary of Leiden use it in the 12th c.³ It is, moreover, an illustrative case of an unequivocally archaic feature (its use predates standard Iṣṭifānī–Ḥunaynī terminology) that cannot however be assumed as a positive chronological marker, for any later work like *Natāʔiǧ* may transmit earlier material normally without linguistic updating and, inversely, adaptation of source materials to the linguistic context of the author can alter the original terminology—which renders any attempt to dating through lexical analysis complicated and most often inconclusive.

Still under the same epigraph, a formula for "Galen's pill" is provided after having recommended taking it for seven nights against mange and dandruff. The origin of the recipe can be identified as GALEN'S purging κοκκία (ie 'small

¹ Medical definitions (in the sense of nosological description) and to a lesser extent aetiology are missing for most of the sicknesses mentioned in the text (with very rare exceptions as leprosy in *Ther 4.4.8*) and it is not unusual here for two diseases to be collocated under one single rubric and to be ascribed an undifferentiated medical treatment. This outstanding lack of nosological discussion (which appears to be a feature inherited from *Nuǧh*) is quite exceptional in the *kun-nāš* genre and it is obvious that the author relied largely on the previous medical knowledge of his addressee or his potential readership.

² Needless to say, the exceptionality of some instances of non-standard nosonymy became much less enigmatic once their origin in an early-ninth-century treatise was confirmed. Given the particular prevalence of some elements of this terminology in the western (and especially Andalusī) medical tradition, however, some of my original remarks on *Natāʔiǧ* are still pertinent.

³ On *ibriyah*, see the *Complementary notes on nosonymy* appended to this chapter.

pills') made of aloe, colocynth, scammony, and some wormwood juice, which was widely transmitted in the Islamicate corpus often with a double denomination *qūqāyā* = *habbu Ġālīnūs* and a formula that is quite stable since its earliest attestations. This prevalent synonymy is somewhat misleading, however, as it does not truly reflect the complex picture of the Islamicate tradition of "Galen's pill", in which the same formula is sometimes handed down under different names and at the same time a common label can conceal significant variations of the basic recipe.¹

Despite the ambiguity of the layout in ZUHR's *Nuġh*, from the reference to AHRUN's Book III it may be inferred (1) that the mention of this pill belongs actually to IBN MĀSAWAYH (who may have instructed rather to take seven pills every night) and (2) that either no recipe was included at this point in the source text or ZUHR decided to omit it from his excerpt.² In any case, ALʔILBĪRĪ does provide a recipe for Galen's pill and the inclusion of the "powder of bitter hiera" («*ġubāru iyāraġ fiqrā*»)³ amongst its ingredients links it to a subtradition that is already attested by AṬṬABARĪ and which recommends this addition specifically for the treatment of alopecia,⁴ but an exact match still remains to be found.

Another quite pervasive element in *Nuġh/Ther* is the frequent prescription of drastic non-medicamentous remedies, most often bloodletting (usually alluded to as *faṣd*, sometimes also as *fathu ʕirq*) and cupping (*hiġāmah*), but occasionally also scarification (*šarʕ*) as here in *Ther* 1.1.3, where therapeutic incision is recommended for the treatment of ulcers on the head (a prescription that is not found in the corresponding locus in *Nuġh*).

¹ For some remarks on Galen's pill, see the *Complementary notes on polypharmacy* at the end of this chapter.

² Cf. *Nuġh* I.1 (A 102₃₁–103₁ | B 180₂₃–24). As I shall argue in the *Concluding remarks*, it is my current understanding that such accurate allusions to AHRUN's individual books within his *Kunnāš* are to be ascribed to IBN MĀSAWAYH rather than to his Andalusī epigone—but I could be entirely wrong in this interpretation.

³ The phrase itself is far from usual and, in fact, I have come across one single parallel in Andalus: the same ingredient is prescribed for a headache in ALHĀŠIMĪ, *Maġālis* I.1.6 (K 23₁₅–16). This one must be added to the long list of specific coincidences between these two Andalusī texts that probably point towards some common source(s) available in early Andalus and that emerge at different times and in different places. These hints would deserve to be further explored.

⁴ Cf. «*habbu qūqāyā Ġālīnūs*», which "avails against alopecia if some bitter picra is added to it", in AṬṬABARĪ, *Firdaws* VI.VI.2 (§ 468₃₋₈). This formula by AṬṬABARĪ is silently borrowed with no remarkable modification as «*habbu Ġālīnūs*» by IBN ALĠAZZĀR, *Zād* I.10 (B–K 118₁₁–120₄ | T 91₅₋₁₃)—incidentally, BOS and KĀS affirm that they could not find this recipe in the Galenic pharmacopoeia (cf. B–K 119 n. 217), yet they had identified the origin of the *κοκκία* in their recent edition and commentary of IBN ĠANĀḤ, *Talḥiṣ* [880]. In Andalus, two different recipes for *qūqāyā* pills that include bitter hiera are recorded by AZZAHRĀWĪ: one that only requires bitter hiera, mastic, and anise in *Taṣrīf* VI.73 (S I 414₃₀₋₃₂); a more complex one with additional ingredients from ARRĀZĪ in *Taṣrīf* VI.66 (S I 414₉₋₁₂).

A couple of lexical items in this chapter are worth commenting and shall be analysed in some detail in Chapter 9. First, the name *šaḡaru ttaʿlab*, which is attested west and east as an alternative form (condemned by some as a vulgarism) of *ʿinabu ttaʿlab* and corresponds therefore to the black nightshade (≡ στρόχνον, *Solanum nigrum* L., also known as ‘blackberry nightshade’ or ‘hound’s berry’). Here it is found within the recipe for Galen’s pill and ought to be considered an inherited term. Then *ʿalqam* in *Ther* 1.1.2 should refer to the squirting cucumber (≡ σίκυς ἄγριος, *Ecballium elaterium* (L.) A.Rich) given that it is immediately preceded by *ḥanḍal* ‘colocynth’ (≡ κολόκυνθα ἄγρία, *Citrullus colocynthis* (L.) Schrad.). However, the text of *Nuḡḥ* may have abridged the original passage (a simple decoction of colocynth is prescribed there) and it is impossible to know whether this phytonym and also natron were already mentioned by IBN MASAWAYH or not. If these items were added by ALḠILBĪRĪ, *ʿalqam* might even be a gloss to *ḥanḍal*.¹

Ther 1.4 — *On the ears*

As previously mentioned, a lacuna affects the second half of the chapter on the scalp and the entire two chapters (on the brain and on the eyes) that followed, as well as the beginning of the chapter on the ears. The segment that must be reconstructed as *Ther* 1.4 begins in its extant form with a lengthy passage that stands out, both in contents and in style, from the overall soberness of *Nuḡḥ/Ther*. Two of the most salient traits of this segment are verbosity and a particular stress on authority and the proven practice of ancient sages or physicians (*ḥukamāʿ*). The former feature is quite dissimilar to the straightforward imperatives and non-agentive prescriptions that pervade the rest of the treatise even within this chapter itself, but it is strongly reminiscent of the style and phraseology of the dietetic epigraphs within *Nat* II.1. There is, moreover, a certain sapiential ring to the saying that the effect and benefit of even the noblest of drugs is cancelled when they are taken with bad foodstuff, just like whoever takes fine ben oil and excellent musk and mixes them with foul-smelling things—I could find no parallel for this passage and the whole locus looks quite uncharacteristic of *Nuḡḥ*. It is quite plausible that a different source has been exploited here, and the materials that follow suggest that it may have been a pseudepigraphic text on Hippocratic-Galenic medicine.

After this acephalous segment, there follows an explicit and essentially authentic but noticeably reworded quotation from HIPPOCRATES that conflates the gist of *Aphor.* II.39, in which the author describes the particular incidence

¹ It is worth noting that this is the only instance of the word *ʿalqam* in the whole text of *Natāʿiḡ* and that is by no means a usual name in the corpus (see the *Complementary notes*).

and unhealability of chronic diseases in the case of elderly people:¹

Aphorisms II.39

L IV 480₁₉–482₂

Οἱ πρεσβύται τῶν νέων τὰ μὲν πολλὰ νοσέουσιν ἥσσον· ὅσα δ' ἂν αὐτέοισι χρόνια νοσήματα γένηται, τὰ πολλὰ ξυναπθνήσκει.

ὅσα] ὀκόσα G | ξυναπθνήσκει] ξυναποθνήσκουσιν G.

Fuṣūl II.39

T 16₇₋₉ | B 5v 13–15

L 7v 2–4 | Y 5v 13–15

الكهول في أكثر الأمر يمرضون أقلّ مما يمرض الشبان، إلا أنّ ما يعرض لهم من الأمراض المزمّنة على أكثر الأمر يموتون وهي بهم.

في أكثر الأمر] في الامر الاكثر | أقلّ] اكثر Y | ممّا يعرض الشبان] من الشبان LT | ما] اكثر ما Y | على أكثر الأمر] في الاكثر LT، على الغالب Y.

with the detailed catalogue that in *Aphor.* III.31 lists such sicknesses:

Aphorisms III.31

L IV 500₁₅–502₂

Τοῖσι δὲ πρεσβύτησι δύσπνοιαι, κατάρροι βηχῶδες, στραγγουρία, δυσουρία, ἄρθρων πόνοι, νεφρίτιδες, ἰλιγγοί, ἀποπληξίαι, ξυσμοὶ τοῦ σώματος ὅλου, ἀγρυπνίαι, κοιλίης καὶ ὀφθαλμῶν καὶ ῥινῶν ὑγρότητες, ἀμβλωπία, γλαυκώσεις, βαρυηχοΐαι.

κατάρροι] καὶ κ. G | ξυσμοὶ] ξυσμὸς G.

Fuṣūl III.31

T 27₁₂–28₃ | B 9r 4–8

L 11v 7–11 | Y 7v 13–15

وأما المشايخ، فيعرض لهم رداءة التنفس والنزلات التي يعرض معها السعال، وتقطير البول وعسره، وأوجاع المفاصل وأوجاع الكلى، والدوار والشكات والقروح الرديّة وحكة البدن، والسهر، ولين البطن، ورطوبة العينين والمنخرين، وظلمة البصر والزرقة، وثقل السمع.

رداءة] رداءة BY | التنفس] النفس LY | والنزلات] والنزل L، والنزلة T، – B | وأوجاع الكلى] والكلى B | البدن] + كله Y | والزرقة] وزرقته Y.

¹ Cf. also GALEN, *In Hipp. Aphor. comm.* (K XVII B 538₂₋₁₃ and 648₂–651₉) [= G in the apparatus], but there is no trace of GALEN's commentary in the passage under examination. Although it is unlikely that the blending of the two aphorisms into one single quotation should be ascribed to ALṬILBĪRĪ, I have been unable to locate any parallel or even similar passage in the corpus. One should perhaps look rather into Islamicate pseudo-Galenic literature, but that is mostly uncharted territory.

Then, and probably drawing still from the same source, a recipe is provided for a wondrous oil allegedly prepared by GALEN in his sleep and for which our text does not only transmit a myriad of ingredients and quite complex instructions but also an extensive and detailed list of benefits.¹ Nothing of this was borrowed from *Nuǧh* and, as pointed out above, it is quite likely that the author may have found this recipe in the same pseudo-Galenic source that provided so much material for the dietetic segments of *Nat* II.1.

A definite return to sober style and therapeutic pragmatism seems to be perceptible after the introduction of a standard epigraph on how to bring out something that has fallen into the ear. Making the patient sneeze is recommended and an incidental remark is made on the same strategy being implemented for treating women whose child has died in the womb or whenever the afterbirth is retained. If it could be proved that this was not already available in *Nuǧh*,² such an appended observation (which is not, of course, an original one)³ might reflect a genuine interest in the matter—beyond mechanical copying, that is—on the side of the author, as do the passages that he draws from the ancient corpus (basically HIPPOCRATES and GALEN) and which he intersperses here and there throughout the first chapters of the section. In this regard *Natāʾiǧ* aligns with some of the early representatives of the *kunnāš* genre (particularly with *Firdaws* and *Hārūniyyah*) despite its much more modest approach to medicine.

A second quote on chronic deafness (*šamam*) allegedly from GALEN seems

¹ According to the passage GALEN would have kept his panacea in secret (hence the name «المكتم») until he decided to reveal it to the Roman emperor (“Caesar”), after which it became famous. This pseudo-Galenic excerpt spans over two full pages in the edition and in the typical inclusion of a plethora of ingredients and in the boastful mention of an imperial context it brings to mind such drugs as the antidote of one hundred ingredients (ἀντίδοτος ἑκατονταμίγματος) in GALEN, *Antid.* II.9 (K XIV 155₁₀–158₃). In overall style and in the punctilious instructions for the use of this oil against each ailment, on the other hand, it is very close to some of the recipes collected in *Našāʾiḥu rruhbān*. However this one is not found in the *Secreta ad Montem*, nor in the extant texts of either *Maktūmah* or *Maḍmūmah* (in none of these texts does the author mention any recipe revealed to him in dreams).

² The text transmitted by the two manuscripts of ZUHR’s treatise shows abridgement, omission, and dislocation, as the chapter on the ears includes only the treatment of swelling or boils (*waram*) and gives way to an epigraph on deciduous eyebrows followed by the chapter on the throat. It cannot therefore be considered a faithful reflection of IBN MĀSAWAYH’s original chapter, which according to its initial summary included epigraphs on bleeding and suppuration, ringing, obstructions, deafness, worms, and earache. This catalogue does not allude, however, to water or other things that fall into the ear, which combined with the use of the Amazighic term *tābūdā* in *Natāʾiǧ* (for which see below) might be interpreted as evidence for an authorial addition to the main source.

³ Cf. an identical double effect attributed to ptarmics or sneeze-inducers by ANTYLLUS in *Extern. sympt. rem.* I «Πταρμικοῖς χρώμεθα [...] ἢ ἔμβρυον ἢ δεύτερα ἐκβαλεῖν θέλοντες [...] ἢ ἐμπεπτωκότα τινὰ ἐν τοῖς ὠσίν ἐκβαλεῖν», quoted in ORIBASIOS, *Collectiones* X.30.1 (H II 71₃₁–72₂).

oddly dislocated and comes closer, at least formally, to a passage by PAUL OF AEGINA in *Pragmateia* than to the original one:¹

GALEN, *Sec. loc.* III.1

Πρὸς δυσηκοΐας

K XII 65⁰⁹⁻¹⁰

ὑποπτευτέον τὸ σύμπτωμα, κατὰ βραχὺ γὰρ αὐξανόμενον ἐν τῷ χρόνῳ κωφότητα τελείαν ἀπεργάζεται.

Pragmateia III.xxiii.11

Περὶ δυσηκοΐας καὶ κωφώσεως

H I 19¹⁸⁻²¹

Αἱ μὲν ἐκ γενετῆς ἢ καὶ μετὰ τὸ τεχθῆναι μὲν, χρονιώταται δὲ καὶ παντελεῖς συνιστάμεναι κωφώσεις τῶν ἀνιάτων εἰσὶν, αἱ δὲ μὴ παντελεῖς μὲν, χρόνιαι δέ, καὶ αὐταὶ τῶν ἀνιάτων ἢ δεινῶς εἰσι δυσιάτων.

Although only further scrutiny will allow for a sounder assessment, the apparently idiosyncratic nature of the therapeutics handed down in *Natāʿiǧ* seems to stem from a combination of the archaism of IBN MĀSAWAYH's text and the incorporation of "less conventional" medical sources as, in this case, pseudo-Galenic materials. Deviations from standard terminology may actually be quite evenly distributed between these two main textual traditions. For example, the couple «*addawīyyu waṣṣarīr*» (four times in the sequence of quotes from GALEN, against the more usual collocation *addawīyyu waṭṭanīn* even before the first Graeco-Arabic translations) is probably pseudo-Galenic in origin, whereas the use of the Syro-Arabic name *fayḡan* for rue (*Ruta graveolens* L.) might be ascribed to either IBN MĀSAWAYH or to the pseudepigraphic source.

Uncertainty is even greater with regard to authorial intervention. At the present time, unless ZUHR's parallel testimony is positive and unambiguous, it is impossible to decide whether any given particular elements are to be ascribed to the "originality" of the author or are simply inherited. Thus, is the shocking gloss/definition of *buḥrān* (a borrowing from Syriac ܒܘܚܪܐܢ that in turn translates Greek κρίς as a technical term of the medical jargon) as "seven days" to be interpreted as an oversimplification of a much more complex concept by ALʿILBĪRĪ himself?² Is the synonymy *šaḡaru uduni lfaʿr* = *mardaquš* a gloss by

¹ The implication being that much Galenic material is represented here (as everywhere else) in mediated and reworked form rather than through direct borrowing. Several different versions of this passage are known in the Islamicate tradition but they are universally unascrbed (and deafness is mostly referred to as *ṭaraš*), cf. for instance IBN SARĀBIYŪN, *Breviarium* II.XIII *De surditate* (V 12va 2–5); ARRĀZĪ, *Taqāsīm* XXXIX (H 148₃₋₈) ≡ *Hillūq* 19v 14–15 ≡ *Divisionum* 62va 14–20, and also *Alḥāwī* II.2 (H II 20₂₂); ALMASĪḤĪ, *Miʿah* LXVIII (S II 59₂₈).

² Although the seventh is one of the critical days (*ayyāmu lbuḥrān* or *baḥārīn*) in the Helleno-Islamicate tradition, none of the sources consulted supports such a (mis)definition of the con-

the author and therefore a true reflection of Andalusī pharmacognostic lore or was is already included in his pseudo-Galenic source?¹

Even if much of the divergence from standard use must be attributed to the author's sources, a certain local flavour is impossible to deny. The fact, moreover, that some of the most conspicuous geolectal markers of the text are found either within (or at least next to) pseudo-Galenic passages or in prescriptions demonstrably inherited from the Graeco-Byzantine corpus ought to be interpreted as an indicator of a local reworking of the materials. An illustrative example is the ichthyonym *silbāh* 'eel' (a generic name for fishes in the order Anguilliformes, from river eels to congers and morays), which is apparently unknown, at least in this exact form, outside the Arabic-speaking west and is certainly unparalleled in the eastern medical corpus.² The therapeutic use of animal gall and fat for the treatment of earaches and hearing disorders is well documented in GALEN's *Sec. loc.*, but an allegedly Galenic quote like the preceding one that mentions the gall of elephants and buffaloes must be pseudepigraphic, and the fat of eels is likewise nowhere to be found in the genuine Galenic corpus (in which the flesh of ἔγχελυς, in turn, features several times).³

Then, in the instructions to suck out water that has fallen into the ear a western Amazighic name *tābūdā* substitutes for what in parallel loci, both in the

cept of crisis. GALEN's fanciful etymology of the medical term κρίσις in *De crisisibus* III.2 (K IX 704₁₇–705₅) was known to IBN ĠANĀḤ (cf. *Talḥiṣ* [800] بحران) but no definition is provided there (cf. BOS, KĀS, LÜBKE, and MENSCHING 2020: 369 for the original Arabic translation of the Galenic passage) and AZZAHRĀWĪ's explanation involves no numbers at all in *Taṣrīf* XXIX.11 s.v. بحران (S II 433₁₁₋₁₃). On the subject of critical days in the Galenic tradition, cf. particularly the introduction to the edition and translation of the Arabic version of GALEN's *De diebus decretoriis* in COOPER 2012: 3–76, to be complemented with the critical remarks made in LANGERMANN 2012.

¹ For this equation, see the analysis of possible geolectal markers in Chapter 9.

² See also Chapter 9.

³ In *Sec. loc.* III.1 GALEN reports that the fat of geese and hens was one of APOLLONIUS' choice remedies for earaches, as well as a mixture of gall and juice of leek (K XII 615₁–616₆; see an echo of these prescriptions in *Nat* III ḤAWĀṢṢ III.11.6–7[10]). He also informs that ARCHIGENES would recommend an instillation of squirrel fat (σκιούρου στέαρ) to the same effect (K XII 623₁₆₋₁₇). He makes repeated mention of the drug of fats (τὸ διὰ τῶν στεάτων [φάρμακον]) too (K XII 602₁₋₂, 610₁₃) and there are, for sure, several additional references to these two animal substances there, but the only fish mentioned in the whole chapter is the enigmatic καλλιώνυμος (also known as οὐρανοσκόπος elsewhere and positively different from ἔγχελυς): «τῷ δ' αὐτῷ καὶ μετὰ χολῆς βοείας ἢ αἰγείας ἢ χελώνης θαλασσίας ἢ τοῦ καλλιωνύμου διειμένου χρωῶ» (K XII 652₇₋₈). This, however, was only one of several fishes involved in otalgic remedies at the time, cf. PLINY, *NH* XXXII.7.[25] «*Auribus utilissimum batiae piscis fel recens, sed et inveteratum nitro, item bacchi, quem quidam mizyzenem vocant, item callionymi cum rosaceo infusum*» (J–M V 756–8). In any case, the presence of the hiera logadion, Rāziqī jasmine oil, and galangal confirms the late (quite probably post-Byzantine) origin of the materials from which the author is drawing.

east and in the west, is quite invariably called *bardī*. The exceptional presence of this word in this particular locus may be reflective of a context that is hard to reconstruct.¹

Ther 1.5 — On the mouth

A wide range of ailments of the mouth and the tongue is covered in this chapter in which diseases of the teeth (decay, caries, toothache) and the gums (bleeding) are discussed alongside specific conditions of the tongue (roughness, pustules, swelling), as well as general paralysis of the uvula, the epiglottis (*ǧalṣamah*), and the tongue. The text of ZUHR's *Nuǧḥ* is of no avail for this chapter or for the following ones, since it jumps from the nose to the throat (see *Ther 1.8* below). I shall therefore be extremely cautious in my assessment of any "original" traits in this segment of *Natāʾiǧ*.

In *Ther 1.5.4–5* two instances of minimal diagnosis are found. In the case of loose teeth, inspection of the teeth is required (*«fayanḍuruhā»*): if the complaint is an old one and the roots of the teeth are dead, there is no hope for healing and the only possible remedy is to brace them with gold (*«tašbikuhā biddahab»*).² Rudimentary aetiology is then reflected in the treatment of foul-smelling breath, and according to the author the several possible origins of this condition necessitate differential therapy. Thus halitosis can be caused by some decayed tooth, which calls for either dental extraction (if it is the roots that are corroded) or a series of preparations to be chewed (*√mdǧ*) as well as dentifrices (*sanūnāt*).³ It can also have its origin in the stomach (which is easily known by

¹ For the same instructions involving *bardī*, cf. especially IBN ALĠAZZĀR, *Zād* II.12 (B–K 3_{5–6} | T 167_{16–18}); AZZAHARĀWĪ, *Tašrīf* II.III.8 (S I 97_{31–33}); and also twice in ALHĀŠIMĪ, *Maǧālis* I.I.22 (K 52_{2–18}). According to ARRĀZĪ a "tube of reed" (*«anbūbatu qaṣab»*) is required for this operation in *Taqāsīm* XXXVII (H 140_{14–1412}), which in the Hebrew and Latin translations is rendered unanimously as a "tube of dill" (*«עשן דליל»* in *Hillūq* 18v 11 and *«cannula de aneto»* in *Divisionum* 62rb 27). It may not be a translational mistake, however, since PSEUDO-TABIT B. QURRĀH does likewise mention a tube of dill (*«anbūbatu šibitt»*) in *Daḥīrah* IX (S 454–5). A pierced reed (*«καλαμίδα διαμπόξ τετραμένην»*) is recommended to this effect already in PSEUDO-DIOSCORIDES, *Euporista* I.62 (W 175_{18–19}) and the exsuction (*«ὁ ἐκμυξισμός»*) can be implemented either through the mouth or *«διὰ καλαμιδος»* according to ARCHIGENES *apud* GALEN, *Sec. loc.* III.I (K XII 656_{13–14}). For the Amazighic word *tābūdā*, see Chapter 9.

² Cf. IBN SARĀBIYŪN's recommendation, when all other remedies have failed, *«Si autem non firmantur cum hoc, tunc oportet ut cauterizentur eorum radices et stringantur cum catenulis auri et argenti»* in *Breviarium* II.XVI (V 15ra 61–63). According to Islamic medicine, golden brackets would have been prescribed by MUḤAMMAD specially for the canine teeth (*tanāyā*), cf. IBN AS-SANĪ, *Nabawī* 113_{3–11}; also ATTIRMIDĪ, *Ġāmiʿ* XXIV.30 ḥadīṯ no. 1882, in which a pre-Islamicate practice of bracing the teeth with gold (*«annahum šaddū asnānahum biddahab»*) is reported (Q III 78_{11–12}).

³ With regard to this latter category of drugs, the "dentifrice of Indian spices" is perhaps too vague

the stench becoming more intense whenever the patients raise their voice) and for such cases stomachics and other purging drugs are prescribed. If the cause of the fetor lies in the head, it should be known from the breath being nasal (*ḥayāšīmī*). Still the ailment can be chronic, since childhood, in which case it is incurable; or it can be recent, and then its treatment involves an even longer series of cathartics than before.

No less than four different recipes are appended to this epigraph: an aloe-based stomach pill («*ḥabbu lmaʿīdah*»), the middle *στομαχικόν* pill, an errhine borrowed from GALEN within an explicit quote,¹ and finally a wick that must be soaked in a preparation before being introduced into the nostrils.

The aforementioned ubiquitousness of high-sounding (and in all likelihood hardly available) remedies is perfectly reflected in *Ther* 1.5.3 by the recommendation of plastering sagzenea, philonium, the Indian *muḡīt*, or the great theriac all over aching teeth. This costly prescription goes back to Byzantine medicine and despite its apparently limited practicality it is passed on, almost universally, as a handy remedy and seems to have been equally fashionable amongst some physicians in Andalus—which certainly begs the question about the degree of bookishness of some alleged medical practices.² A little later in *Ther* 1.5.5 another

a reference to be easily identified, but the very specific denomination “Alḥaḡḡāḡ b. Yūsuf’s dentifrice” should prove easier to check against the corpus. So far I could find only one parallel in *Taṣrīf* XXI.1.68 «*ṣifatu sanīni lḥaḡḡāḡ*», which shares a basic composition (burnt pomegranate peels, burnt date stones, burnt goat hooves, oak galls, pepper, pyrethrum, Andarānī salt, and saffron) and is to be used every day (S II 104₇₋₁₀).

¹ The nature of the drugs known as *saʿūṭ* and the meaning of its corresponding verbs are perfectly described from native lexicographic sources by LANE in *AEL* 1364b s.r. *سعت* (mark that in Andalus *saʿūṭ* was also the metonymical name of a herb, cf. CORRIENTE, *DAA* 252b *{sʿt}). Such drugs require pouring the medicine into the patient’s nose and therefore ‘errhine’ (from Greek ἔρρινον, of transparent etymology), which I borrow from LANE, is best suited to translate the Arabic term, thus avoiding the unfortunate connotations of ‘sniffer’ or ‘snuffer’. Let it be noted, however, that a *saʿūṭ* does not necessarily induce sneezing (in the case at hand it certainly does not) and thus the traditional equivalent ‘sternutatory’ (or ‘sneezer’) may be slightly misleading in some cases.

² Cf. «καὶ τῆς θηριακῆς δὲ καὶ τῆς Ἑσδρα ἀντιδότου λαβῶν καὶ διαλύσας ἐψήματι δίδου διακατέχειν ἐν τῷ στόματι. καλῶ δὲ ποιεῖ καὶ ἡ Φίλωνος ἀντίδοτος διαχρισμένη καὶ ἡ σώτειρα» in AETIUS OF AMIDA, *Iatrica* VIII.30 Θεραπεία τῶν διὰ ψύξιν ὀδυνωμένων τοὺς ὀδόντας (O II 441₁₀₋₁₂); also «καὶ ἡ Φίλωνος ἀντίδοτος περιπλασσομένη τῷ ὀδόντι ἀνωδυνίαν ἐμποιεῖ» in PAUL OF AEGINA, *Pragmateia* III.XXVI.2 Πρὸς φλεγμονὴν ὀδόντων (H I 198₂₅₋₂₆). This practice is continued by IBN SARĀBIYŪN, who prescribes filling a caries with sagzenea or theriac in *Breviarium* II.XVI (V 14vb 62–65). Applying just the four-drug theriac over aching tooth roots is recommended, in turn, by ARRĀZĪ in *Taqāsīm* XLV (H 162₁₀) ≡ *Divisionum* XLV (V 63ra 10–11) ≡ *Hilluq* XLVII (P 22v 19–20); philonium, sagzenea, and theriac by IBN ALĠAZZĀR in *Zād* II.18 (B–K 360₂ | T 183₁₄₋₁₆). For Andalus, there is the invaluable testimony of ALHĀŠIMĪ on an analogous use of sagzenea, philonium, and the four-drug theriac by his master ATTAYMĪ, which points once again to some common written source, cf. *Maǧālis* I.1.24 (K 63₁₋₂).

pill bearing a Persian name (*ḥabbu ššabyār*) is prescribed twice.

This chapter is quite rich in items deserving lexical commentary. These include an attestation of the verb *šallala* in its meaning ‘to rinse’ («*wayušallalu lʿfam*» ‘let the mouth be rinsed’)¹ as well as several geolectally marked phytonyms. Thus, the marginal form *kabbār* (instead of *kabar*) for ‘caperbush’ (≡ *κάρπαρας*, *Capparis spinosa* L.) is quite probably representative of local use, as it seems to have been unknown outside the westernmost region of the Arabic-speaking world. A fortiori the Amazighic gloss *tākawt/tākūt* for *furbīyūn* ‘resin spurge’ (≡ *εὐφόρβιον*, *Euphorbia resinifera* O.Berg.) reflects a specifically western tradition.

On the other hand, the gloss *ḥabbu rraʿs* for *maywīzaǧ* ‘stavesacre, lice-bane’ (*Staphisagria macrosperma* Spach, formerly *Delphinium staphisagria* L.) may not be particularly significant as a geolectal marker since this name is also documented in Qayrawān and apparently even further east in the early corpus of Syro-Arabic and Graeco-Arabic translations, but the much rarer (and perhaps exclusively Andalusī) synonym ‘Syrian fennel’ («*albisbāsu ššāmī*») glossing anise (*anīsūn* ≡ *ἄνησσον*, *Pimpinella anisum* L.) has some undeniable historical interest.²

Amongst non-botanical terms there is *ǧalšamah*, a well-known Classical Arabic name for the glottal region that ALʿILBĪRĪ quite probably inherits from his source, and also a double philological crux: the names of the two veins in the lips (which appear to be called «الشارفان» here) and those of the two veins under the tongue (transmitted in P as «الطالعان»?).

¹ If the lexeme $\sqrt{šll}$ is common standard Arabic with a variety of meanings (cf. IBN MANḌŪR, *Lisān* XI 360b 19 – 366b 2), this particular use of the intensive D-stem seems to be characteristic of western dialects. It is marked as Maǧribī (“au Maghrib”) by DOZY in *SDA* I 780b, but it is also documented for Andalusī Arabic by CORRIENTE, *DAA* 289b *{šLL} (with no specific references).

² On all these lexical items, see Chapter 9/GLOSS.

Ther 1.6 — On the nostrils

The brief chapter devoted to the nostrils¹ is perhaps more characteristic of the remainder of the section of THERAPEUTICS (and actually of *Nuǧḥ*) with its short straightforward prescriptions that are most often bluntly juxtaposed and only rarely articulated into a coherent discourse. Although a certain logical course of action can be sometimes intuited (often with the help of parallel loci), the exact order of the different steps to be taken is almost never explicitly stated and the inconsistent use of the conjunctions *wa-* and *aw* does not allow for any certainty as to when the different operations are complementary to each other and when they represent alternative treatments. In this respect it can be argued that a raw, quasi-diplomatic, edition of the text would have offered the contemporary reader a more realistic taste of its peculiar style, but I have nonetheless favoured an extensive use of punctuation—the abruptness of the original syntax being to some extent reflected in a deliberate (ab)use of the *point à la ligne*.

The ailments discussed in this chapter include: anosmia (*inqiṭāḥu ššamm*) and discharge from the nostrils² in a new collocation of two quite different conditions (not all cases of anosmia derive from catarrh, nor does a running at the nose necessarily translate into a loss of smell) that are assigned a common treatment. Moreover, the underlying and mostly silent aetiology so characteristic of *Nuǧḥ/Ther* can be seen here in the prescription of such drugs as purge black bile and phlegm from below (*maššā*).

Then another combined epigraph is devoted to swellings and heat in the nose,³ which includes also intranasal warts or polyps (*bawāsīr*)⁴ but not ulcers

¹ While being part of the basic lexicon of Classical Arabic *almanḥarān* is quite uncommon as an element of a chapter title, where it is rather *alʔanf* ‘the nose’ that features most often. According to CORRIENTE *manḥar* is indeed “más and[alusí]” than *anf* (cf. *LAPA* 8 **ʔnf*), which seems to be confirmed by late Ġarnāṭī Arabic «nariz del onbre *mānḥar manáḥir*» and «hedor de narizes *nutúnat almanáḥir*» in *Vocabulista arávigo* 320b 11 and 273a 10–11, respectively (= *LAPA* 199b–200a **nrx* and 199a **ntn*). Unfortunately ZUHR’s omission of the corresponding chapter in *Nuǧḥ* does not allow to draw a conclusion as to the originality of this rubric.

² Nasal rheum or drip here (*sayalānu lʔanf*) is apparently lexically (and also conceptually?) distinguished from catarrh (*zūkām*) affecting the lungs in *Ther* 2.2, which might somehow mirror the difference established by GALEN between *κατάρροος* (running from the head into the mouth) and *κόρυζα* (running into the nose), cf. *Caus. Symp.* III.11 (K VII 263₅₋₇). In two instances in *Nat* II.1, in turn, *zūkām* would seem to reflect rather undifferentiated *κόρυζα*.

³ The presence of “heat” («حرارة») as a nosological category is rather shocking here, yet it does not seem that it should represent a mistransmission of «حزازة» as elsewhere, nor do the three instances of the same spelling support the possibility of a misreading for *خراج* ‘abscess’. After all, the *φλεγμονή* of the Greek nosological tradition was conceived as a hot inflammation (≡ *alwaramu lḥār* in Ḥunaynī terminology).

⁴ The gloss “warts” («*attaʔalil*») confirms that the author had indeed «بواسير» (and not its quasi-homograph *نواصير / نواسير* ‘fistulae’) in mind, for this synonymy is implied also in *Ther* 4.3.5 with

(*qurūḥ*) as listed in the initial catalogue. The chapter ends with a relatively long series of remedies for nosebleed, and the “stench” («*natn*») mentioned last in the summary is nowhere to be found in the body of the text.¹

Although the remedies prescribed for these conditions are overall quite standard, both the terminology for the diseases and a few ingredients will certainly benefit from further scrutiny. On an incidental note, a solution for a crux “*and seven leaves of fresh* —” involving a meaningless misreading in P and for which no help could be gained from ZUHR is provided by a recipe noted down by IBN WĀFID in *Wisād*. The unidentified herb is *mardaquš*, and the conspicuous presence of musk and ambergris amongst the ingredients of the recipe confirms its non-Galenic origin.²

regard to anal haemorrhoids. Incidentally, in view of the collocations «*min nāsūrin walaḥmin nābit*» and then «*fi nmawābiti wannawāsīr*», and also of the treatment prescribed (namely excision and cauterization), the parallel loci in AṬṬABARĪ, *Firdaws* IV.III.8 (§ 182₁₉, 183₁) probably ought to be emended as «*باسور*» and «*بواسير*» respectively (this meaning is further confirmed by «*tilka zzawāʿid*» in 183₁). In a parallel locus in IBN ALĠAZZĀR, *Zād* II.13 manuscript witnesses are quite evenly distributed between «*بواسير ونوابس*» (= T 171₃ = manuscripts SORD in BOS–KĀS’ edition) and «*نوابس ونوابس*» (= B–K 318₅, following manuscripts ITC), which the editors translate as “polyps or excrescences”; then «*البواسير والعقد الكائنة في الأنف*» (= T 171₇ = MSS RDCSTO) is also edited as «*النوابس...*» (= B–K 318₈, based on the sole testimony of manuscript I) and rendered accordingly as “polyps and tumors”. The basic assumption of my remark is, of course, that despite some occasional hesitation (especially as to the exact spelling and pronunciation of *s/š*) a quite clear distinction between wart-like excrescences (*باسور*) and fistulae (*ناصور*) obtains overall in the medical corpus. For the particular case of nasal excrescences (some of which were of the polyp and ḏḏαῠα kind), mark ALĠAWHARĪ’s definition of *basūr* as “an ailment that occurs in the seat and also in the inside of the nose” (cf. IBN MANḌŪR, *Lisān* IV 59b 21–22 s.r. √*بسر*).

¹ Besides a literally stinking nose, some sort of cacosmia may be intended here, by which the patient perceives a foul odour without any apparent external cause, cf. IBN ALĠAZZĀR, *Zād* II.13 for a general discussion of dysosmia (B–K 312₁–320₅ | T 169₂–171₁₆), with a reference to «*arrāʿiḥatu lmunkaratu fi lmanḥarayn*» (B–K 318₃ | T 171₁). BOS and KĀS translate the rubric as “foul-smelling nose” and identify it with ḏḏαῠα, but such a polyp is actually just *one* of the causes for this complaint according to IBN ALĠAZZĀR himself. In Andalus AZZAHARĀWĪ notes down the treatment for nose stench («*natn*») caused by hot vapours, cf. *Taṣrīf* II.III (S I 89₃₂–90₄). See also «*natnu alʿanf*» in AṬṬABARĪ, *Firdaws* IV.III.8 (§ 183₄); ARRĀZĪ, *Taqāsīm* XLIV (H 160) ≡ *Divisionum* XLIV *De fetore in naso* (V 64r_b 43–52) ≡ *Hillūq* XLVI (P 22r 19–22v 7), to be added to the references provided by BOS and KĀS in their edition of IBN ALĠAZZĀR’s *Zād* (= B–K 313 n. 460). An additional Byzantine precedent can be found in PSEUDO-GALEN, *Rem. parab.* II.v.2 Πρὸς δυσωδίαν μυκτῆρων (K XIV 416₃₋₆) and also in *Rem. parab.* III 517₁₂–518₂.

² Cf. IBN WĀFID in *Wisād* V.10 (A 80₁₁₋₁₅).

Ther 1.7 — On the face

A further example of quasi-telegrammatic style is provided in this chapter, from which the usual preview of the ailments is missing, perhaps through clerical eyeskip.¹ In its extant form, the text of *On the face* comprises the treatment of erysipelas (*humrah* ≡ ἐρυσίπελας), pimples and pustules (*baraš* and *batr* ≡ ἔξ-ἀνθημα), freckles (*kalaf* ≡ ἔφηλις), and ulcers on the face, as well as facial palsy (*laqwah* ≡ παράλυσις) and scanty or deciduous eyebrows (corresponding to μαδάρωσις and μίλφωσις in the Graeco-Byzantine tradition).²

In the therapy for hemiplegia in *Ther 1.7.4* the presence of *ḥiyāršanbar* («خيارشنبر») ‘purging cassia’ (*Cassia fistula* L., also known as ‘Indian laburnum’) seems to be the result of imperfect transmission. First and foremost, an “oil of purging cassia” («دهن الخيارشنبر») is quite unprecedented in the medical corpus; then, parallel loci suggest that it is rather *ḡundabādistar* («جندبادستر», ie castoreum) that ought to be dissolved in jasmine oil for the preparation of an errhine.³ The reading of P is unambiguous in both loci and since it is impossible to ascertain whether this mistransmission goes back to the author himself (who may have found it thus in his source) I have retained it in the edited text.

A parablepsis can be noticed in *Ther 1.7.5* in «وطلا عليه حافر وراش | حزبا محزوقه», where the unlikelihood of such a basilectal syntactic construction and, above all, the fact that chameleons can hardly be said to have hooves seem to indicate that some word has been inadvertently skipped by the copyist, who in fact had just

¹ While there are a few instances of rubric-less transition from the summary to the body of the chapter, this one would be the only chapter in THERAPEUTICS lacking an initial catalogue of diseases. If some text is actually missing, it is impossible to know whether *Erysipelas* was the first epigraph or was originally preceded by some other skin condition.

² The above equivalences to the Graeco-Byzantine terminology are a simplification of the results of an ongoing survey of the corpus (the matter is particularly complex with regard to the exact identification of *baraš*, which often features in collocation with *namaš*).

³ Castoreum as an ingredient of errhines is prescribed for paralysis (and also epilepsy and hemiplegia) very much everywhere in the corpus, as for instance in AṬṬABARĪ, *Firdaws* IV.II.5 (§ 143₈, 146₅); but cf. particularly PSEUDO-TĀBIT B. QURRAH, *Dahīrah* VI.2 (S 25₈₋₉ | 21–22) for the use of both castoreum oil («دهن الجندبادستر») and beaten up castoreum in a virtually identical context. These two elements are repeatedly mentioned also in the treatment of hemiplegia in IBN ALĠAZZĀR, *Zād* I.23 (B–K 136₁₀₋₁₄₀₁ | T 125₃₋₁₃₁₉); only castoreum (but not its oil) features, in turn, in AZZAHRĀWĪ, *Taṣrīf* II.II.17 (S I 75₃₁₋₃₂). The use of castoreum against spasms and paralysis goes back to Greek sources; purging cassia, on the contrary, was unknown to DIOSCORIDES and GALEN, and in the Islamicate tradition it is an eastern import, as reflected in its name *ḥiyāršanbar* (from Persian *ḥiyār-šanbar*, cf. VULLERS, *LPLE* 767b) and in the synonyms ‘Indian cucumber’ (*qittāʿun hindī*) and ‘Indian carob’ (*ḥarrūbun hindī*) by which it was also known, cf. IBN ĠANĀH, *Talḥiṣ* [875]1031, the former from ARRĀZĪ (cf. *Alḥāwī* XXII 293a 3), the latter from IBN ISḤĀQ. The same eastern connection is reflected in the alleged Greek name «qārātiyā hindī» (where κεράτια = *ḥarnūb*) recorded in *Sumdah* [1805] خیار شنبر (B–C–T 189₂₆), as well as in the “modern” name *algarrova de Egypto* in DE LAGUNA 1570: 21₄₉.

missed a whole line and then partially corrected his mistake on the margin.¹ There is, indeed, a remarkable accumulation of medically assimilated specific properties in this chapter (pigeon droppings, urine of dogs and camels, hooves and head), which is actually rather exceptional in THERAPEUTICS.

A trivial instance of self-referentiality is found in *Ther 1.7.3 On ulcers on the face*, where a cross-reference to the preceding chapter 1.6 *On the nostrils* is provided—which, in view of other similar instances probably goes back to IBN MĀSAWAYH’S original text.

Ther 1.8 — On the throat

Chapter 1.8 comprises the treatment of quinsy (*dubāḥah* ≡ *κυνάγχη* / *συνάγχη*),² coarseness and roughness of the throat (including aphonia), inflammations of both the throat and the uvula, leeches, and scrofulas. At this point ZUHR’S *Nuǧḥ* becomes again relevant as it does transmit IBN MĀSAWAYH’S original chapter of the throat (or at least a substantial excerpt from it). With some minimal differences (for instance, *Nuǧḥ* reads consistently *dubāḥ* for ‘quinsy’, but this may be an authorial update of the terminology) ALʿILBĪRĪ follows quite closely his model and his own reproduction of the source text shows that either the copyists or ZUHR himself erred in the ascription of some passages.³ Moreover,

¹ Although not impossible, this kind of substandard *idāfah* would be rather suspect in a text that is remarkably correct with regard to the received rules of Classical Arabic. A plausible candidate to be the missing animal would be the goat, whose hooves are recommended against alopecia, bald patches, etc. cf. for instance IBN ʿALĪ, *Ḥayawān* B [22.43] (R 232); AṬṬABARĪ, *Firdaws* IV.II.1 (§ 134₂₂₋₂₃). This property was borrowed into the Islamicate tradition from GALEN: «Ὀνυχας αἰγῶν [≡ «أظلاف المعز»] ἔνιοι καθέντας, εἶτα τὴν τέφραν ὄξει δεύοντες ἀλωπεκίας καταχρίουσιν, ὥστ’ εἴη ἂν καὶ ἡ τοιαύτη τέφρα λεπτυντικῆς δυνάμειως» in *Simpl. med.* XI.I.17 Περὶ ὀνύχων αἰγείων καὶ ὀνείων (K XII 341₁₂₋₁₅) ≡ *Mufradah* XI.12 ذكر الأظلاف والحوافر (E 174r 5–7).

² In the Arabographic tradition *ḥunāq* and *dubāḥah* are mostly synonymous, cf. the unambiguous gloss «الذنبخة (وهي الخناق)» in IBN ALĠAZZĀR, *Zād* III.1 (T 2086–214₁₅). The two terms are often used concurrently in any given text, cf. AṬṬABARĪ, *Firdaws* IV.V.1–3 (§ 199₁₆ and 200_{11|13} for ذنبخة and then 201₂₃ and 202_{3|7} for خناق); also AZZAHRAWĪ, *Taṣrīf* II.IX.3 (S I 125₁₀₋₁₂₇₂₀). In *Natāʾiǧ*, the terms *dubāḥah* and *ḥunāq* (especially in the plural *ḥawānīq*) are represented in all sections. For a survey of the different realisations of the word (acrolectal *du-* and *di-*, basilectal *da-*, all three of them with or without a quiescent *-b-*), cf. IBN MANḌŪR, *Lisān* II 438a 1–18. The form *dabḥah* explicitly ascribed to the populace is the one documented in Andalus, cf. CORRIENTE, *DAA* 191a *{ḌBH}. This term appears to reflect, on the other hand, an autochthonous Arabic tradition of pre-Islamic nosology, as no parallel nosonym was developed in Aramaic from the cognate root \sqrt{dbh} .

³ Cf. ZUHR, *Nuǧḥ* I.5 (A 1086–110₂₅ | B 185₈₋₁₈₇₁₀), but most of that chapter is a lengthy digression by the Ḥībili physician on the treatment of quinsy. As for the confusion of quotes and authorial remarks, there is perhaps some ground to suspect that ZUHR may not have been completely honest in his indications and that he may have usurped some of the lines of his source, as shown most compellingly by “his” references to AHRUN’S book or by some passages marked as “ZUHR” that have an exact parallel in *Natāʾiǧ*.

ZUHR's version includes a new misunderstanding of his source: his "bleeding gums" («ودم اللثا» on both manuscripts) has no place in a chapter on the throat, and the treatment prescribed for this ailment shows beyond doubt that it corresponds to ALʿILBĪRĪ's "swollen uvula" («ورم اللهاة»), which in a less careful spelling would have been copied as ورم اللهاة and then grossly misinterpreted by an even less careful reader).

When dealing with quinsy in *Ther* 1.8.1 an exceptional instance of prognosis is found: if the boil is hot and deeply seated («*ǧāʿir*»), the patient shall perish within four days, or seven at the most. It is possible that this datum was already in the source text, for ZUHR includes a similar (but not identical) reference to the fourth or fifth day for which he explicitly cites GALEN's *Buḥrān* and *Ayyāmu lbuḥrān*. In any case, this kind of medical prediction goes back to the Hippocratic collection and particularly to the catalogues of signs gathered there in *Progn.* and *Prorrh.* (of which the former was translated into Arabic as *Kitābu taqdimati lmaʿrifah*),¹ but it is also well represented in *Aphor.* An important addition to this corpus is the pseudepigraphic Ἱπποκράτους νοήματα / *Prognostica Ypocratis* and what appears to be its Arabic offspring the *Capsula eburnea*, both of which represent a full-blown subgenre of "aphoristische Todesprognostik".² The prognostic interpretation of the sign appended here in *Natāʾiǧ* seems to echo the genuine Hippocratic tradition and it can be said to be essentially a somewhat divergent rewording of a passage on the prognosis of quinsy that is fairly well documented in the Islamicate corpus.³ Now, the exact wording of our

¹ Unlike the received Greek text the Arabic translation is divided into three discourses, cf. KLAMROTH 1866: 201–202; ULLMANN 1970: 29. An Arabic translation alternative to that of ḤUNAYN and already available to ALYAṢQŪBĪ is edited from three manuscripts by KLAMROTH 1866: 204–233.

² Cf. SUDHOFF 1915b: 111. Despite being more than a century old, SUDHOFF's compact study remains unsurpassed as far as the Greek and the Latin transmission of this series of texts is concerned. In his hypothesis (followed by ULLMANN 1970: 33–34) the text Ἱπποκράτους νοήματα τε καὶ σημειώσεις περὶ ζωῆς καὶ θανάτου (which is transmitted in at least eleven manuscripts from the 15th–16th centuries and of which he presents a first edition) would reflect the primitive form of a brief canon of prognostics compiled in fourth/fifth-century Alexandria. This text would then have entered the Latinate tradition through southern Italy at some point between the 6th and the 8th centuries, whence the oldest witnesses to the *Prognostica Ypocratis* / *Prognostica Democritis* dating from the 9th c. and for which a critical edition is also included by SUDHOFF. On the other hand the pseudo-Hippocratic treatise would have known a wide circulation in the Islamicate world and one of its Arabic versions (for which see below) provided in Andalus the Vorlage for GERARD OF CREMONA's translation *Liber veritatis Ypocratis*, which in turn would eventually circulate under the title *Secreta Ypocratis* and was translated into a number of European vernaculars (both Germanic and Romance) as well as into Hebrew (cf. MUSCHEL 1932). There is, moreover, an equally brief text of the same subgenre that bears the parallel title *Prognostica Galieni* and which can be ascribed "at the latest to a ninth-century compiler" (cf. NUTTON 1970: 99).

prognostication (and particularly the qualification *ǧāʔir* for the swelling) is apparently unparalleled and like so much of the Hippocratic and Galenic (and also pseudo-Galenic) material used by ALʔILBĪRĪ the origin and transmission of this passage requires further examination.¹

A cross-reference “the Roman salve [*almarhamu rrūmī*] mentioned at the beginning of the book” in *Ther* 1.8.6 *On scrofulas* does not correspond to anything in the extant text of *Natāʔiǧ* but may refer to an item actually present in the lost ending of *Ther* 1.1 *On the scalp*, where the treatment of both ulcers and wounds on the surface of the head must have been discussed and it is therefore plausible that this Roman salve may have been mentioned (and even a recipe for it provided) there. In the parallel locus in *Nuǧħ* ZUHR seems to have taken over, once again, IBN MĀSAWAYH’s place but he only alludes to the *diyāħilūn* (≡ δία χυλῶν). Now, according to ZUHR’s excerpts the epigraph on wounds on the scalp in *Nuǧħ* I.1 mentioned at least three different salves borrowed from GALEN: the one known as *aškā*² (thus in A, the beginning of the word is unreadable in B), the βασιλικόν, and the τετραφάρμακον (here *marhamu lʔarbaʔ*). Given that so far I have found no external evidence for the existence of a “Roman salve” in the corpus, I am inclined to interpret it as a reference to either the first enigmatic salve in the above triad or to some other preparation that was perhaps included

³ A passage from HIPPOCRATES on the σημείωσις of quinsy (قيض) is quoted by AʔTABARĪ in *Firdaws* IV.v.2: “If it does not appear on the neck, it shall prove lethal on the first or fourth day; if it does appear on the neck, it is a more positive sign; if a boil [مزر] appears on the throat, that is a good sign [...]” (§ 200₁₃₋₁₆). Also AZZAHRAWĪ, *Taṣrīf* II.viii.2 specifies that the worst of all kinds of quinsy is the one in which the swelling does not manifest itself either inwards or outwards— “this one sometimes kills in the first, the second, or the third day” (S I 125₃₋₆). According to IBN SĪNĀ it is dog quinsy (the one known as *kalbī* = κυνάγχη) that is said to kill between the first and the fourth days, cf. *Qānūn* III.ix.6 (B II 199₂₈₋₂₉). For the origin of this doctrine, cf. HIPPOCRATES, *Progn.* 23 «αἱ δὲ κυνάγχαι δεινόταται μὲν εἰσι καὶ τάχιστα ἀναιρέουσιν, ὀκόσαι μῆτε ἐν τῇ φάρυγγι μῆδὲν ἔκδηλον ποιεῖουσι μῆτε ἐν τῷ ἀρχένι, [...] αὐται γὰρ καὶ αὐθημερὸν ἀποπνίγουσι καὶ δευτεραῖαι καὶ τριταῖαι καὶ τεταρταῖαι» (L II 176₂₋₇ | K I 103₄₋₉) ≡ *Taqdimah* III «*waʔammā ddubahatu*, [...] *faqad yaħtaniqu fihi šāħibuhū fi lyawmi lʔawwali aw fi ttāni aw fi ttāliṭi aw fi rrābiʔ*» (K 228₃₋₇ | E 41₁₋₅ | M 26₁₉₋₂₇), cf. also HIPPOCRATES, *Aphor.* VI.37 and VII.49 (L IV 572₃₋₄, 590₁₂₋₁₃) ≡ *Fuṣūl* V.10 and VII.49 (T 57₃₋₄; B 20_v 7-9, the latter aphorism is missing from TYTLER’s edition). The *seventh* day is mentioned, on the other hand, as the limit of the life expectancy of patients that, having escaped from quinsy, see how their ailment moves into the lungs in HIPPOCRATES, *Aphor.* V.10 (L IV 534₃₋₅₃₆) ≡ *Fuṣūl* V.10 (T 41₁₋₁₃).

¹ Despite its main focus on pustules and boils as signs for prognosis, none of the texts published by KUHNE offers a parallel for our locus. In addition to her preliminary studies (cf. KUHNE 1985, 1988), the edition of *Kitābu dduǧ* is found in KUHNE 1989a, 1989b, 1990a; and *Fi lmawti ssariʔ* in KUHNE 1990b; to which a Judaeo-Arabic text edited in AGUIRRE DE CÁRCER 1986: 30-39 should be added; for IBN SĪNĀ’s metrical composition on the subject, cf. KUHNE 1987. Her research on the Aljamiate version (cf. KUHNE 1986) has been recently expanded to include the Iberian transmission of related texts (cf. PENSADO 2014: 48-52).

in the original *Nuǧh*. In fact, several other salves or liniments (*marāhim* ≡ ἔμπλαστροι) are prescribed in this epigraph in order to cleanse the scrofulas: the basilicon, the four-drug salve, and the Egyptian salve.¹

Still amongst the prescriptions against scrofulas, a compound cathartic drug labelled as كسج is mentioned here for the first time. It is inherited from *Nuǧh*, where it is prescribed at least four times for different ailments. It is twice referred to as “Galen’s *kustaǧ*” (cf. A 1056₉ | B 182_{14|17}) with an explicit reference to AHRUN’ s book; it is also twice explicitly equated to “Galen’s pill [*ḥabb*]” (cf. A 1076, 108₈); and there is still an additional unqualified reference to *kustaǧ* (cf. A 126₅). The two manuscripts are quite consistent in their spelling *k-s-t-ǧ* (in B actually كسج). This is, no doubt, the same term used by AṬṬABARĪ first as a specific type of preparation (like pill, pastille, lohoc, etc), then as the first element of the drug name «كسج السكينيح». None of the texts helps, of course, with the vocalisation of the word and at least as far as the Andalusī tradition is concerned /-s-/ seems to be better supported, which is indeed the original Persian form of the word.²

It is worth noting that even if the ashes of vipers enter the initial recipe against scrofulas, such classical remedies as the drugs made of the ashes of swallows or white dog excrements are not mentioned here, which suggests again an overall quite clear-cut distinction in the author’s (ie IBN MĀSAWAYH’S) mind between conventional therapeutics and *Ḥawāṣṣ*—which does not however negate their complementariness.

Ther 2.1 — On the chest

An explanation of the fourfold structure of the human body introduces a new textual unity that comprises three separate chapters on the chest, the lungs, and the heart. The chest (*ṣadr*) is here explicitly compared to the bellows (*kīr*) as to its function in that it takes “a gentle breeze of air” («*annasīma llaṭīfa mina lhawā?*») into the heart and brings forth the smoky vapours that cloud it. Comparison to the excerpt transmitted by ZUHR shows that either his Vorlage was remarkably defective or he was as tasteless in his abridgement as he was usually careless in his reading of the source:

¹ The non-identification of the basilicon as the four-drug salve is reflected also by AZZAHRĀWĪ, who notes down the formulas for both the greater and the lesser basilica, neither of which includes any fat in its recipe, in *Taṣrīf* XXIV.37–38 (S II 194_{18–21}), whereas he registers «*almarhamu l’aswadu rrubā’i*» (ie a black τετραφάρμακον) that does require animal fat in *Taṣrīf* XXIV.46 (S II 195_{8–11}). The Egyptian salve («*almarhamu lmiṣri*»), in turn, is mentioned several times in *Taṣrīf* and also in ALHĀŠIMĪ, *Maǧālis* I.1.22|42|52 (K 53₃, 101₆, 113₆). It is worth noting that neither of these salves is included amongst the recipes gathered by IBN ṢABDIRABBĪH in *Dukkān* XVII في عمل المراهم (L 64v 21 – 67r 12).

² See the *Complementary notes on polypharmacy*.

Nuḡh I.6 (A 110₂₆₋₂₈ | B 187₁₂₋₁₃)

وأما منفعته: كذا الكبد في إدخال الرياح
على البدن وإخراجها عنه. وهو حجاب القلب
والرئة، وفي داخله يكون النفس. ويُسمونه
«الكبير»، وينور البدن.

كدا الكبد [B، — الكبد A | وينور] AB.

Ther II.2.1

فأما منفعه: فإنه كالكبير في إدخال التَّسِيمِ
اللطيف من الهواء إلى القلب وإخراج الأبخرة
الدُّخَانِيَّةِ الَّتِي تَتَمُّ القلب. وهو حجاب القلب
والرئة، وفي داخله تكون الأنفاس. ويُسمونه
«تتور البدن».

On the other hand, IBN MĀSAWAYH's formal distinction between complaints of the chest (which include cough, difficult breathing, and haemoptysis) and diseases of the lungs (asthma, catarrh, and cough) shows some originality.

Within *Ther* 2.1.1 pleurisy (*dātu lḡanb* ≡ πλευρίτις) is mentioned as one of the possible causes of chest-ache, to which the following prescriptions are related. The catalogue of compound drugs is enriched precisely with those mentioned for the treatment of pleurisy. There the first therapeutic mention of the hepatic of turmeric (*dabīd kurkumā*) and the Roman philonium are found in *Ther* 2.1.1, then hepatics (*dabīdāt*) in general are recommended in 2.1.3. All of these were already in the source text, of which ALʿILBĪRĪ transmits a more complete account than ZUHR.¹

A recipe copied on the right margin of P 60r by the same hand seems to have been skipped by the scribe while copying *Ther* 2.1.3 and then added by himself, but the text is unfortunately mutilated by the trimming of the margin.²

A few additional lexical items worth noting are the probably geolectal form *ḥubbāz* in *Ther* 2.1.1, for which no parallel can be found in *Nuḡh*. Then in *Ther* 2.1.4 an ingredient is referred to by two different names in two adjacent recipes: first as *šayyān*, then as *damu lʿaḥawayn*, both of which are well attested and dialectally unmarked, but the latter is the one actually found in *Nuḡh* (cf. A 114₁₉). The presence of Armenian earth (*tīn armanī*) in the first recipe against blood spitting and of mummy is anecdotically interesting too, as mineral substances are remarkably rare throughout THERAPEUTICS.

Ther 2.2 — On the lungs

The explanation of the utility of the lungs includes a new reference to the collective knowledge of the sages as to the metaphor “the two fans” (*almīrwaḥatān*) that they bestowed upon them. This passage is not to be found in *Nuḡh* and

¹ On the category of hepatics (*dabīdāt*), see the overview of *Pharm* 4 in Chapter 8.

² The composition of the remedy can be only partially reconstructed: its ingredients were one fourth of arsenic and alum, and Iraqi sulphur (perhaps also one fourth); the preparation ought to be taken every day in a soft-boiled egg («بيضة انبرشت»).

might by an addition by the author.¹ Then the transition (or, to be precise, the lack thereof) between the preliminary catalogue of the diseases of the lungs and the body of the chapter is unusual in that this brief list is immediately followed, with no rubric or any other textual marker, by the differential diagnosis of consumption (*sill* ≡ φθίσις), which is detected by the foul smell of excretions and deciduousness of the hair—in that case there is no possible cure. If neither of these symptoms is shown by the patient, any of the lesser ailments, namely asthma (*nasamah*), catarrh (*zukām*), or cough (*suṣlah*), is to be assumed.² These respiratory disorders are then assigned a common treatment with no further differentiation.

Some differences can be perceived with regard to ZUHR's excerpts from *Nuǧh*. On the one hand, the chapter on the lungs is quite regular there and consumption and all the other ailments have their own rubricated epigraphs. Then there is some variation (which may not be original) in the reference to *zukmah* / *zukām*, and the original *Nuǧh* appears to have included also the treatment of ulcers and pustules of the lungs as well as blood spitting, none of which seems to be even echoed in our text.

A gloss *lūbān* is provided here for *kundur* 'frankincense' (= λιβανός, the resin of several species of *Boswellia*, particularly of *Boswellia sacra* Flueck.)³ even if it is not the first time that this ingredient is mentioned by this name in the text. Just within THERAPEUTICS frankincense is referred to simply as *kundur* no less than five times (see *Ther* 1.4, 1.5.5, 1.6.1, 2.1.4, and 4.2.2), while *lūbān* is mentioned once in this form in *Ther* 4.4.2, with a short vowel (ie *lubān*) within the recipe of a remedy against blood vomiting in *Ther* 3.4.8, specified as "white frankincense" («*lubānun abyad*») in *Ther* 4.2.2, and as an element of a nominal annexation "frankincense stones" («*ḥaṣā lubān*») in the recipe for a medicinal powder in *Ther* 3.4.2. Although analogous cases can be found for this only apparently free variation, there is probably no better example of the extent to which terminology reflects source-dependence rather than actual authorial choice—which, of course, is not a feature particular to ALʿILBĪRĪ but rather quite a widespread one in medical texts. In *Nuǧh* only *kundur* seems to be used throughout, with

¹ As indicated in the critical apparatus *ad loc.* a comparison of the lungs to a fan («*šibhu lmir-waḥah*», in the singular) is documented in AṬṬABARĪ, *Firdaws* IV.VIII.1 (§ 2253-4).

² I have already suggested above that the author may be adhering here to a lexical and nosological distinction between a running at the nose (*sayalānu lʿanf*) and a discharge from the head into the lungs (*zukām*). For the alternation, with no apparent semantic difference, between *suṣāl* and *suṣlah*, cf. for instance these two forms used in two consecutive lines by ALHĀŠIMĪ in *Maǧālis* I.I.26 (K 697-8), then «سعلة رطبة» and also two instances of «سعلة» in *Maǧālis* I.I.27 (K 725, K 7318). The form *suṣlah* must have been, indeed, popular in Andalusī dialects, as shown by Ġarnāṭī Arabic «*tosse çoōla*» in PEDRO DE ALCALÁ's *Vocabulista arávido* 416b 24.

³ For a note on this equation, see Chapter 9.

no gloss.

Ther 2.3 — On the heart

In his echo of the initial segment of this chapter in *Nuǧḥ* ZUHR does not include any metaphorical allusion to the heart being the “spring [*yanbūṣ*] and mine [*maṣḍin*] of the spirit”. In cases like this (as in the preceding chapter on the lungs) it is impossible to ascertain whether it is ALṬILBĪRĪ that introduced these traditional comparisons from parallel sources, although for some of them there is evidence that they were already available in IBN MĀSAWAYH’s original compilation.

The parallel text of *Nuǧḥ*, on the other hand, confirms a long-held suspicion and offers a better reading for what in manuscript P of *Natāʾiǧ* is transmitted as «العشاوه» and «غشا». This ailment cannot be other than fainting or cardiac syncope (ie *ǧašy*), and the two manuscripts of *Nuǧḥ* read indeed «الغشى» here.¹ The chapter also covers heart palpitations and pounding, and pericardial swelling and rupture.

An additional illustration of the kind of diagnosis implemented in *Nuǧḥ* is found here in *Ther 2.3.3*, where the extreme afflictions of heart swellings and solutions of continuity (of the pericardium) are treated. Both are affirmed to be lethal in themselves, unless the swelling be a cold one, which is known from the patient’s temperament, pulse («*ḍarabānu ṣurūqihī*»), age, nourishment, time (most likely in which season of the year the sickness is detected), and custom. If the swelling is found to be cold, a series of prescriptions follow for the correct treatment of the disease. As usually, *Natāʾiǧ* transmits a more complete account of the original text than ZUHR.

Just the rubric for the recipe of a clyster or enema (*ḥuqnah*) for a dry belly and colic is preserved at the end of the chapter, after having prescribed the use of such remedies. It is not to be found in *Nuǧḥ* and it may have been an authorial addition lost in the transmission of the text.

With regard to lexical items of interest, *sīsanbar* seems to be mentioned twice, against syncope and palpitations,² which would match the presence of *nammām* in an identical context in at least one parallel text,³ *Natāʾiǧ* showing once

¹ Some remarks on this word are to be found in the *Complementary notes on nosonymy*.

² Manuscript P transmits a corrupt reading in both loci: first «شيشنير», then «سيسنير». Even if a genuine variant شيشنير* seems to be unattested, I retain -š-, not without hesitation, as somewhat of a *difficilior* (but there are some instances of a confusion between ش and ش by the copyist of P). In this regard it is worth noting that according to IBN ṢĀLIḤ 8525 IBN ĠULĠUL would have distinguished between this شيشنير (= *nammāmun barrī* ‘mint’) and a second سيسنير (= *ǧirǧiru lmāʾ* ‘watercress’) precisely by the spelling, although none of this is reflected in the extant witnesses of his *Tafsīr*, cf. 3:40 سيسنيريون (G 49₁₄ | D 85₁₉ | P 63r) and 2:109 سيسنيريون (G 38₁ | D 548).

again the less common (and more archaicising) synonym.¹ The text of *Nuḡh* is barely readable in these two loci and in the epigraph on heart palpitations it seems that the text mentions rather *ḥiyāršanbar* (cf. B 190₂₈), which might be a trivialisation of the less known phytonym.

In *Ther* 2.3.3 I have interpreted the reading «الدهن الرازي» as الدهن الرازي “Rāziqī oil”, synonymous to *zanbaq* as the name of jasmine oil, but it must be noted that *Nuḡh* B 191₁₀ reads rather “oil of roses” («دهن الورد»²).

Ther 3.1 — *On the liver*

The text corresponding to the third quarter of the human body is substantially richer than the preceding ones and comprises six chapters focusing on the liver, the spleen, the stomach, the bowels, and finally the kidneys and the bladder.

One of the main features inherited from *Nuḡh* is the recurrence of diagnostic observation throughout in *Ther* 3.1. A change of colour in the patient serves as an indicator of a weak altered liver in *Ther* 3.1.1, which calls for the use of the reputed hepatic drugs of turmeric and lacquer. In *Ther* 3.1.2 an hepatic bruise (*waty*) can be detected if the patient has fallen, or received a blow, or carried a heavy burden.³ Then in *Ther* 3.1.4 the presence of liver oppilations (ie obstructions in the hepatic duct) may be felt by the patient when something sweet is eaten. A finer diagnostic method is followed in *Ther* 3.1.5 for the more severe case of hepatic ulcers: if they are accompanied by vein rupture, this is known from the patient profusely vomiting clean blood, which is a certain sign of imminent death; if no vein is broken, the patient vomits blood mixed with pus and is at

³ An exact parallel is provided by IBN ALĠAZZĀR, *Zād* III.13 on the treatment of heart palpitations, where one mitqāl of Yemeni alum must be diluted in half a raṭl of «*māʿi nnaʿnāʿ*», to which the author appends an alternative «*fāʿin lam yūḡadi nnaʿnāʿ, ḡuʿṣila makānahu nnammām*» (T 279₁₆₋₁₈).

¹ For the synonymy of *sīsanbar* and *nammām* as the name of some hybrid mint, see Chapter 9.

² Cf. the parallel sequence «مثل دهن الحيري أو دهن النرجس أو دهن الياسمين» for heart palpitations in IBN ALĠAZZĀR, *Zād* III.13 (T 276₇). In THERAPEUTICS there are two instances of *rāziqī* as a qualification of *zanbaq* (ie *azzanbaqu rrāziqī*), first within the pseudo-Galenic excerpt in *Ther* 1.3* *On the ears* (where the word in question is spelled «زازی» like here), then in 3.1.1 («بالرأزي»), and one single instance of *rāziqī* as a substantive in 3.1.2 («بالرأزي»); as opposed to fourteen loci in which jasmine oil is referred to simply as *zanbaq*. On the other hand, in *Nat V Pharm* 8.8 *duhnu lyāsamīn* is glossed as *zanbaq* (see below the remarks thereon). As a substantive *rāziqī* was already identified as *zanbaq* by IBN ṢIMRĀN (cf. IBN ĠANĀḤ, *Talḥiṣ* [917]) and the equation *rāziqī* = *duhnu lyāsamīn* is transmitted also by AZZAHRĀWĪ in *Taṣrīf* XXIX.1 (S II 425₂₅); as well as by other Andalusī authors (cf. further references in BOS, KĀS, LÜBKE, and MENSCHING 2020: 1044).

³ Despite all the protestations of the purists, it is *waty* rather than *waṭʿ*? the more widely attested form of this word in the medical tradition. As commented before, I interpret *waty* here as referring to some sort of bruise in the liver, whereas in the case of joints the same word is rendered as “subluxation” (see below *Ther* 44.2). Incidentally, neither *{wḡy} or *{wḡʿ} is recorded in CORRIENTE, *DAA* 556–557.

the same time afflicted by dropsy. Amongst the main drugs recommended for the treatment in the latter case the full range of hepatics are mentioned again.¹

It is worth noting that both in the summary and in *Ther* 3.1.5 dropsy is referred to as “yellow water” (*almāʿu lʿaṣfār*), following the terminology found in the source.² The originally separate epigraph for this ailment appears to have been omitted and in our text the transition from ulcers in the liver to dropsy involves a probably corrupt passage for which *Nuǧh* does not provide any evidence other than the absence of any corresponding phrase there. Several possible emendations come to mind for the reading «وهو المدور بماء الحين ذلك ويكون» of P, but none is entirely satisfactory.³

The chapter includes a standard recipe for pastilles of roses (apparently not included in *Nuǧh*), as well as a new reference to the type of compound drug labelled as *kustaǧ* (now *kustaǧu ssakbīnaǧ*, which confirms the equation *kustaǧ* = *ḥabb*) and to the “fourfold theriac”, which is alternatively referred to as «*attiryāqu lʿarbaʿ*» (sic, either a mistransmission or a widespread substandard form for *tiryāqu lʿarbaʿ*) and *attiryāqu lmurabbaʿ* in a few lines.⁴ Both pharmaconyms are inherited from *Nuǧh* (cf. *kustaǧu ssakbīnaǧ* in B 191₂₄ and 192₄, and

¹ In this second passage, in addition to the hepatics of lacquer and turmeric, the hepatics of costus and rhubarb are also mentioned by name. For these hepatic drugs generically known as *dabīd* / *dabīd* in the Islamicate tradition, see below the remarks to *Pharm* 4. Mark the spelling «ذبيذ» in both instances in *Ther* 3.1.1, which contrasts with the systematically unpointed spelling «دسد» in *Ther* 3.1.5 and with the consistent use of the form «دييد» in *Nat* V.

² On this denomination of dropsy, see the *Complementary notes on nosonomy*.

³ Until the last moment I have favoured the hypothesis of an authorial gloss that some copyist would have misunderstood, namely «وهو المستحي بالحين». In that scenario the word *dālika* might have been misplaced and it may be actually related to the following sentence (as in *Nuǧh*). The restoration, albeit plausible, is far from convincing. On the other hand, an *ad sensum* interpretation “the yellow water (which resembles whey)” would make sense, but I doubt that the received text allows for such a reconstruction: the ductus «المدور» is only forcefully reconcilable with the meaning ‘to resemble’ and such a comparison would be, to my knowledge, unparalleled in the corpus (yet the fact that giving the patient to drink whey features quite frequently amongst the remedies for dropsy might have somehow interfered in the process of copy). On strictly palaeographic and semantical grounds «وهو المد(ال)ور بماء الحين» would be even a better option, but the phrase would still be misplaced and I can find no parallel in the medical corpus for this particular use of *√dwr* (for which see KAZIMIRSKI, *DAF* 747b s.r. *√دور* III ‘Avoic soin de quelque chose’).

⁴ The same variation is shown by ALHĀŠIMĪ, who notes down the name of this drug as *tiryāqu lʿarbaʿ* in *Maǧālis* I.1.24 (K 63₁₋₂), but as *attiryāqu lmurabbaʿ* in *Maǧālis* I.1.25|28 (K 65₁₆, 76₈). Manuscript witnesses for IBN ALĠAZZĀR’S *Zād* I.22 (B–K 190₉) disagree as to the exact name of this drug, which they transmit likewise either as «*attiryāqu lʿarbaʿ*» (manuscripts RDC) or as «*attiryāqu lmurabbaʿ*» (manuscripts IST), cf. the critical apparatus in Bos–Kās’ edition. The full periphrasis «الترياق الذي يُعمل بأربعة أدوية» is used in the header of the recipe recorded by AṬṬABARĪ in *Firdaws* VI.VI.1 (§ 45₁₉₋₂₃); also in SĀBŪR B. SAHL *Ṣaǧūr* V [1] ترياق الأربعة الأدوية (K 41₁₁₋₁₈).

tiryāqu lʿarbaʿ in B 191₂₄).

Even if in this particular case the use in *Ther* 3.1.5 of *zayt* as an alternative to *duhn* when referring to oils extracted from fruits (and also blossoms) other than olives (here *zaytu lawz* ‘almond oil’) is an imitation of the source text, this usage is particularly well documented in Andalus.¹

Finally, a variant spelling «مومية» for موميا ‘mummy’ is analogous to «سقمونية» once in *Ther* 3.2.1 (and twice in *Nat* II.1) as a variant of the regular سقمونيا ‘scammony’. Such variation, however, is probably to be ascribed to the copyist rather than to the author.

Ther 3.2 — *On the gallbladder*

In this separate chapter the gallbladder is attributed the function of heating the stomach, the liver, and the rest of the body organs, especially during winter—for gall is, indeed, “the body’s fire” (this simile is missing, once again, from *Nuǧh*). It also helps digestion and concoction of food in the stomach, stirs evacuation and micturition, cleanses the blood from the chyme (*kīmūs* ≡ χυμός) of thick blood by attracting it through subtle veins.

The problematic transmission of IBN MĀSAWAYH’s original chapter by ZUHR is analysed in some detail in the complementary notes on nosonomy appended to this chapter s.v. *ṣufār* / *ṣuffār*. Suffice it to mention here that the somewhat obscure conceptualisation of jaundice, which is referred to both as *ṣufār* and as *yaraqān* and is moreover covered in two separate epigraphs (here actually *Ther* 3.2.1_{3|4}) deserves further examination.

A cross-reference “let the patient drink the hepatics drugs that we have told” in *Ther* 3.2.2 can be safely connected to the drugs mentioned in the preceding chapter *On the liver*, but “let it be treated it with the remedy that we have mentioned in the chapter *On the gallbladder*” in *Ther* 3.2.3 seems to make little sense as an actual reference, since *this* is the chapter on the gallbladder. No such reference is found in *Nuǧh*.

Ther 3.3 — *On the spleen*

On the spleen is even more telling than previous chapters with regard to IBN MĀSAWAYH’s design and organisation of the contents. First, a medical observation substitutes for the standard list of diseases in the introduction to the chapter: “the ailments of the spleen are those of the liver, and their remedies are also the

¹ It is attested since IBN ḤABĪB down to the 16th c. (cf. «azeite de — zéit al —» for walnuts, nettles, lily, clove, almonds, roses, bulrush, marjoram, in PEDRO DE ALCALÁ’s *Vocabulista arávigo* 108v 37 – 109a 8 (= CORRIENTE, *LAPA* 91a **zyt*). For the Andalusī medical corpus, cf. also *zaytu rrand* ‘laurel oil’ in ALHĀŠIMĪ, *Maǧālis* 109₁₃ and 154₃.

same". Then, with no rubric whatsoever the treatment for swollen and hardened spleens is described. The exact same display is found in *Nuǧh*.

A new cross-reference (a cataphoric one) refers the reader to a certain salve that "is mentioned afterwards in the chapter *On the stomach*", only to then copy the recipe for what would appear to be that salve, but it is not, since the preparation of the remedy is actually provided in *Ther* 3.4.1 against pains and swellings of the stomach. The reference was originally in the source text (even if in *Nuǧh* it is ascribed to ZUHR), as was the actual recipe, in which caper is referred to as *aṣaf*.¹

The chapter includes also the formulas for two different pastilles that have caper and poppy as their respective main ingredients and which are not paralleled by ZUHR's *Nuǧh*. The first recipe refers now to the caper bush by its most common name *kabar*. Therefore, if *kabbār* in *Ther* 1.5.5 is added to this pair, all three major Arabic synonyms for *κάππαρις* are represented in THERAPEUTICS, the conclusion being unavoidable that the choice of the name in each instance is mostly determined by the source rather than by authorial intention—or to put it in other words, there is no wish for normalisation on the author's side.

On the other hand, the recipe for poppy pastilles is said to have been borrowed from ŠIMṢŪN's book. It would not be unreasonable to presume that these two recipes may have been already available in the source text, but *Nuǧh* does not include them and they might as well have been borrowed from somewhere else (let it be recalled that *Nat* V contains a full-blown pharmacopoeia that proves that the author had access to at least one fairly good compilation of recipes).

Two of the compound remedies prescribed for splenetic ailments are certainly written artefacts with no real currency in Andalusī drugstores. The *dah-murtā* belongs to the Syro-Arabic stock of early semi-legendary drugs, as shown by an invaluable explicit reference to AHRUN's Book *On the liver* in *Nuǧh*;² while Ezra's theriac (of any deturpation of this name that the author may have inherited from his source; ZUHR reads *tiryāqu lṣazīz*) dates back to the Byzantine tradition.³

Ther 3.4 — *On the stomach*

This is one of the longest chapters in the whole of *Nuǧh/Ther*, with as many

¹ Classical authorities recorded *aṣaf* as a dialectal variant for *laṣaf* and identified it as *kabar*, cf. ABŪ ḤANĪFAH, *Nabāt* [23] (L 34₁₃); IBN ḠANĀH, *Talḥiṣ* [20]; *ṣumdah* [112|2655] (B–C–T 16₂₇, 30₁₂₅). At least in this instance the meaning 'caper berry' can be ruled out since the *roots* of the plant are explicitly mentioned in both recipes.

² Cf. ZUHR, *Nuǧh* I.9 (A 117_{29–30} | B 193_{15–16}).

³ On these two drugs, see the *Complementary notes on polypharmacy*.

as nine different epigraphs in which the author describes the treatment of a wide range of ailments: stomachache and swellings, weakness and loss of appetite, ravenous hunger (*aššahwatu lkalbiyyah* ≡ βουλιμία), hiccup and vomit, diarrhoea, belching and an upset stomach or surfeit (*tuḥamah*), indigestion and incontinence, coughing blood, and finally thirst.¹ There is overall agreement between the catalogue of diseases in the summary and the epigraphs actually included in the chapter, but three deviations of different importance must be noted.

First, the initial list mentions acidity (*humūḍah*), which is afterwards perhaps silently subsumed in the epigraph on belching. Then the epigraph on loose bowels or diarrhoea (*suhūlatu lbatn*) is not referred to in the catalogue under any name. Finally, the summary mentions a suspect «نفث الطعام» (perhaps by contamination with the immediately preceding word «فيء») whereas the actual epigraph discusses «نفث الدم», that is *blood* spitting or vomiting (the same phrase has been used to refer haemoptysis in *Ther* 2.1.4). The series of traditional haemostatic ingredients that enter the formula prescribed for this condition shows quite clearly that “blood” was originally intended here and that the locus in the summary must be emended accordingly. This obvious emendation is further confirmed externally by the original locus in *Nuḡh* (A 118₁₆ | B 194₂, where only «م» can be read now).

Diagnosis by inspection of the patient’s colour is mentioned again in *Ther* 3.4.1 and a new sign of death («*ṣalāmatu ttalaf*») is interpreted from inveterate diarrhoea in 3.4.5.

As far as the medical treatment is concerned, immersion in a bathtub (*hawḍ*) is prescribed for belching and indigestion, and three separate recipes are provided (all three signalled by the catchword *ṣifah*) in the chapter: two in *Ther* 3.4.2 (one of which is a medicinal powder or catapasm),² a third one in 3.4.8 against haemoptysis containing such characteristic ingredients as clay from Samos (*kawk-abu lʔarḍ* ≡ γῆς ἀστήρ),³ blossoms of pomegranate (*ḡullanār*), and dragon’s-

¹ There is not much worth mentioning with regard to the terminology of these disorders as it is for the most part quite standard. The Arabic words for ‘hiccup’ and ‘surfeit’ vocalise *fuwāq* and *tuḥamah*, respectively, in accordance with the acrolectal norm, but *fawāq* and *tuḥmah* are actually better documented in Andalusī Arabic. For the former, cf. Ġarnāṭī «hipo del estómago *faguáq*» in PEDRO DE ALCALÁ’s *Vocabulista arávigo* 275a18 (= CORRIENTE, *LAPA* 158b–159a **fwq*); also CORRIENTE, *DAA* 388a *{F’Q} (incidentally, this lexematic root has been traditionally considered to be rather *√fwq*, cf. DOZY, *SDA* II 290b s.r. *فوق*). For the bisyllabic variant *tuḥmah*, in turn, cf. CORRIENTE, *DAA* 76a *{TXM}.

² See *Pharm* 1 for some observations on the category of compound drugs labelled as *safīf* in the Islamicate corpus.

³ On this clay, which was known in the Greek tradition also as Σαμία γῆ and Σάμιος ἀστήρ, cf. Kās 2010: 942–944.

blood (*damu lʿaḥawayn*). Equally interesting are the instructions for the preparation of a salve to be applied on an aching stomach in *Ther* 3.4.1.

Unlike nosonomy, the botanical lexicon of *On the stomach* includes several remarkable items. First, Latinate جنتورية (realised in Arabic either as *ǧintawriyah* or *ǧantūriyah*) refers probably to the common centaury (*Centaurium erythraea* Rafn) and provides additional evidence of the western origin of the text since it is attested exclusively in Qayrawān and in Andalus.¹ The original text apparently had rather *qanṭūriyūn* here (cf. *Nuǧḥ* A 118₂₂ | B 194₈), which proves that ALʿILBIRĪ cared enough to adapt at least partially the eastern nomenclature of his source.

Then the digestive powder appended to the same epigraph *Ther* 3.4.5 includes amongst its ingredients *qaraḍ*, a synonym for Graeco-Arabic *aqāqiyā* (≡ ἀκκ-κία), referring to the gum (or the juice, or perhaps even the fruit, as nothing is specified in our text) of some of the many species of the genus *Acacia*.² The collocation there of “black and white cumin, fennel [*šamār*], and anise [*anīsūn*]” should be compared (or rather contrasted) to the synonymy discussed above in *Ther* 1.5, and the fact that fennel is referred to as *rāziyānaǧ* in the preceding line when its extract or water is mentioned might reflect a finer distinction between wild fennel (*rāziyānaǧ*) and the garden variety (*šamār*).³ This recipe further contains an interesting mention of the peels of *nāranǧ* ‘bitter orange’, as well as a semantically ambiguous form *ḥašā lūbān* that may represent here either actual frankincense or perhaps rather storax (= στύραξ, the resin of *Styrax officinalis* L.).⁴ It is uncertain how much of these materials derive from *Nuǧḥ*

¹ See Chapter 9.

² The spelling transmitted by the copyist is «قرط» indeed, thence it can be presumed that the author did not inherit the alternative, and less prestigious, form *qurt*, for which cf. IBN ǦANĀḤ, *Talḥiṣ* [849]. Neither IṢṬIFĀN nor ḤUNAYN use *qaraḍ* in their respective translations, cf. *Ḥašāʾiṣ* 1104 أقاقيا (P 23v 10 – 24r 5 | T 96₁₄–98₃) ≡ *Materia medica* 1101 ἀκκκία (W I 92₂₈–93₈); and *Mufradah* VI.13 الأقاقيا ذك (E 96v 1–7) ≡ *Simpl. med.* VI.1.12 Περι ἀκκκίας (K XI 816₁₇–817₁₂). In Andalus the acacia tree is first identified as *šaǧaratu lqaraḍ* by IBN ǦULǦUL on the authority of ABŪ ḤANĪFAḤ, cf. *Tafsīr* 1:68 (G 198–9 | D 317–18, edited «القرط»). For the identification of the gum and of the tree that produces it, cf. DIETRICH 1988: II 160–161.

³ The identification of *šamār* as specifically ‘cultivated fennel’ (*rāziyānaǧun bustāni*) was supported by ṬUWĀNIŠ (ie DŪNAŠ B. TAMĪM) according to IBN ǦANĀḤ, *Talḥiṣ* [662], whence AZ-ZAHRĀWĪ, *Tašrīf* XXIX.1 (S II 438₂₃). Let it be noted, however, that the unicum of *Talḥiṣ* transmits a form in *s*– and that the facsimiled manuscript of *Tašrīf* spells it with a *š*– but enters it under letter *sin*. In any case, *šamār* is abundantly documented in Arabic (and thence even in Persian), and it is certainly related to Syriac ܩܪܬ and post-Tanakhic Hebrew קרשׁ (cf. JASTROW, *DTML* 1537a), cf. BOS, KĀS, LŪBKE, and MENSCHING 2020: 823 for further references. In the case of *Natāʾiǧ*, both the clear spelling *š*– of P and the context (all the items in the series are explicitly affirmed to be garden herbs) advice against reading alternatively *samār*, which was identified as DIOSCORIDES’ σχοῖνος ἐλεία by IBN ǦULǦUL in *Tafsīr* 4:45 (D 132₂₂ | G 74_{1–2}); cf. also DIETRICH 1988: II 558 n. 2.

and, therefore, to what extent this terminology is reflective of the author's own usage.

In the treatment of belching and surfeit in *Ther* 3.4.6 the first recommendation is to give the patient to drink «العبراقون», which is obviously corrupt. This meaningless word could be simply emended to read العاريقون 'agaric' (≡ ἀγαρίκον), but given that the name of the agaric is far from uncommon and that it is, moreover, correctly read and written without any problem elsewhere by the copyist of P (see *gārīqūn* in *Ther* 1.5.5 in the recipe for the middle stomachic, and the same form in 3.2.1), I favour a *difficilior* interpretation as *fandādiqūn*, which matches perfectly this precise pathological context.¹ The exact same word is found in *Nuǧh* and despite the uncertainty as to the exact form in which it was received by ZUHR, «العيرادفون» in A 119, and B 194₁₇ is virtually identical to the reading transmitted by *Natāʾiǧ* and confirms that it is not agaric that was originally mentioned here.

⁴ On these two items, see Chapter 9.

¹ A compound drug named *fandādiqūn* is attested by AṬṬABARĪ precisely for the treatment of stomach acidity and surfeit («*waʿin waǧada fihā ḥumūḍatan watuḥamā*»), then also for other ailments of the stomach and the liver, cf. *Firdaws* IV.VI.3 (§ 212_{17|24}) and IV.IX.10 (§ 260₂₁). A full recipe is registered afterwards in *Firdaws* VI.VI.4 (§ 477₁₁₋₁₈), where its benefit is stated against stomachaches caused by phlegm and thick flatulence. A prescription of جوارشن الفنداديقون for stomach-related disorders is found in IBN ALĠAZZĀR, *Maʿīdah* 119₂₇. The same formula as in *Firdaws* is transmitted also by IBN SINĀ, *Qānūn* VI.3.11 (B III 249₂₈₋₃₃₃).

Ther 3.5 — On the bowels

Ther A specific chapter on the intestines follows in 3.5, where the by now familiar diagnostic formula «*wayuṣrafu dālika biʿan...*» is used to detect intestinal tapeworms when the stomach and the liver are sound and healthy, which in turn is known by the redness of the lips and by the fairness of the colour of the patient. Then a new instance of unrubricated epigraph is found in *Ther* 3.5.1, the symptoms of excoriated intestines following without any interruption the aforementioned diagnosis.¹ The chapter also includes remedies for colics and flatulence (which are dealt with in combination and apparently share the same regimen) and also for tapeworms. The exact same arrangement of the information was found already in *Nuǧḥ*.

Three items of some lexicographical relevance are found in the epigraph on tapeworms in *Ther* 3.5.3. First, the name *ṣuffār* by which stomach worms are referred to and which should not be confused with *ṣufār* ‘jaundice’. Then a drug is mentioned that might be interpreted as the “winter pill” (الحب الشتوي),² yet a clear reference to “the Indian pill” (*alḥabbu lhindī*) in *Ther* 4.2.2 and the testimony of ZUHR, who reads here “the Indian pill” (cf. *Nuǧḥ* A 120₂ | B 195₁₆) seem to suggest that this is rather a mistransmission of الهدى. An emendation is, therefore, probably necessary. Finally, the chapter includes a non-lexicographical attestation of *das(s)ās*.³ Let it be noted that ZUHR did not understand the word and reinterpreted it as «*ṣafāʾiḥ, wahuwa rraṣāṣu lmaḥkūk*» (cf. *Nuǧḥ* A 120₃ | B 195₁₆), which makes less sense when combined with cattle gall, natron, and gall.

The mention in *Ther* 3.5.2 of a “fattened cockerel” («الدريك المسمن») may be retained as genuine apomorphy (either authorial or clerical) since it is a meaningful reinterpretation of the original prescription involving an “old cockerel” (ديك مسن).

Ther 3.6 — On the kidneys and the bladder

¹ This pathology (which is referred to here as *tashīǧ* in the summary, then as *suḥāǧ* in the body of the text) is better attested as *saḥǧ*. It is characterised elsewhere as an abrasion and peeling of the intestinal wall that becomes manifest in the faeces, cf. IBN MĀSAWAYH, *Ishāl* 209r 11–12; ARRĀZĪ, *Taqāsīm* LXIX (H 306₆₋₇); IBN ALĠAZZĀR, *Zād* IV.15 (T 346₁₅₋₁₇).

² Manuscript P reads «السوي» here but quite clearly «الشتوي» below in *Ther* 4.4.9.

³ Cf. IBN ĠANĀH, *Talḥiṣ* [1001], where *šiyāfāt* (here ‘suppositories’) are simply glossed as *das(s)āsāt*, which is expanded by AZZAHRAWĪ, *Taṣrif* XXIX.11 «*aššiyāfātu: hiya ddas(s)āsātu llati tustaʿmalu fi lʿasfali liṣtiqāli ṭṭabiṣah*» (S II 449₂₅₋₂₆). A singular *das(s)āsa* is recorded in the *Vocabulista in Arabico*, which was the only reference available to DOZY, *SDA* I 440b s.r. دس and also to CORRIENTE, *DAA* 179a *{DSS} I, until BOS, KĀS, LÜBKE, and MENSCHING 2020: 1118. Although the derivation from the basic meaning of *√dss* is quite obvious (cf. «*addassu: idḥālu ššayʿi min taḥtihi*» in IBN MANḌŪR, *Lisān* VI 82b 3) and unlike the apparently homonymous name of some species of earthworms and “snakes” (cf. *dassāsah* and *dassās* in *Lisān* VI 83b 8–22), it seems that this particular technical term was unknown outside Andalus.

The third quarter of the human body closes with this chapter in which, as one might have expected, priority is given to the treatment of kidney stones, with an additional discussion of urinary incontinence and ulcers (the latter two conditions are actually discussed in inverted order with respect to the initial list).

Remedies for calculi include MĀSARĠAWAYH's drug made of seeds,¹ which in *Nuġh* is actually ascribed to AHRUN in his Book *On colic* (cf. «الدواء المتخذ من الزرايع» in A 120₂₇ | B 196₇). Separate formulas for two additional preparations are also provided: for some pastilles for calculi and bladder-aches, and for a drug to the same effect but especially suited for children. None of the recipes included by ZUHR in his version of *Nuġh* coincides with the ones here.

In *Natāʿiġ* (but not in *Nuġh*) an explicit quotation is ascribed to an enigmatic sage whose name has been distorted beyond recognition («لطلان») and according to whom a patient suffering from calculi should eat one or two ounces of bitter almonds.²

Several of the ingredients mentioned in this chapter are of lexical interest. Within the recipe for pastilles appended to *Ther* 3.6.1 mention is made of such herbs as *tayil* / *tīl* 'dog's-tooth grass' or 'couch grass' (*Cynodon dactylon* (L.) Pers.) or perhaps 'common couch' (*Elymus repens* (L.) Gould), *baršiyāwušān* 'maiden-hair fern' (*Adiantum capillus-veneris* L.), and *qaṭaf* 'garden orach' (*Atriplex hortensis* L.), all of which are widely reported as drastic litholytics.³

The problems posed by *qulb* in the same recipe may well serve as an example of the precariousness of botanical identification when based strictly on textual documentation. This plant can be identified either as common gromwell (*Lithospermum officinale* L.) or as IBN MĀSAWAYH's "greyish Indian seed" that

¹ This remedy is called «*dawāʿu zzarārīʿ*» here and then «*addawāʿu lladyyuʿmalu bizzarārīʿ*» in *Ther* 4.2.2, where it is not ascribed to any authority. The recipe for a polyvalent drug is reported from MĀSARĠAWAYH by AṬṬABARĪ, who attributes to it a litholytic power («*wayuḍību lḥaṣāh*»). It includes amongst its ingredients seeds of celery (and probably also of anise, fennel, caraway, and a few other herbs, but *bizr* is only specified for the first item in the list) and must be made into small pepper-like pills, cf. *Firdaws* VI.VI.1 (§ 465₆₋₂₀). Incidentally, the form *zarārīʿ* (for which cf. CORRIENTE, *DAA* 228b *{ZR'}) shows both basilectal and geolectal features: as a plural of substandard *zarriʿah* it deviates from the Classical form *zarāʿiʿ* (plural of *zarīʿah*); in the shortening of the last vowel (*zarārīʿ* rather than *zarārīʿ*) it follows a phonological tendency particular to Maġribī dialects and possibly provides a new example of Andalusī plural.

² A litholytic property is attributed to bitter almonds when taken in drink with some grape-syrup (γλυκύς) already by DIOSCORIDES in *Materia medica* 1:123 ἀμυγδαλῆς πικρᾶς (WI 113₁₃) ≡ *Ḥaṣāʿiʿ* 1:130 شجرة اللوز المر (P 28v 6 | T 117₇₋₈), however I could find no parallel for this particular passage, nor any mention of an authority whose name might correspond to the form transmitted in P. In *Ḥaṣāh* II (M 56v 4–5) IBN ALĠAZZĀR ascribes to IBN ʿIMRĀN the recipe for a remedy against calculi that includes an ingredient referred to as «حبّ البلطال», which comes *formally* close to our word but must however refer to a herb (probably plantain).

³ On this three phytonyms, see Chapter 9.

TĀBIT B. QURRAH considered synonymous to *māš hindī* (*Vigna radiata* (L.) R. Wilczek).¹ Finally, a gloss in *Ther* 3.6.2 identifies *marmāhūz* as a species of *marw* ‘cat thyme’ (*Teucrium marum* L.).²

Once again, an edition of *Nuǧh* is badly needed if the extent of ALʿILBĪRĪ’s intervention in his text is to be ascertained.

Ther 4.1 — *On the legs, the hips, and the back*

The fourth and last part of the human body (the beginning of which is explicitly marked on the text) comprises six chapters. According to the explanation that precedes *Ther* 2.1 this fourth anatomical part should be represented by the legs, but the actual catalogue of organs is much more comprehensive. The legs feature indeed, twice, in the chapter, first in *Ther* 4.1 alongside the hips and the back, then in *Ther* 4.4 alongside the thighs and the knees; but to these the testicles and the penis are added in *Ther* 4.2, which may still be understandable if the meaning of “legs” is taken to cover in a broad sense the whole of the lower body from the waist downwards. Then the inclusion of the bottom in *Ther* 4.3 becomes only logical, and the combined chapter *Ther* 4.5 *On the hands and the feet* is necessitated by the fact that the upper extremities have not been dealt with in any of the previous sections. An analogous reason may lie beyond the treatment of skin conditions under *Ther* 4.4: some of them had been cursorily addressed above in 1.7 *On the face*, but others (particularly leprosy) have not. By the same token fevers in *Ther* 4.6 are representative of ailments that affect the whole body.

In *Ther* 4.1 *On the hips and the back* an epigraph for the treatment of sciatica (*širqu nnasā* ≡ ἰσχίαις)³ is missing (the ailment is mentioned in the initial catalogue and a separate rubric was available in *Nuǧh*).

A new example of minimal aetiology is found in *Ther* 4.1.2, where the origin of hip dislocation is identified in thickened or clotted raw phlegm («*alḥāmu lmunṣaqid*»), which with the passage of time turns into something like a stone (*ḥaṣāh*). Drastic cauterisation of the joints is prescribed when all remedies have failed.

¹ For the double possible identification of this seed, see Chapter 9

² Manuscript P reads «*ملم*» but it is hardly possible that this should reflect anything else than a clerical misreading (maybe a haplography, since the word is followed with the conjunction *و*).

³ Incidentally, PEDRO DE ALCALÁ’s «ciática enfermedad *ēerquēci* | ciática assí *erquēñça*» in *Vocabulista aráviġo* 167b 12–13 is interpreted by CORRIENTE as a genuine reflection of an Andalusi form [*širqassí*] and he further points towards Syriac *ܫܪܩܝܝܫ* (cf. abundant documentation for this word in PAYNE SMITH, *Thesaurus* 756) as the etymon of the second element of the Arabic annexation in *LAPA* 135a **rq* and also in *DAA* 351a *{‘RQ} 1. The origin of the Syriac word, in turn, is found in Aramaic reflections of Tanakhic Hebrew *קִיבֵּי הַיָּדָיִם* ‘sciatic nerve’ according to BROCKELMANN–SOKOLOFF, *Lexicon* 250a s.v. *ܫܪܩܝܝܫ*.

A complete formula for the Persian pill is provided in *Ther* 4.1.1 and in the same epigraph a remedy is mentioned that P transmits as «المسوا الصغير» and which has so far defied all attempts to identification. In ZUHR's excerpt from *Nuǧh* it is read twice as «المسري الرقيق» (cf. A 122₂₈, 123₂), which does not shed much light on the question.¹

Ther 4.2 — *On the testicles and the penis*

The most obvious consideration about *Nuǧh*/*Ther* 4.2 is the absence of an analogous chapter devoted to the vulva (and probably also the uterus). This omission is quite anomalous within the Islamicate tradition of general comprehensive medicine and I know of no other text of the *kunnāš* type in which gynaecological matters are completely ignored—but then, *Nuǧh* does not exactly qualify as a comprehensive *kunnāš*.

In any case, with regard to the contents of the chapter, there is some disagreement between the catalogue of ailments mentioned in the summary and the actual epigraphs comprised in it, the latter being actually *more* than announced. In addition to scrotal hernias,² impotence and lack of libido, and pains in the

¹ On purely formal grounds, the word might be presumed to be a mutilation of *maysūsan* 'lily-wine', which IBN ĠANĀḤ describes as "a well-known compound drug" («*dawāʾun murakkabun maʾrūf*») in *Talḥiṣ* [554], having found it mentioned by AHRUN, MASĪḤ, and others—incidentally, the fact that the Andalusī physician cannot even provide a simple gloss (something like *šarābu ssūsan*) for the name may indicate that "well-known" means here actually "well attested" or "widely mentioned". A Persian etymology *may sūsan* 'wine of lily' is admitted for this name, which is indeed recorded as a 'lotion which women use in washing their heads' by STEINGASS, *CPED* 1362 s.v. (but it is not registered in VULLERS, *LPLE*). Mentions of *maysūsan* compatible with a wine or a syrup are found very much everywhere in the early corpus (cf. for instance AṬṬABARĪ, *Firdaws* 278₂₄ and 309₁₃) and recipes are noted down by IBN ATTILMĪD, *Aqrābādīn* VII [207] (K 109₉₋₂₂), also by IBN ĠAZLAḤ as located by BOS, KĀS, LÜBKE, and MENSCHING 2020: 726. A use as a liniment to be bandaged with a cloth on the hands, the feet, and the neck, or to be put over the stomach and the joints is explicitly mentioned in the header of IBN ATTILMĪD's recipe. The drug is mentioned everywhere in unqualified form, however, and there does not seem to be any parallel for a "lesser lily-wine", although ZUHR's *raqiq* is quite an apt qualification for a wine-like substance.

² As the text does not provide any clues as to how the author understood the terms with which he mentions most sicknesses further examination will be required to ascertain whether the elements of the couple *udrah* / *fat(a)q* stand here in synonymical variation or rather represent different pathologies. The choice of either term (mostly as a hyperonym but occasionally also as the sole denomination of all inguinal hernias) may respond to local (or even individual) preference, but a nosological difference is certainly present in AṬṬABARĪ, *Firdaws* IV.IX.15, where *udrah* (S 270_{19|20}) and *fat(a)q* (S 270_{19|20} and 271₈) are mentioned separately; and an explicit difference in severity and healability is made between the two by IBN ALĠAZZĀR in *Zād* VI.8 (T 530_{2-533,4}). In Andalus IBN ĠANĀḤ explains *qīlah* (= *κίλη*, probably through Syriac *ܩܠܗ*) by *udrah* in *Talḥiṣ* [897] but does not mention *fat(a)q* anywhere (cf. also BOS, KĀS, LÜBKE, and MENSCHING 2020: 1029), while AZZAHRĀWĪ, *Taṣrīf* II.XXII.10 focuses on «الأدرّة (وهي القيلة)» but also

penis,¹ in *Ther* 4.2.4 mange or itching is collocated with ulcers, and then a whole epigraph *Ther* 4.2.5 is appended on excessive erections and abnormal sperm release.²

The treatment of the some ailments is overall standard but there are a few interesting items, such as the involvement of an assistant (*ḡulām*) in the preparation of one of the remedies described in *Ther* 4.2.2 (for which no parallel is to be found in *Nuḡh*), or the recurring use of verbal forms of $\sqrt{s\dot{s}t}$ with the penis as an object of the verb, which implies urethral administration of the remedy.³

On the lexical level, a gloss *buṭm* = *alḥabbatu lḥaḍrāʾ* for ‘terebinth’ (*Pistacia terebinthus* L.) is too widely documented to be of any significance,⁴ but *arraḥḡān* as an anatomical name for the inguinal or pubic region shows once more a non-negligible command of Classical Arabic—either by ALʿILBĪRĪ himself or, more probably, by his source.⁵ Quite unsurprisingly, ZUHR appears to skip the word and substitutes «*alʿudratu walfat(a)q*» for it (cf. *Nuḡh* A 123₁₃ | B 198₅).

An unambiguous instance of “the Indian pill” (*alḥabbu lhindī*) in *Ther* 4.2.2

includes the treatment of *futūq* (S I 236₂₂–237₂₀). On the other hand, mending «*النفخ*» («*والمعح*» P) in the summary only to match «*النفق*» in the rubric seems unwarranted, especially given that an inflation of the testicles is frequently mentioned and that AZZAHRAWĪ even has a specific epigraph thereon in *Taṣrīf* II.XXII.7 *النفخ* (S I 236_{6–15}).

¹ Here and elsewhere ALʿILBĪRĪ follows common usage and refers to the penis alternatively as *dakar* or *ihlil* with no difference in meaning.

² The former corresponds in essence, but not in name, to *πριαπισμός* as described, for example, in GALEN, *Loc. affect.* VI.6 (K VIII 439_{4–9}) ≡ *Mawāḍiʿ* VI (E 188r 18–22 | M 83v 1–6). No Arabic name is to be found there, whereas AṬṬABARĪ already has «*kaṭratu lintišār*» and «*in kaṭura lʿinṣāḍ*» in *Firdaws* IV.IX.14 (S 266₇, and 270₃); cf. also IBN ALĠAZZĀR «*alʿinṣāḍu ddāʾim*» alongside a transcription of the Greek nosonym in *Zād* VI.2 (T 515_{2–6}). Arabic *anṣāḍa* (with *inṣāḍ* as it *maṣdar*) is also the regular term for ‘to have an erection’ throughout *Natāʾiḡ*. Then, both “abundance of sperm” (*kaṭratu lmaʾ*), where *māʾ* for ‘sperm’ is much better documented in traditional literature than in medical texts) and “nocturnal emission” (*ihṭilām*) are to be subsumed within the general pathology of *γυνόρροια* as found in GALEN, *Loc. affect.* VIII 438_{18–439₄}) ≡ «*taqtīru lmanī*» in *Mawāḍiʿ* VIII (E 188r 16–18 | M 83r 16–83v 1), but «*sayalānu lmanī*» in *Ġaw. Mawāḍiʿ* 123r 16–17; cf. also the phrases «*ḥurūḡu lmanī fi ḡayr waqtih*» and «*kaṭratu ḥurūḡi lmanī*» in *Firdaws* 266₈ and 269₂₅ respectively; likewise *ihṭilām* in IBN ALĠAZZĀR, *Zād* VI.4 (T 520_{2–522₂}).

³ Needless to say, ‘to cause to sneeze’ and ‘sternutatory’ are quite out of question in this case.

⁴ Cf. IBN ĠANĀḤ, *Talḥiṣ* [143] «*albuṭmu ṣaḡaratu lḥabbati lḥaḍrāʾ, wayuḡālu littamri ayḍan buṭm*», which he borrows from ABŪ ḤANĪFAH, *Nabāt* III [74] (L 47₁₃); cf. also BOS, KÄS, LÜBKE, and MENSCHING 2020: 335 for further references.

⁵ Manuscript P reads «*الرفعتان*», but I can find no support for a morphological feminine (semantically singulative) form in lexicographic sources; cf. «*arraḥḡu warrufḡu: uṣūlu lfahīdayni min bāṭin*» in IBN MANḌŪR, *Lisān* VIII 429a 14 s.r. *رفعة*. This anatomical name is much better documented in the Sunnah (cf. particularly the legal discussion around the ḥadīṯ «*idā ltaqā rraḥḡān*») than in the medical corpus, yet precisely in Andalus AZZAHRAWĪ mentions «*alʿibṭayn warraḥḡayn walʿurbīyyatayn*» in *Taṣrīf* XIX.II.8 (S II 79₈). The word is not recorded in CORRIENTE, *DAA* 213.

supported by a simple *alhindī* in *Nuǧh* (cf. A 123₃₀ | B 198₁₈) suggests that the “winter pill” is probably a ghost-drug and justifies (at least provisionally) the emendation proposed above.

Ther 4.3 — On the bottom

Three different words are used in this chapter to refer to the anus: two of them are common euphemisms (*asfal* ‘bottom’ and *maḥraǧ* ‘exit’), while the third one is a rarer synonym *ṣurm* that takes here a substandard form (it is transmitted with the same spelling in *Nuǧh*) and may actually function as a hyponym with a narrower meaning ‘rectum’.¹

The relative length of detail shown in the discussion of anal diseases (pain, fissures, prolapse, warts, fistulae)² may be interpreted as a reflection of a genuine preoccupation—which was otherwise widely shared by most physicians (and patients, to be sure). In this regard and even if the source text already contained this epigraph, the attention given in *Ther 4.3.7* to the “concealed malady” (*addāʾu lḥafi*) contrasts strongly with the prudish omission of it by AZZAHRĀWĪ in his all-encompassing *kunnāš*.³

Taṣrīf II.xv.8 الداء الخفي (S I 193₁₅₋₁₆)

تركنا ذكره لئلا نلجحه وقلة المتعالجين منه، وهو ينقسم إلى سبعة عشر نوعًا ويستود الصنف
بذكره ولا يعود بمنفعة لا دنيا ولا آخرة.

Several compound drugs are prescribed for these ailments, such as the lesser golden pill, the pill of gums, and the fetid pill for anal pains; the great *buhṭaǧ*, hiera logadion, and the great theriac for anal “warts”; the *kustaǧ*, the *buhṭaǧ*, and the triphala are commended for the treatment of fistulae (or haemorrhoids if the text were to be emended as *bāsūr*); finally the *šiltā* for the concealed malady.

¹ On this form with *ṣ*-, see the notes on nosonomy and anatomy at the end of this chapter.

² Since *taʾālil* seem to correspond here to haemorrhoids (*bawāsir* ≡ κονδύλωματα in DIOSCORIDES but αἰμορροῖδες [τυφλαί] in GALEN), the reading «ناسور» of P ought perhaps to be retained as correct and interpreted as reflecting standard *nāšūr* ‘fistula’ (from Syriac ܢܫܘܪ), but let it be noted that *Nuǧh* has «البواسير» here. As a singular *nāšūr* is certainly much more common than *bāsūr*, and the variant in *-s-* (rather than *-ṣ-*) is well attested in general (cf. AṬṬABARĪ, *Firdaws* 271₁₄|17|19, 272₁₄|17|20|23, 273₂|4) and particularly in Andalusī Arabic (cf. CORRIENTE, *DAA* 527 *{NSR} II). In any case, a certain degree of confusion (both palaeographical and, at least occasionally, medical) between *bawāsir* and *nawāšir* / *nawāsir* seems to be quite widespread everywhere in the manuscript tradition and AZZAHRĀWĪ not only considers the two ailments (that is *nawāšir* and *bawāsir* to share both aetiology and therapeutics but he also recalls that they both receive the homonymous denomination *alʿarwāḥ*, cf. *Taṣrīf* II.xv.3 (S I 191₄₋₅)).

³ An annotated English translation of ARRĀZĪ’s monograph on this illness is available in ROSENTHAL 1978.

Minimal header-less recipes (or rather instructions) are provided for: a liniment made of litharge and burnt lead mixed with some jasmine oil in *Ther* 4.3.2 and a very similar liniment made of litharge and white-lead (*isfidāğ*) with some oil in *Ther* 4.3.3; an oil (the text reads actually “oils”) made of yolk, oil of roses, and some pure boiled wine (*nabīd*).

The recipe for the pill of pepperwort (*šīṭarağ* ≡ λεπίδιον, *Lepidium latifolium* L.) that is appended to *Ther* 4.3.2 includes amongst its ingredients, if I do not err in my interpretation of the locus, an extremely rare instance of the synonym *isfindār* for ‘white mustard’ (*Sinapis alba* L.) which clearly shows the originally Iranian context of the formula inherited by the author. The fact that no gloss has been appended to the name suggests that ALḤILBĪRĪ may not have been in a position to identify it and simply copied it as transmitted in his source. Unfortunately ZUHR’s *Nuğh* does not include this recipe.¹

Another interesting item is the typically Andalusī form *qasṭal* ‘chestnut’ that is used exceptionally in *Ther* 4.3.2 at variance with *šāh bullūt* in a different locus in the text, and in *Nuğh* in fact *aššāh ballūt* is found (cf. A 126₂₈).²

In a preparation described in *Ther* 4.3.4 for the treatment of anal proptosis equal parts of burnt shells and aloe must be mixed and kneaded with yolk and some vinegar, then smeared over the anus. The word for ‘shells’ here is *maḥār*, which is, if not dialectal, admittedly exceptional in the medical corpus.³

Ther 4.4 — *On the thighs, the shanks, and the knees*

Two thematic subunits are to be distinguished within this chapter: first epigraphs *Ther* 4.4.1–3, which focus on ailments that actually relate to the legs; then *Ther* 4.4.4–10 dealing exclusively with skin conditions.⁴ The original arrangement of the materials seems to have been reasonably clear in IBN MĀSAWAYH’S *Nuğh*,

¹ On this Iranian phytonym, see Chapter 9.

² Cf. for example the exact parallel «*waššāh ballūtu lmašwiyyu biqīšrihi ddāhili*» in *Ther* 3.5.1 that further confirms the emendation implemented here (on a side note, the non-connected spelling «الشاه بلوط» is consistent in P and features twice in *Ther* 3.5.1 and a third time in 3.6.2). For Andalusī *qasṭal*, see the discussion of geolectal markers in Chapter 9.

³ Attestations for this word are analysed in Chapter 9.

⁴ No such distinction is made in the text (which is a continuous one) and since all the epigraphs (except for mange) are mentioned in the summary it can be safely assumed that this is not a case of clerical conflation of two different chapters. The same arrangement is transmitted in *Nuğh*. A quite similar sequence is found, in fact, in AṬṬABARĪ, *Firdaws* IV.XI.1–5, where the nosology and treatment of hips (§ 317₈–318₁₅, focusing mainly on sciatica and gout) are immediately followed by a series of skin diseases such as albaras, mange, dry scab or heat-spots (*haṣaf*), and scrofulas (§ 318₁₆–325₂). In the standard head-to-toe arrangement it is quite frequent, indeed, for skin diseases (and in general such ailments as affect the whole body rather than any particular organ) to come after the discussion of bone-setting.

but its reflection in ZUHR's and particularly in ALʿILBĪRĪ's treatises is rather messy.

Diseases that affect the legs are explicitly stated to be of the same genus than the ones mentioned for the hips, including inflation of the legs,¹ subluxation (*waṭy*), and fractures (*kasr*).² The treatment of fractures is made extensive to any broken bones in the body and reports not only what little bone-setting is contained in the whole of *Natāʾiġ*³ but also a remarkable quote from the ancients («*fīmā dakarati lʾawāʾil*») on plastering dog brains all over the broken bone, for which a virtually identical passage can be located in the extant fragments of JULIUS AFRICANUS and also in PLINY.⁴ As so often throughout the re-edition if IBN MĀSAWAYH's *Nuġh*, the reference to this quote («*fīmā dakarahū baʿḍu lʾawāʾil*») is ascribed to ZUHR in the manuscripts (cf. A 128₁₄₋₁₅). It is logical to assume that it must have been already present in the source text.

The second subunit is made up of seven different epigraphs, all of which deal exclusively with conditions of the skin: mange, scales freckles and lichen, small-pox and measles, albaras and vitiligo, and leprosy.¹ This catalogue does not quite

¹ Literally “winds in the legs” («*arriyāhu fi ssāqayn*»), for which a more technical name would be “empneumatosi”. In the Helleno-Islamic tradition πνεῦμα ≡ *rīh* may afflict (just like blood, bile, and phlegm) virtually any organ and references to “gout winds” («*rīyāhu nniqris*»), for instance, are not rare in the corpus, cf. AṬṬABARĪ, *Firdaws* IV.XI.3 (§ 320₄); also sciatic winds are mentioned by ALHĀŠIMĪ «*wabwaḡaʿu lʾawwalu attahimuhū min rīhin liʿirqi nnasā*» in *Maġālis* I.I.44 (K 104₁₃). A thorough discussion of the concept and therapeutical treatment of πνεῦμα φουσώδές ≡ *rīhun nāfiḡah* is provided in GALEN, *Ad Glauc.* II.8 (K XI 111₁₋₁₁₅₆) ≡ *Aġlawqun* II (P 329_v 14 – 331_v 13). See also the description of the bone-corroding *rīhu ššawkah* in IBN SĪNĀ, *Qānūn* IV.VI.4.8 (B III 185₉₋₁₂).

² The typology of solutions of continuity and dislocations was remarkably developed since Antiquity and there seems to be, moreover, some fluidity in the early Arabic terminology for these ailments, particularly with regard to *wat?* / *waṭy* (which is well attested already in AṬṬABARĪ). For a relatively late systematic classification of these pathologies and an unambiguous definition of *waṭy* as ‘subluxation, partial dislocation’, cf. IBN SĪNĀ, *Qānūn* IV.IV.2.1 (B III 155₁₄₋₁₉) and also IV.V.1.1 (B III 186₃₁₋₁₈₇₁). On a side note, I have preferred to translate the same word as ‘bruise’ above when related to the liver, although ‘dislocation of the liver’ would be equally possible.

³ The operation described in the text requires such typical items as bandages or dressings (*faṣāʾib*, the singular of which is *fiṣābah* and also *fiṣāb*), ligatures or straps (both the singular *ribāṭ* and the plural *rabāʾiṭ* feature here), and splints (*ġabāʾir*, plural of either *ġibārah* or *ġabīrah*). The whole passage is inherited from *Nuġh*. For a detailed account of the use of all these elements in bone-setting, cf. IBN SĪNĀ, *Qānūn* IV.V.2.7–9 (B III 201₃₀₋₂₀₃_n).

⁴ Cf. AFRICANUS, *Cesti* D41 «Κυνός ἐγκέφαλος κάταγμα πωροῖ ἡμέρας ἰδ’ εἰς ὀθόνιον ἐγχριόμενος καὶ ἐπιτιθέμενος, ἀνοθεν ἐρέας ἐπειλουμένης» (W–S–M–G 134); and PLINY, *NH* XXX.13.[40] «*ossibus fractis caninum cerebrum linteolo inlito, superpositis lanis, quae subinde (oleo) subfundantur, fere xiii diebus solidat*» (J–M IV 464₁₋₃ | J VIII 354₁₆₋₁₈). The same passage is included also in the pseudo-Galenic *Dinam. ad Moec.* [273] «*Ad os fractum. Cerebrum canis cum aceto calido distempera et superpone in panno lineo, per tres dies dimitte*» (B 121₃₃₋₃₅).

coincide with the one transmitted in *Nuǧh* and a more systematic comparison of the two texts remains to be done.

In *Natāʾiǧ* the rubric of the first epigraph marks clearly this shift in the focus of the chapter: “As to the mange on the whole rest of the body”. Mange is not listed however amongst the diseases announced in the summary of the chapter (but it is in *Nuǧh*), whereas the preceding and the subsequent epigraphs are.

This one is not the only structural anomaly in the sequence: smallpox (*ǧu-darī*) is dealt with in *Ther* 4.4.5 in standard collocation with measles (*ḥaṣabah*), but apparently also again in *Ther* 4.4.9, where it is discussed separately and given a different treatment. Besides, there are compelling reasons to suspect that the text as transmitted in manuscript P is defective: an eyeskip is self-evident at the beginning of *Ther* 4.4.9 (this is marked as a lacuna in the edited text) and hemiplegia, which closes the catalogue of diseases in the summary, is nowhere to be found in the body of the chapter. Fortunately *Nuǧh* contributes invaluable help to solve this crux: the second instance of smallpox is nothing but a misreading of الجدر ‘numbness’ (cf. the epigraph «الجدر والفالج» in *Nuǧh* A 131₂₃) and the reading «الجدر» in P towards the end of the chapter should be accordingly emended as «الجدر (ي)».²

The chapter provides a thorough description and prognosis of leprosy in *Ther* 4.4.8, against which the author recommends cauterisation and the classical remedies based on the flesh of vipers. All this information was already available in ALʿILBĪRĪ’s source, which further included an extremely interesting reference to the four species of leprosy, namely the lion’s malady, the fox’s malady, the snake’s malady, and what manuscript A reads as «داء القرص» but might actually be the elephant’s malady (cf. *Nuǧh* A 130₉₋₁₀). This classification is essentially identical to the four different varieties of leprosy mentioned separately in *Nat* II.1 in the discussion of humoral physiology, which confirms the antiquity of the materials exploited there. On the other hand, that the reader of the text was expected to have some previous knowledge of medicine can be inferred, again, from the protasis “if you see the signs” (of smallpox and measles) without these symptoms being ever actually described.

The treatment of skin conditions calls, as usually, for a wide array of compound drugs. In addition to the ubiquitous theodoretus and hiera logodion, the

¹ Mange (*ǧarab*) and freckles (*kalaf*) have already been introduced above in *Ther* 4.1.1 and 1.7.2; *qawbāʾ/qiwabāʾ/qūbāʾ* corresponds to λειχήν. In the Graeco-Arabic tradition *baraṣ* (which entered Middle English as *albaras* through mediaeval technical Latin, cf. NORRI, *DMVE* 35b–36a s.v.) refers to λευκή, while *bahaq* (cognate to Syriac ܒܗܩܩ and Hebrew ܒܗܩ) translates ἀλφός.

² As seen in the parallel locus in *Nuǧh*, hemiplegia (*fāliǧ* from Syriac ܦܠܝܓ) ought to be included in this epigraph.

author recommends the Indian *buhtağ* and also the great *buhtağ*, as well as the Māhiyānī and the Hāšimī drugs. The latter two are found in *Nuğḥ* A 129₂₉, where an explicit reference is made to ZIYĀD ALYĀQŪTĪ's book. In *Natāʔiğ* the list includes also the Indian *muğīt* drug,¹ a new instance of the "Indian/winter pill" (in *Natāʔiğ* once again clearly «الحبب الشتوي», with no parallel in *Nuğḥ*), the pill of pepperwort, the *kustağ* of sagapenum, and the fetid pill.

In *Ther* 4.4.9 «الكيلاج» probably represents, in a corrupt form, كلاج oil***? 'coconut oil', but no confirmation can be obtained from *Nuğḥ* here.² Castoreum (which has already been mentioned several times throughout THERAPEUTICS) is referred to quite exceptionally as «*ṣaqīdun yusammā ʔundabādistar*» in *Ther* 4.4.6.

Ther 4.5 — On the hands and the feet

That briefness does not necessarily equate to lack of interest is eloquently proved by the this short chapter. Chaps and redness may not be remarkable by any standards, but the malignant excrescence called "grape" (*ṣinabah*) in *Ther* 4.5.1 (= *Nuğḥ* A 132₂₅) does deserve further attention. The chapter includes, furthermore, an exceptional attestation of the enigmatic nosonym *diqrārah* ('gout?') in *Ther* 4.5.1 (= *Nuğḥ* A 132₁₄).³

¹ This one is a variation of the name of the same drug that has been previously mentioned as *almuğītu lhindi*. The same collocation of the Māhiyānī drug (read actually «الدوا السيلاني» / «المياهياني»), the Hāšimī drug, and the Indian *muğīt* is prescribed against leprosy by IBN WĀFID in his *Tadkirah* (cf. G 9v 7 and 28v 26–27; already recorded by DOZY, *SDA* II 758b s.r. هشم). The same reference to YĀQŪTĪ's book is given by IBN WĀFID for all these drugs. On the other side, the actual formula for "a drug called the Hāšimī" («*dawāʔun tudṣā "lhāšimī"*») is noted down in AZZAHRĀWĪ, *Taṣrīf* VI.45 (S I 41_{16–19}).

² Cf. IBN ĠANĀH, *Talḥiṣ* [230] «دهن الكلاج هو (دهن) الجوز الهندي» the word diversely transmitted as «دهن الكلكلاج هو دهن جوز الهند» in AZZAHRĀWĪ, *Taṣrīf* XXIX.1 (S II 424₁₃), which may be the historically more correct form (see the critical apparatus *ad loc.*).

³ For both *ṣinabah* and *diqrārah*, see the *Complementary notes on nosonymy* appended to this survey.

Ther 4.6 — On fevers

THERAPEUTICS, and therewith the combined medical treatise that makes up the core of *Natāʿiǧ*, comes to an end with a brief survey of the typology and treatment of fevers. The original chapter in IBN MĀSAWAYH's is practically omitted by ZUHR in *Nuǧh* and no comparison can be made between the two texts.

In *Natāʿiǧ* fevers are said to be “different in genus and species”, but only some of the simple ones are discussed in the text: quartan, intermittent, tertian, burning and continuous, and finally mixed fevers. The author's simplification of the matter is remarkable but far from unprecedented and it is worth noting that here, as in the remainder of the text, no trace of Greek terminology is found.¹

Quite exceptionally, a concise aetiological remark introduces each epigraph: quartan fever is born from black bile, intermittent fever from rotten phlegm, tertian fever from yellow bile, the symptoms of burning and continuous fevers are evident in their heat, mixed fevers are caused by differences in nature. This rudimentary aetiology is no pedantic ornament at all but a direct and easy-to-grasp justification of the regimen prescribed for each kind of fever. Thus, the cure for melancholic quartan fevers consists in abstaining from melancholic food; since the cause of quotidian fevers is phlegm, it is only logical that their treatment should include such biting foodstuff as can cut thick phlegm, and so on and so forth.

Despite the author's overall unsophisticated approach, an elementary diagnosis is regularly mentioned for each variety of fever (*faʿidā raʿayta* three times, *dalāʿil* once) and the technical term *inhiḍām* (corresponding, apparently, to *naḍǧ* ≡ πέψις in standard terminology) is used no less than three times as an indicator of the need for a change in the diet first prescribed.

The treatment of fevers is for the most part dietetic (including diverse syrups, oxymel, and hydromel, as well as several different kinds of food), but the author recommends also inducing vomit with hot water in the case of daily fevers and letting blood from the median cubital vein in the case of a continuous fever. A few compound drugs are also prescribed: the electuary of asafoetida, the hi-

¹ In Qayrawān IBN ALĠAZZĀR still provides the original Greek names for at least four different fevers in *Zād* VII, mostly as synonyms or, at least in some cases, as specifying hyponyms: «قوسوس» for καύσος (B 190, 342 | T II 598₁, 604₁₀); «اطريطاوس» for τριταίος (B 336 | T II 604₆); «سونوخوس» for σύννοχος (B 467 | T II 609₁₁₋₁₂); and «امفيامرينوس» for ἀμφημερινός (B 732 | T II 620₇₋₈). In Andalus, in turn, no Greek name is mentioned in the whole chapter devoted to fevers by AZZAHRAWĪ in *Taṣrif* II.30 (S II.1 333₅–365₁₅), except for a transliteration of ἐκτικός at *Taṣrif* II 337₁. The trend towards systematic terminological Arabicisation had, in fact, begun in the east: while the early Syro-Arabic *kanānīš* rarely fail to include Greek pyretological nomenclature, non-Arabic names of fevers are conspicuously absent already from ARRĀZĪ's *Almanṣūrī* X (B 459₁–522₂₂).

era logadion, the theodoretus, the decoction of epithymum, the bitter hiera, the hepatic of roses (*dabīd ward*), the pills of tabasheer and the pills of camphor, the great theriac (twice), and the “yellow drugs” such as “Salīm’s yellow”.¹

¹ Some references to this category of drugs are provided in the *Complementary notes on polypharmacy*.

6.3 Concluding remarks

Like most sections of the book *Nat* II.2 is large and by derivative, but in this case its main source can be identified. From beginning to end (except perhaps for a few loci) a pre-existing treatise on therapeutics is reproduced with minimal authorial intervention. The task of the author-compiler is limited to very sporadic linguistic adaptation and occasional complementation with additional sources. As stated at the beginning of this chapter, the treatise that provided the copy-text for *Nat* II.2 is IBN MĀSAWAYH's *Kitābu nnuġh* (also *Kitābu lmunġih*), upon which the reputed Andalusī physician ABULĀLĀʿ ZUHR (d. 1131) affirms to have built his own *Kitābu nuġhi nnuġh* and from which he draws most of the materials that make up Chapter 1 of that book. To his apparently literal excerpts from the original text (which are usually introduced by “Yuhannā said”)¹ ZUHR appends quite regularly his own remarks (often a simple approval) and a few alleged improvements too, which are intended to enhance the usefulness of his predecessor's book (thence the title *The success of the success*) with particular regard to his western coevals.²

A simple comparison of the two texts reveals a level of identity that leaves no doubt about their genetic affiliation. Correspondences have been regularly indicated in the above survey for most epigraphs in *Nat* II.2, but reproducing here two parallel (or rather stemmatically cognate) passages side by side may convey a clearer idea of the extent of this identity. I have chosen one of the most apparently idiosyncratic chapters in *Nat* II.2 as an illustration of how drastically the emergence of a new witness can alter the previous interpretation of

¹ In several places in the above survey I have shown that this usage is not entirely consistent and that many a passage ascribed to ZUHR in the manuscripts is demonstrably a quote from IBN MĀSAWAYH. Internal evidence confirms, more importantly, that the introductory description of the organs as to their temperament, uses, and ailments is borrowed from the source text even if in most chapters this is not explicitly indicated (an exception being the passage reproduced below). A systematic examination would be required, in any case, to screen what is original (even if apparently appropriated by ZUHR) from what is an addition by the compiler.

² For the description of ZUHR's text and an edition of some fragments (which made possible the identification of *Nuġh* as the source for *Nat* II.2), cf. ÁLVAREZ 1995b, where further references are provided with regard to the history of the rediscovery of this title; also ÁLVAREZ 2009: 34. The two manuscripts on which that description is based are Rabat, Alḥizānah Alḥasaniyyah MSS *Maġmūf* 253 (= A) and 1538 (= B), photographic reproductions of which were kindly scanned and made available to me by Dr ÁLVAREZ. For an possible additional Tunisian manuscript (referred to as ʿabdaliyyah 2867, item no. 2) that appears to have been lost, cf. ALMUNAĠĠID 1959: 259 no. 82. Not much attention has been given to this treatise since then, cf. a passing-mention in ALĀMIRĪ 2014: 32–33 no. 13, 182. On a side note, the chapters devoted to diverse kinds of compound drugs shall be of some help for the future analysis of *Nat* V PHARMACOPOEIA. According to ÁLVAREZ 1995b: 85 the year 1091 might be a *terminus post quem* for the compilation of the text.

any text. My own reading of the chapter (and, by extension, of much of the section) relied mostly on the exclusively western documentation of the word *diqrārah* but the probable attestation of the word in IBN MĀSAWAYH's text (and perhaps also in MASĪH's) necessitates a totally different explanation:¹

Nuǧḥ I.19 (A 132₁₃₋₁₈ | B 205₁₅₋₁₉)

Nat II.2 THERAPEUTICS 4-5

القول في اليدين والرجلين

باب ذكر اليدين والرجلين
ومزاجهما وأدويةهما

قال يوحنا:

أما مزاجهما: فالبرد واليبس.
وأما منافعهما: فالقَبْضُ والبَسْطُ والمَشْيُ.
وأما أمراضها: فالتَقَرُّسُ والدَّقْرَارَةُ.
والشَّقَاقُ، والحمرة، والعنبة.

أما مزاجهما: فالبرد واليبس.
وأما منافعهما: فالقَبْضُ والبَسْطُ والمَشْيُ.
وأما أمراضها: فالتَقَرُّسُ والدَّقْرَارَةُ،
والشَّقَاقُ، والحمرة، والعنبة.
علاج التقرس والدقراة

قال يوحنا:

فيفتح عرق الأكل في الربيع والخريف،
وفتح عرق القدم (وهو الصافن).
ويحمل مرهم الكَرْزُبُ ومُخَّ البيض
وتقل الخلّ وزيت الورد.
ويُدِيمُ شرب حبّ الفيقرا وشرب اللوغاديا
في الخريف.
ويشرب من الترياق الأكبر في الشهر مرتين.

فتح العرق الأكل في الربيع والخريف،
وفتح عرق القدم.
ويحمل مرهم الأكَزْبُ ومُخَّ البيض
وتقل الخلّ وزيت الورد.
ويُدِيمُ شرب حبّ الفيقرا، ويشرب اللوغاديا
في السنة مرتين في الربيع والخريف.
ويشرب من الترياق الأكبر في الشهر مرتين.

This representative example shows, moreover, that *Nat* II.2 transmits overall a less abridged (and often far less misunderstood) reproduction of the source text, and that it cannot therefore be derived from ZUHR's *Nuǧḥ*. That ZUHR does not depend on *Nat* II.2, in turn, is proved by the explicit mention of IBN MĀSAWAYH throughout and also by a number of instances in which he retains the original eastern phytonyms whereas ALʿILBĪRĪ either glosses them or substitutes a local name for them.

In the absence of positive evidence to the contrary and given that this is, let it be recalled once again, a preliminary survey (not a definitive analysis) of *Nat* II.2, my working hypothesis here is that the two Andalusī physicians gained access to a copy of IBN MĀSAWAYH's treatise and exploited it for their own purposes. ALʿILBĪRĪ incorporated it virtually *in toto* as a complement for his own compre-

¹ See below the *Complementary notes on nosonymy*.

hensive *kunnāš*, while ZUHR added a new title to his literary output with far less effort than what compiling from scratch would have required.

A few words need to be said about ALʿILBĪRĪ's intervention in his text. That he may not have limited himself to copying his source is a possibility strongly suggested by the pseudo-Galenic materials found in *Ther* 1.4 *On the ears* and perhaps also by the superimposition of a quaternary division of the human body over the head-to-toe arrangement (but this might have already featured in the source and might have been omitted by ZUHR). A more active rôle may be also reflected by the inclusion of some recipes throughout the text, but most of them (or even all of them) must have been already available in IBN MĀSAWAYH's treatise (on which see the paragraph below). In any case, the conspicuous presence of some exclusive geolectalisms and a number of glosses unparalleled in ZUHR's excerpts prove that he certainly was not an inane transmitter. That he often understood his source far better than his distinguished colleague, on the other hand, says something about his medical knowledge. In this regard, and especially when compared to ZUHR's version, *Nat* II.2 ought to be considered quite a careful and intelligent reproduction of the original text (and he further associated his own name of that of one of the most reputed figures of the foundational period).

A text to edit and a text to reconstruct

Despite my provisional (but perhaps not entirely unjustified) criticism of ZUHR's authorial strategy in his *Nuǧḥu nnuǧḥ*, that text certainly deserves to be edited and analysed. The fact that a copy of IBN MĀSAWAYH's old treatise was still available in the 12th c. in the Islamicate west and that such a high-rank physician should have chosen it to be his copy-text is in itself worth noting. In this regard, ZUHR's "re-edition" of *Nuǧḥ* seems to reflect the protracted influence of that apparently modest book in the western tradition (more on this below).

Besides, ZUHR's treatise is quite informative about a number of aspects related to compilational technique. There is, for instance, an evident problem with the frequency of misascribed passages in the two manuscripts. This misattribution is moreover unidirectional: while many an original passage stemming from IBN MĀSAWAYH's text is introduced by the name of the Iṣbili physician, the contrary never happens. It is unlikely that any copyists should have tampered thus with their Vorlage and the phenomenon may therefore be interpreted rather as a partial appropriation on the side of ZUHR.

Still with regard to compilation, *Nuǧḥu nnuǧḥ* appears to be a perfect example of failed implementation of an initial plan. The twenty-chapter structure announced in the index of contents at the beginning of the text is nowhere to

be found in the actual text. An underlying two-part design can be intuited, but the transition from Chapter I (= the abridged version of IBN MĀSAWAYH's therapeutics) to the second part is only implicit. The minimal eight-line discussion on fevers is followed by a lengthy digression on dog bites, then by an epigraph on how to drive away noxious insects (and even on how to hunt cranes). There follow an intriguing series of epigraphs on medical matters in which GALEN is repeatedly cited, and a great many recipes that would require further examination, as some of them might preserve additional fragments of IBN MĀSAWAYH's *Nuġh*.¹

As for IBN MĀSAWAYH's original treatise (of which this survey turned out to be an indirect analysis), a reconstruction of its contents is now a little more feasible on the basis of *Nat* II.2, ZUHR's *Nuġh*, and a few excerpts in indirect transmission. The text may be identified as the *Kitābu lmunġiḥ* mentioned IBN ABĪ UṢAYBĪFAH and for which ARRĀZĪ transmits at least eleven quotes in *Alḥāwī*.² A preliminary survey of ARRĀZĪ's quotations from *Almunġiḥ* shows some noticeable differences with regard to ZUHR's excerpts and also to ALʿILBĪRĪ's text. However, the evidence contributed by the whole title of the treatise and by those passages tallies quite well with what can be inferred from its Andalusī echoes. Unlike the great compilations of the *kunnāš* type, *Nuġh* focuses on *recipes* and *treatments* (ie remedies) with only minimal attention given to nosology or to medical theory in general, and that is quite an accurate description of *Nat* II.2 indeed.

Furthermore, IBN ABĪ UṢAYBĪFAH's title provides a clue to a problem for which I could not provide a satisfactory solution, namely whether the many recipes included in *Nat* II.2 but not in ZUHR's *Nuġhu nnuġh* were already available in their source or not. The presence of *ṣifāt* in the title seems to answer this question and ALʿILBĪRĪ's rôle is therefore perhaps best described as a careful copyist and his text as a much more faithful reproduction of *Nuġh* than the re-edition prepared

¹ As pointed out by ÁLVAREZ MILLÁN 1995: 87–88, this “second part” does not correspond to the pharmacopoeical chapters listed in the prologue. On a side note, that prologue (which must have had some factual basis in the author's original plan) is explicit enough to rule it out as a possible cognate or close parallel to *Nat* V PHARMACOPOEIA. There are nonetheless several elements of remarkable interest in that planned dispensatory, such as the compound drugs styled as *bahātiġ* in Chapter III, the *dabidāt* in Chapter IV, or the *aṣāfirah* (a plural of *aṣfar*?) in Chapter VIII.

² This identification is already suggested by ÁLVAREZ 1995b: 85 n. 5. For IBN ABĪ UṢAYBĪFAH, cf. *Ṭabaqāt* 255_{III}, where the full title of the work is registered as *Kitābu lmunġiḥ fī ṣṣifāt walṣilāġāt*; cf. also SEZGIN 1970: 234 no. 14. It is ULLMANN 1970: 113 who, as usually, provides a complete list of quotations in *Alḥāwī*. On a side note, let it be noted that IBN ĠULĠUL does not seem to know of the existence of this title (cf. *Ṭabaqāt* 65_I–66₄), but it was an important source of recipes for IBN ALĠAZZĀR, who draws from it quite extensively in *Zād*, and indirectly also for AZZAHRĀWĪ (see Chapter 9).

by the Iṣbīlī physician.³

On the other hand and as a final remark, I should stress that, even if it is little more than a sparingly glossed *copy* of a pre-existing text, *Nat* II.2 ought to be analysed within the general context of *Natāʾiǧ*. From that perspective, it is just what would be expected from the same author who, as shall be seen below, extracted his own anthology of quotes related to the specific properties of things from a previous compilation and built an average pharmacopoeia probably also drawing from some collection of recipes available to him at that time. It is, thus, with regard to ALʿILBĪRĪ's compilational strategy that THERAPEUTICS should be considered, while its value as a medical text should be measured by the availability and quality of such literature in his own context, the chronological element of which is unfortunately unknown to us. That it happens to be a major testimony to the no longer extant text of one of the main protagonists of the earliest period of Islamicate medicine—that is a most welcome added value of *Nat* II.2.

³ Unfortunately I could not conduct a systematic comparison of the recipes transmitted in *Nat* II.2 with the chaotic pharmacopoeical materials collected in ZUHR's text, nor with the indirect transmission of the formulas from the original *Nuǧ* in *Alḥāwī* and *Zād*. As far as the latter text is concerned, the superb ongoing critical edition of the Arabic original and the Hebrew and Latin translations by BOS, KĀS, and McVAUGH shall make the task much easier and its results far more compelling.

6.4 Appendices

	<i>Nat II.2</i>	<i>Nuḡh</i>	A	B
1.1	جلدة الرأس	القول في جلدة الرأس	102 ₂₂ -104 ₂₂	180 ₁₇ -182 ₃
1.2		باب الدماغ	104 ₂₂ -105 ₂₅	182 ₄ -183 ₁
1.3		باب في العينين	105 ₂₆ -107 ₂₁	183 ₂ -184 ₂₃
1.4	—§§	باب في الأذنين	107 ₂₂₋₃₁	184 ₂₄ -185 ₁
1.5	باب ذكر الفم واللسان			
1.6	باب ذكر المنخرين			
1.7	باب ذكر الوجه	—§	107 ₃₁ -108 ₅	185 ₂₋₇
1.8	باب ذكر الحلق	القول في الحلق	108 ₆ -110 ₂₅	185 ₈ -187 ₁₀
2.1	أما الصدر	القول في الصدر	110 ₂₅ -112 ₄	187 ₁₁ -188 ₁₃
2.2	وأما الرئة	القول في الرئة	112 ₄ -114 ₂₆	188 ₁₄ -190 ₂₁
2.3	وأما القلب	القول في القلب	114 ₂₆ -115 ₁₆	190 ₂₂ -191 ₁₀
3.1	باب ذكر الكبد	القول في الكبد	115 ₁₆ -117 ₄	191 ₁₁ -192 ₂₃
3.2	وأما المرارة	القول في المرارة	117 ₄₋₂₂	192 ₂₃ -193 ₈
3.3	باب ذكر الطحال	القول في الطحال	117 ₂₂ -118 ₁₃	193 ₉₋₂₈
3.4	باب ذكر المعدة	القول في المعدة	118 ₁₃ -119 ₂₁	193 ₂₉ -195 ₄
3.5	وأما الأمعاء	القول في الأمعاء	119 ₂₁ -120 ₂₂	195 ₅ -196 ₁
3.6	باب ذكر الكليتين والمثانة	القول في الكليتين والمثانة	120 ₂₂ -122 ₂₂	196 ₂ -198 ₁₈
4.1	باب ذكر الوركين والظهر	القول في الوركين	122 ₂₂ -123 ₈	198 ₁₈ -199 _?
4.2	باب ذكر الأنتيين والذكر	القول في الأنتيين والذكر	123 ₈ -125 ₂₅	199 _? -200 ₄
4.3	وأما الأسفل	القول في الأسفل	125 ₂₅ -127 ₂₅	200 ₄ -201 ₂₂
4.4	باب ذكر الفخذين والساقين والركبتين	القول في الفخذين والساقين والركبتين	127 ₂₅ -132 ₁₃	201 ₂₃ -205 ₁₄
4.5	باب ذكر اليدين والرجلين	القول في اليدين والرجلين	132 ₁₃ -133 ₁	205 ₁₅₋₃₀
4.6	باب ذكر الحميات	باب في الحميات	133 ₁₋₉	206 ₁₋₈

Table 6.1: Concordance of chapters between *Nat II.2* and ZUHR's *Nuḡh*.

Complementary notes on nosonymy and anatomy

A systematic comparison of *Nat* II.2 with the reconstructed text of IBN MĀS-AWAYH's *Nuǧḥ* remains to be conducted and the remarks included in the following list are not only abridged but also subject to future revision. For ZUHR's *Nuǧḥ* the reference is to manuscript A unless indicated otherwise. Once again, this list is not a proper medical glossary. Nosological identification is secondary to my main concern here, which is simply to offer a limited and provisional concordance of available documentation for a few of the lexical items present in *Nat* II.2, to which some item from *Nat* II.1 has also been added. Brief remarks from a medico-philological perspective are to be found as footnotes to particular words in the corresponding loci and the critical apparatus ought to be consulted too for further information. On the other hand, without being actually Andalusocentric, for obvious reasons Andalusī materials have been overall prioritised. The catalogue is not exhaustive (only the most significant nosonyms have been selected) and it is arranged according to a strict alifatic order.

The above remarks apply also to the list of polypharmacy that follows these notes.

ibriyah 'dandruff, scurf' *Ther* 1.1

In *Nat* II.2 *ibriyah* is a source-dependent nosonym, since it is the one used already by IBN MĀS-AWAYH according to *Nuǧḥ* 102₂₂|24. It appears to have been the main Arabic word for dandruff throughout the 9th c., at least prior to IŞṬIFAN's and ḤUNAYN's shared loan-translation of *πίτυρα* as *nuḥālah*, which would become the standard name of this ailment.¹

It may be relevant for the prehistory of *Nuǧḥ* that the influential pseudo-Galenic treatise *Naṣāʾiḥu rruhbān* appears to have featured this word for dandruff judging from a recipe against alopecia «*wassaʿfati walʾibriyati walḥikkah*» drawn from that text and copied on the right margin of IBN WĀFID, *Tadkirah* G 14r, which is supported by PSEUDO-GALEN, *Secr. ad Mont.* [7] (B 369₁₋₂₂), where the word is translated as *impetigo*.

The same pre-standard terminology may have been introduced by IBN ʿIM-RĀN into Qayrawān, as reflected in IBN ALĠAZZĀR's use of *ibriyah* as his main (but not exclusive) name for dandruff.²

¹ Cf. three instances of the word in AṬṬABARĪ, *Firdaws* IV.II.1 (§ 136₁₄) and IV.XI.5 (§ 323₂₄); whereas *ḥazāz* in *Firdaws* 135₁₀ does not seem to allude to the same condition and it ought to be put in relation to *ḥazāz(ah)* ≡ ἄχωρ, for which see below. For this early period, cf. also MASĪḤ *apud* IBN SAMĀĠŪN, *Ġāmiʿ* شـ 23 (S IV 261₁).

² Cf. especially the chapter title in IBN ALĠAZZĀR, *Zād* I.5 جلدة الرأس في الإبرية المتولدة في (B-K 82₁₋₈₆ | T 76₄₋₇₇₁₄). Yet *nuḥālah* is also used at least once in a literal, non-adapted, quote from *Ḥaṣāʾiṣ*

In Andalus, *ibriyah* is recorded by IBN ĠANĀḤ, *Talḥiṣ* [400], where it explains *ḥazāz* on the authority of Arabic lexicography and quite strikingly also on the testimony of ARRĀZĪ's *Manṣūrī*, which as pointed out by BOS, KĀS, LÜBKE, and MENSCHING 2020: 569 does not seem to include any mention of this word.¹ The same denomination for dandruff features often in AZZAHRAWĪ,² and through *Nuġḥ* the word is transmitted also by ZUHR, then by his son IBN ZUHR in *Taysīr* I (H 23₄–24₁₀).

Regardless of its ultimately bookish origin, this nosonym seems to have been naturalised also in spoken Andalusi Arabic.³ As to the etymology of the word, alternative forms in *h*- and even *t*- are recorded by native lexicographers, pointing perhaps towards a non-Arabic origin.⁴

birsāmun ḥārr 'hot inflammation of the brain, phrenitis' (etymologically 'pleuritis') *NatPhil* 4.2.3

Documentation for this borrowing from Persian that actually involves a confusion between *barsām* ('swelling [and pain] of the chest', 'pleurisy' < *bar* 'chest') and *sarsām* ('swelling of the head' < *sar* 'head') is available in virtually every text on Islamic medicine.⁵ The most interesting thing here is the different nomenclature echoed in *Nat* II.1 and then in *Nat* III, where λήθαργος (which

(B–K 84₂ | T 77₂). On a side note regarding the possibility that in Qayrawān a non-Iṣṭifānī translation of *Materia medica* might have been used, it is uncertain whether «*naqqati l'ibriyata llati fi rra?sa*» in IBN ALĠAZZĀR *Zād* I.5 (B–K 82_{12–13} | T 76_{16–17}) represents a local rewording or rather an originally alternative translation of «*σμήχει δὲ καὶ πύτυρα*» in *Mat. med.* 1:112 *μυρσίνη ἢ ἡμερος* (W I 105₂₁), which IṢṬIFĀN had rendered as «*wayaġlū nuḥālah rra?sa*» in *Ḥaṣāʾiṣ* 1:116 *آس بستاني* (P 26_v 22 | T 109₁₇). The fact that afterwards he retains the original *nuḥālah* when quoting from the same source (cf. B–K 84₂ | T 77₂) seems to suggest that this may be a case of spontaneous synonymical substitution on the part of the author.

¹ Cf. a separate epigraph devoted to this condition in *Manṣūrī* V.1 *في ما يذهب بالحزاز* (B 237_{3–13}). Mark that a gloss for *ibriyah* is included also by IBN ALḤAŠŠĀʾ in *Mufid* [316] (C–R 34_{10–12}), which must mean that the word is (or at least was) somewhere to be found in that text.

² Cf. *Taṣrif* II.1.5 *القول في الإبرية* (S I 59_{32–60₉}), which may betray his Ifriqi sources, but then again in the gloss «*حزازة هي الإبرية*» in *Taṣrif* XIX.11 (S II 444₁₀), and quite regularly in *Taṣrif* XIII.1 (S II 134_{22|29}, 135_{7|8|33}, 136_{1|15|17}, 137₆, etc).

³ From a Romance reflection *aprea* (cf. VÁZQUEZ DE BENITO and HERRERA 1989: 94–95) CORRIENTE infers an Andalusi low-register pronunciation *abrýya* DAA 1b *{BR} II, which would be an indicator of some currency of the word beyond the written language.

⁴ Cf. ALḤALĪL, *Ṣayn* IV 47₇ s.r. *√هبر*; IBN ASSIKKĪT, *Ḥalq* 175_{4–5}; IBN MANḌŪR, *Lisān* V 248a 14–21 s.r. *√هبر* and V 335a 23 s.r. *√حزز*; the same variants are listed by ALḤWARIZMĪ too in *Mafātih* II.III.2: «*alḥazāzu wal'ibriyatu walhibriyatu fi rra?si šay?un kannuḥālati fihi*» (V 156_{10–11}). A possible South Arabic etymon **mabriyyah* is suggested by CORRIENTE in a footnote to DAA 1b *{BR} II, then again in CORRIENTE–PEREIRA–VICENTE, *DFDAA* 3 n. 12.

⁵ Cf. VULLERS, *LPLE* I 219b s.v. *برسام* and II 193a s.v. *برسام*; and most particularly the most recent remarks (and references to previous literature on the subject) by BOS, KĀS, LÜBKE, and MENSCHING 2020: 1030–1032 in their commentary to IBN ĠANĀḤ, *Talḥiṣ* [899] *قرايطس* (which is itself

was often glossed indeed as *birsāmun ḥārr*) is referred to as *nisyān*, in a typical case of non-normalised source-dependant terminology. For a detailed analysis of the different interpretations of λήθαργος in the Islamicate tradition (including *albirsāmu ḥārr* and also *nisyān*), see Part III Chapter 4 *Nat* II.iv *On oblivion*.

bahaqun aġbar ‘grey *bahaq*’ *NatPhil* 4.2.3

This ailment is glossed (maybe by the author himself) as *ḥikkah* ‘itch, itchiness’, which from a medical perspective is a rather poor explanation. While black and white *bahaq* (the latter corresponding canonically, and also etymologically, to ἀλφός) are universally distinguished, a threefold distinction seems to be less extended.

Grey *bahaq* is described as the mildest variety (and also the fastest to heal) by IBN ALĠAZZĀR, from whom it appears to be borrowed by AZZAHRĀWĪ.¹

Its presence in *Natāʾiġ* in a segment of presumable pseudo-Galenic inspiration (if not directly borrowed from that source, which seems to have been remarkably rich in mentions of different species of leprosy) and also in Qayrawān may prove to be of some significance.²

ḥazāzah ‘scales, scurf’ *Ther* 4.4.5

As indicated in the overview of *Nat* II.2 *ad loc.*, interpreting *ḥazāzah* from the ductus «حراره» transmitted by P is palaeographically unproblematic and semantically satisfactory. This interpretation finds external support in the parallel chapter in IBN ALĠAZZĀR’s *Zād* that is rubricated «fi ḥazāzi walquwabā?».³

an early and fairly widespread apomorphic reading of فرانيطس ≡ φρένιτις / φρενίτις). As expected, the Syriac tradition was quite immune to such a misreading, cf. ܚܙܙܐ in PAYNE SMITH, *The-saurus* 3269.

¹ Cf. IBN ALĠAZZĀR, *Zād* VII.18 (T 655₁₆₋₁₈, 656₉₋₁₁ | B 108–110 [n.v.]); AZZAHRĀWĪ, *Taṣrif* II.XXIX.2 (S I 315₃₁₋₃₂). Let it be noted that despite that explicit mention of grey *bahaq* the aetiology and therapeutics in that chapters focus exclusively on the white and black varieties.

² As far as my notes go, the Graeco-Byzantine tradition only distinguishes two kinds of ἀλφοί: white (λευκός) and black (μέλας), which are caused by phlegm and by black bile respectively; cf. for instance GALEN, *Sympt. Caus.* III.3 (K VII 227₄₋₉); *In Hipp. Alim. comm.* III.21 (K XV 348₁₄₋₁₆); PSEUDO-GALEN, *Introductio* XIII (K XIV 758₁₄₋₁₇); PAUL OF AEGINA, *Pragmateia* IV.VI.1 (H I 327₆₋₁₁).

³ Cf. IBN ALĠAZZĀR, *Zād* VII.19 (T 659_{9-660₁₉}). There the second type of lichen (the one called *alwaḥšāh*) is characterised by abundant scales or flakes («nuḥālatun kaṭīrah») and the author prescribes peeling the exfoliated spot («yuqaššaru ḥazāz») and treating it until the condition ceases. That locus is echoed, without however mentioning the nosonym *ḥazāz*, by AZZAHRĀWĪ in *Taṣrif* II.XXIX.6 (S I 320₂₁). In the only preview of the book available to me at this time, BOS 2015: 17, 113 translates IBN ALĠAZZĀR’s *ḥazāz* as ‘scurf’.

In a passage that might derive from the primitive core of MASĪH's *Kunnāš* the edited text of the *Hārūniyyah* prescribes smearing a mixture of rue and henna over the face against *ḥazāzah* and smallpox scars.¹

In Andalus, a dry lichen (*quwabāʾ/qūbāʾ*) that «*taṣīru mitla ḥazāz*» is mentioned by ALHĀŠIMĪ.² The word was indeed well established in the local lexicon, as seen in late Ġarnāṭī «enpeyne *hazīze hazéiç* | enpeyne en la barba *hazīze fal lāhya* | enpeynoso lleno dellos *muházzeç* | enpeynoso assi *méli min hazéiç*».³

Arabic *ḥazāz(ah)* is often transmitted in a defective spelling and may have been even occasionally reinterpreted as actual heat (*ḥarārah*), perhaps in the form of an inflammation.⁴

The word is used by IŞTIFAN to translate ἄχωρ and, as pointed out in the remarks to *Ther* 1.1.1, it is nosologically related but not identical to *nuḥālāh* (= *ib-riyah*) 'dandruff'.⁵

In *Natāʾiğ* it might represent the author's own terminology, since the original chapter in IBN MĀSAWAYH's *Nuğh* seems to deal with *quwabāʾ* and *kalaf* in separate epigraphs with no mention of *ḥazāz(ah)*.⁶

¹ Cf. *Hārūniyyah* I.XIII.10 (G 249₁₂₋₁₃). The remedy features immediately before the sequence on specific properties, with which it does not share a common origin. If it were not an original element of the primitive pandect, it would still attest to the western use of the word with this particular meaning.

² Cf. ALHĀŠIMĪ, *Mağālis* I.I.48 (K 109₈₋₉); the passage is transmitted only in MS E, dated 1227).

³ Cf. PEDRO DE ALCALÁ, *Vocabulista arávigo* 230b 33–39 (= CORRIENTE, *LAPA* 44a **hzz*), where Castilian *empeine* is a descendant of Latin *impetigo* (= Greek *λεγχίγν*), cf. ANTONIO DE LEBRISA, *Vocabulario* F4V 19–20.

⁴ Cf. «*walkalafi walqawābī (wahiya ḥazāzah)*» in *Hārūniyyah* I.9 (G 189_ε), for which manuscript T reads «والحارّة»; also «*wayaqlāʿu ḥarārata walʾibriyata mina rraʿs*» in the facsimiled Istanbul copy of AZZAHRĀWĪ, *Taṣrīf* II 348₂₈. Probably also IBN WĀFID, *Wisād* XXI.7 «*ṣifātun lirağulin šaraḍat lahū ḥarāratun fi ḍahrihi*» (A 226₂₀₋₂₁), which he treated by laying it open («*amartuhū bišarhihā*») and applying a cup on it.

⁵ Cf. *Ḥašāʾiğ* 1:28 دهن اللوز (P 10r 4–5 | T 40₄₋₆) ≡ *Materia medica* 1:33 ἀμυγδάλινον ἔλαιον (WI 38₇). To the above references, add still PSEUDO-ṬĀBIT B. QURRAH, *Dajīrah* 12₉₋₁₀. Also Syriac ܚܙܙܐ and ܚܙܙܐܐ in PAYNE SMITH, *Thesaurus* 1239 and BROCKELMANN-SOKOLOFF, *Lexicon* 438a.

⁶ Cf. *Nuğh* 127₂₈ (initial catalogue of ailments), 128₂₉₋₁₃₀₄ (individual epigraphs). In view of his overall strategy in the reproduction and commentary of his source, it is unlikely (but not impossible) that ZUHR should have altered the original arrangement of the epigraphs.

diqrārah ‘? Ther 4.5.1

In *Natāʔiḡ* this nosonym is inherited from IBN MĀSAWAYH’s *Nuḡh*, but ALʔILBĪRĪ appears to transmit a less abridged excerpt of the original text than ZUHR.¹

This eastern attestation of the word is exceptionally interesting, as *diqrārah* had for a long time been a hapax attested only in the Leiden Glossary and was thought to be a mere synonym of *niqris*. Now, in the natural philosophical section of the edited version of the *Hārūniyyah*, within an epigraph introduced by an explicit mention of MASĪḤ B. ḤAKAM and allegedly drawn from the combined authority of GALEN and the enigmatic Indian sage FALAṬĪS, *diqrārah* features in a context essentially identical to the one implied in *Nuḡh*.²

Hārūniyyah I.III.8 (G 87₁₀₋₁₂)

ذَكَرَ جَالِينُوسُ وَفَلطَيْسُ الْهِنْدِيُّ إِذْ الْمَرَّةَ الصَّفْرَاءَ أَصْلَهَا فِي الْمَعْدَةِ، وَسُلْطَانَهُ فِي الْكَبِدِ [...] وَفَسَادَ الْيَدَيْنِ وَالرِّجْلَيْنِ وَتَشْتِيقَتَهُمَا؛ وَمَهْ بِصَيْبِ وَجَعِ الْمَفَاصِلِ وَالرِّكْبِ، وَمِنْهُ الدَّقْرَارَةُ.

For Andalus, the publication of eleventh-century ALHĀŠIMĪ’s *Maḡālis*, however, provided not only a non-lexicography instance of the nosonym but also, and more importantly, evidence for a different meaning. Thus, the Ṭulayṭulī physician mentions several conditions of the skin of the feet in a report from him master ATTAYMĪ: «*waminhā šinfun āḡaru yuqālu lahū “alquwabāʔa lyābisah”; wahiya tašīru mitla ḡazāz, watusammā ayḡani “ddiqrārah”*». Then from MANŠŪR, about the claws of hawk: «*faḡaraḡa bayna ašābiʔihī šayʔun yuqālu lahū “ad-diqrārah”*».³ From this succinct descriptions of the ailments as a sort of dry lichen one may perhaps venture an identification with a variant of *lichen planus*.

As for the word *diqrārah* itself, CORRIENTE’s etymological proposal is as ingenuous as impossible to verify, but the Syriac connection may be supported by the two eastern authors that use the term with a meaning close to ‘gout’.⁴

¹ Cf. ZUHR, *Nuḡh* 132₄₄, which preserves only the initial mention of the ailment but not the epigraph in which it must have been dealt with. Manuscript P of *Natāʔiḡ* (the only extant witness for this passage) reads twice «دقراة» on fol. 74r 9|10, which suggests that the scribe may have found this unfamiliar word unpointed in his Vorlage.

² For a limited discussion and a provisional hypothesis on the origin of the “core” of the *Hārūniyyah*, see Part III Chapter 1. On a side note, the the editor’s translation “la nausée” is not even justified by a footnote and one wonders which may be the dictionary that provided so many interpretations of obscure terminology in that text.

³ Cf. ALHĀŠIMĪ, *Maḡālis* I.I.48 (K 109₈₋₉), only in MS E; this locus has been mentioned above for *ḡazāzah*) and *Maḡālis* I.II.22 (K 129₁₃), respectively.

⁴ Cf. CORRIENTE, *DAA* 188 *{DQR}, who suggests a “folk-etymological derivation” of the Syriac form ܕܩܪܪܐ (≡ ποδαρριχος in the translation of GALEN’s *Simpl. med.* according to PAYNE SMITH, *Thesaurus* 3038 s.v.; cf. also BROCKELMANN–SOKOLOFF, *Lexicon* 1156a s.v. ܕܩܪܪܐ) with the Persian adjectival suffix *-ār* that would have resulted in Arabic دقراة* ‘the one with short trousers’.

It is, however, highly uncertain whether this particular meaning can be assigned to IBN MĀSAWAYH'S (and also MASĪḤ'S) *diqrārah*. There is no doubt that a semantic distinction must obtain between *niqris* and *diqrārah*, as they are coordinated twice in the chapter. This differentiation might have mirrored the couple χειράγγρα 'gout in the hand' and ποδάγγρα 'gout in the feet' of the Graeco-Byzantine tradition, but this seems unheard of in the Arabic corpus and it is unclear which of the terms would correspond to *chiragra*. The evident etymological association implicit in Greek ποδάγγρα was, in fact, lost in Arabic *niqris* and no need seems to have been felt to assign a new name to the analogous ailment of the hands, which was indeed very rarely mentioned (if ever).¹

šurm 'anus' Ther 4.3

The same form in *š-* (normative Classical Arabic has rather *s-*) was probably found already in the source text, IBN MĀSAWAYH'S *Nuǧḥ*,² but it is nevertheless also attested in Andalusī Arabic by ALHĀŠIMĪ.³

However *šurm* is much better documented in general, east and west, in medical texts.⁴ The word apparently featured in a ḥadīṭ recorded from ʿĀLĪ'S mouth, but some lexicographers did not consider it chaste Arabic.⁵

¹ Cf. PEDRO DE ALCALÁ'S «gota de pies *négreç a reglén*» | «gota de manos *négreç al ydély*» in *Vocabulista arávigo* 262b 38 and 263a 1, respectively (= CORRIENTE, *LAPA* 205b **nqrs*); also CORRIENTE, *DAA* 537b *{NQRZ/S}, where the origin of this Arabic word is sought in Greek νέκρωσις, but perhaps one might rather look towards *√qrs* (= Syriac *√ܩܪܫ* and Mishnaic Hebrew *√קרח*), which is semantically less problematic.

² Cf. ZUHR, *Nuǧḥ* 125₂₇, 126₃₇.

³ Cf. precisely the phrases «*yaḥruǧu šurmuhū*» and «*ḥurūǧu ššurm*» in ALHĀŠIMĪ, *Maǧālis* I.33 (K 88₂₉). Two non-medical references to *šurm* can be found in CORRIENTE, *DAA* 250a *{SRM}.

⁴ The standard form is used by AṬṬABARĪ, *Firdaws* IV.IX.16 «*ilā maqṣadati wassurm*» (§ 271₁₇; also 272₅); in Qayrawān by IBN ALĠAZZĀR, *Zād* IV.20 (T 385₉; exceptionally, against his usual *maqṣadah*); and in Andalus by AZZAHRAWĪ, *Taṣrīf* II.XV (S I 188₃₁). The apparent Syriac cognate *ܩܪܫܐ* (for which cf. *Bar Bahlūl*, *Lexicon* 1958₈₋₉; and PAYNE SMITH, *Thesaurus* 4334) is considered a borrowing from Arabic in BROCKELMANN-SOKOLOFF, *Lexicon* 1536a.

⁵ Cf. IBN MANDŪR, *Lisān* XII 286a 6–8 s.r. *√SRM*. According to him, IBN ALʿĀRĀBĪ had made it synonymous to *unmu suwayd* (cf. *Lisān* XII 286a 3–4), and ALĠAWHARĪ had it for a *muwalladah* word designating “the exit of the faeces” («*mahraǧu tufl*») at the end of the rectum (cf. *Lisān* XII 286a 5–6). On a tangential note, the anatomical meaning of *tawq* ‘anus’ (maybe ‘sphincter’?) quite systematically reflected in ALHĀŠIMĪ (cf. *Maǧālis* 82_{3|8|10|12|17}, 83₁₅, 84_{9|17}, 85_{6|1820|21}, 86₃) is not recorded in contemporary lexicographical sources. As a metaphor it might be compared to Greek δακτύλιος ‘ring’ but also ‘anus’ (cf. LIDDELL-SCOTT, *Lexicon* 323b–324a).

ṣufār ‘jaundice’ *Ther* 3.2.1 | *ṣuffār* ‘tapeworms’ *Ther* 3.5.3

Although it is evident that no definitive conclusion should be drawn from one single fragment without taking into consideration the entire texts involved, hereunder I shall argue that the comparison of the contents of the chapter on the gallbladder in *Natāʾiḡ* to its source and to ZUHR’s interpretation thereof contributes extremely compelling evidence for the independence of our author from the Iṣbīlī physician.

Let me reproduce here the pertinent locus in ZUHR’s “extended edition” of IBN MĀSAWAYH’s *Nuḡh*:

ZUHR, *Nuḡh* I.10

Ther 3.2.1

A 117⁷⁻¹⁴ | B 192²³⁻¹⁹³₁

وأما أمراضها: فالصفر والدود واليرقان.
وأما دواهما من الصفر أولاً (وهو اصفرار
البدن كله فجأة، ليس هي الصفر التي تخلق
في البطن) بأن يُسهل طبيعته بعشرة مثاقيل
هليلج [...].

وأما أمراضها: فالصفر والسدد.
وأما علاجها من الصفر (وهو اليرقان)
— فن ذلك: أن تؤخذ عشرة مثاقيل
هليلج [...].

زهر — نعم جيد هذا كله. وعندني
أبرع منه للصفر التي ذكر يوحنا والدود،
وليس الدود التي تكون في الجوف مع الصفر
فتخرج عند الخلاء، لاكتها دود سوء تحدث
في المرارة، ليس لها حركة.

كله [كلها | فجأة] A. A.

The two Andalusi authors could not differ more in their understanding of the original passage. Now, ZUHR’s interpretation can be proved to be wrong and the exact origin of his mistake can be pinpointed. Probably because he accessed a copy that transmitted not the original سدد ‘oppilation, obstruction’ but an apomorphic reading الدود (or perhaps because he misread the word himself) ZUHR felt somehow compelled to interpret *ṣufār* in a way that is actually negated by his source. According to his own excerpt (which, by the way, is drastically and also quite sensibly simplified in this point by ALṬILBĪRĪ), IBN MĀSAWAYH defines *ṣufār* as “the whole body turning suddenly yellow” and states quite emphatically that it does *not* mean the *ṣuffār* that grow in the belly (ie tapeworms). This unambiguous statement notwithstanding, ZUHR prefers to construe an unprecedented reference to some “malignant moveless worms in the gallbladder” rather

than to doubt the reading of the word *aldūd*—which, all in all, does not speak much in favour of his medical instinct, but *aliquando bonus dormitat Homerus...*¹

On the other hand, *ṣuffār* does refer to intestinal worms in *Ther* 3.5.3, which also follows closely IBN MĀSAWAYH's original chapter on the bowels.² This synonym for tapeworms is also well documented in Andalus in a medical context. Thus *ṣuffār* is used regularly by ALHĀŠIMĪ, and the collocation «*addūdu waṣṣuffār*» surfaces in a veterinary recipe against tapeworms in IBN ALṢAWWĀM.³ It was not limited to the written language, as shown by Ġarnāṭī «*lombriz del estómago = lombriz qualquiera ṣuffāra ṣuffār*».⁴

ṣinabah 'excrescence (on the hands or feet)' *Ther* 4.5.1.

One of the many exceptional nosonyms (in this case virtually a hapax legomenon) inherited by ALṢILBĪRĪ from his source is this name for which the context suggests some kind of wart-like growth or protuberance.⁵ The word is not documented (to the best of my knowledge) with this specific meaning in the medical corpus.

There is an intriguing mention in the *Hārūniyyah* in a passage on quinsy in which *ṣinabah* appears to gloss 'Persian fire' (*annāru lfārisiyyah*):

Hārūniyyah I.XIII.5 (G 241₆₋₇)

وكذلك إذا حُنت الأفاعي بخيوط الحرير التي تكون على رؤوس الصدف حتى تموت الأفاعي، ورُبطت في الرقبة: أبرأت من الخناق والنار الفارسية (وهي الحبة التي تُستى بالعنبة).

Let it be noted that this passage stems, according to the working hypothesis propounded in Part III of this dissertation, from the tradition of ^α*Hawāṣṣ* but this gloss cannot be found either in that compilation or in the original locus in GALEN. Judging from the context, this *ṣinabah* may well be the usual term for a swollen uvula, in which case it is perhaps rather the mention of Persian fire that ought to be explained. If the link, in the sense of a synonymy, between the latter and *ṣinabah* could be proved to exist in ninth-century eastern terminology, IBN MĀSAWAYH's nosonym would become much easier to identify as a kind of cutaneous disease or lesion.

¹ The apparent redundancy of IBN MĀSAWAYH's separate mention of *ṣuffār* and *yaraqān* (enhanced by ALṢILBĪRĪ when he introduces the latter as a gloss to the former) remains to be explained, but fortunately there is no need to tackle that question here.

² Cf. ZUHR, *Nuǧh* I.13 (A 119₂₃, 120₁₃₋₁₅).

³ Cf. ALHĀŠIMĪ, *Maǧālis* I.I.28 (K 76_{10,16,18,19}); IBN ALṢAWWĀM, *Filāḥah* XXXIII.5 (B II 666₂₄₋₂₆).

⁴ Cf. PEDRO DE ALCALÁ, *Vocabulista arávigo* 295a 22–23 (= CORRIENTE, *LAPA* 118b **ṣfr*); also CORRIENTE, *DAA* 307b **{ṢFR}* I.

⁵ Cf. ZUHR, *Nuǧh* I.19 (A 132₂₅).

In standard Arabic nosological terminology *ṣinabah* (like Syriac ܫܢܒܗ) mirrors Greek σταφυλή as the name for a swollen, grape-like, uvula,¹ but in the Syriac tradition ܫܢܒܗ expands this semantic range to include a kind of haemorrhoidal excrescence (*bawāsīr*) and BAR ḤALĪ considers it to be a synonym of ܫܢܒܗ / *tūtah*, while on the other hand ܫܢܒܗ is even better documented in Judaeo-Aramaic as ‘a berrylike excrescence’.² An attestation for a likewise wider meaning is provided, indeed, in Arabic lexicography: «*walṣinabatu: baṭratun taḥruḡu bil?insāni tuṣdī*» in IBN MANḌŪR.³

ǧašy 2.3

The two words by which this pathology (corresponding to καρδιακαὶ συγχοπαί) is referred to in our text are actually problematic. In the summary of the chapter P reads «العشاوه», which even if interpreted as *ǧišāwah* is nowhere recorded in the sense required here, as it designates either the membrane that encloses the heart (ie the *pericardium*, ὁ περικάρδιος ὑμῆν or simply τὸ περικάρδιον) or a quite unrelated condition of the eyes (namely dim-sightedness, ἀμβλυσωπία). Moreover, the ailment is mentioned twice as «عشا» (representing either *ǧašā* or *ǧišā*, but certainly not *ǧašy*) in the body of the chapter (first in the rubric of *Ther* 2.3¹, then in 2.3³).

Now, *ǧišā?* / *ǧašā?* does not actually feature amongst the several derivatives from √*ǧšw* attested with this meaning, cf. IBN MANḌŪR, *Lisān* XV 126a 9 – 128a 8 s.r. √عشا (not even in dialect, cf. DOZY, *SDA* II 214 s.r. √عشو; CORRIENTE, *DAA* 379b *{ǧšw}). In fact, the standard term for ‘syncope’, ‘fainting’ in the Arabic corpus is *ǧašy*, cf. AṬṬABARĪ, *Firdaws* IV.VIII.2 (§ 227_{2|11}) and IV.X.22 (§ 308_{2|3}, 309₉, 310₆); AZZAHRAWĪ, *Taṣrīf* II.XII.5 (S I 145₃₁–147₂₀); IBN ḠANĀḤ, *Talḥiṣ* [175] (depending on GALEN, *Ad Glauca.*); GALEN, *Loc. affect.* V.II (K VIII 302₁₁) «καρδιακαὶ συγχοπαί» ≡ «*ǧašyun min qibali lqalb*» *Mawāḍiʿ* V (E 54v 5). No other form is found in the whole section devoted to this ailment in ARRĀZĪ, *Alḥāwī* VII.II.

However, no less than five instances of the spelling «عشا» are found in the aforementioned epigraph on syncope in *Taṣrīf* II.XII.5 (S I 146₃₁, 147_{11|13|17|23}), which leads me to suspect that *ǧašā* may have existed (perhaps only in Andalusī Arabic?) as a genuine word for ‘fainting’ to be added to *ǧašy*, *ǧašyah*, *ǧašayān*, *ǧāštyah*, *ǧišwah*. If only the form «عشَى» edited in IBN ALĠAZZĀR, *Zād* III.14 (T 280₁–286₁₄) could be trusted to reflect the actual reading of the manuscripts, then the form *ǧašā* would be even better supported, but it might be a case of

¹ Cf. for instance IBN ḠANĀḤ, *Talḥiṣ* [743] (with a reference to GALEN’s *Sympt. Caus.*) and also AZZAHRAWĪ, *Taṣrīf* XXIX.II (S II 447₃₀).

² Cf. PAYNE SMITH, *Thesaurus* 2932 s.v. ܫܢܒܗ and also BROCKELMANN–SOKOLOFF, *Lexicon* 1114b. For עבבחה, cf. JASTROW, *DTM* 1091b.

³ Cf. IBN MANḌŪR, *Lisān* I 630b 11 ≡ AZZABĪDĪ, *Tāǧ* III 441a 1–5.

editorial interpretation (no variant reading is registered in the apparatus), as is the unfortunate «الغثى المعروف بالغثى القلبي» in PSEUDO-TĀBIT B. QURRAH, *Daḥīrah* XII (S 65₉), which was echoed as “disturbance of the heart” by MEYERHOF 1930: 65.

māʾun aṣfār ‘dropsy’ *Ther* 3.1.5

This denomination is prevalent throughout *Natāʾiġ*, from *Nat* II.1 to *Nat* V PHARMACOPOEIA, and it is the only one attested in THERAPEUTICS, yet *istisqāʾ* is found once in *Nat* IV REGIMEN, and once precisely in the text of the recipe for the hepatic of lacquer in *Pharm* 4.32.

For *almāʾulʾaṣfār* as the name of dropsy in Andalus, cf. particularly ALHĀŠIMĪ, *Maǧālis* I.36|38 (K 91₈, 94₁₉). It was definitely not the most common name for this ailment and IBN ĠANĀḤ does not even mention it in any of the entries that he devotes to it, cf. *Talḥiṣ* [108], where he registers أدرس (= ὕδρωψ) as meaning *istisqāʾ* according to IBN ŠIMRĀN; then in *Talḥiṣ* [176] he reports a synonymous expression “white phlegm” from HIPPOCRATES’ *Aphorisms*; and still three consecutive lemmata on as many different kinds of *ḥaban* in *Talḥiṣ* [402–404].

malihūliyā ‘melancholy’ *NatPhil* 4.3

The form (which cannot even be ascribed to the author as it may have been altered by the copyists) is one of the many variants in which μελαγχολία was transmitted in Arabic texts. There is some interest, however, in the gloss «*tibatu lsaqli waḍahābuhū*», which does not coincide with the usual association of melancholy to sadness but has a close parallel in «*Stulticia مَلْحُونِيَّة*» in the *Vocabulista in Arabico* 593₁₈ (from which even a verb يتملحن / اتملحن was derived, cf. *Vocabulista in Arabico* 594₃). Yet this is by no means a particular local development: a very similar definition of مَلْحُونِيَّة is registered by Syriac lexicographers.¹ The matter must be further examined, as there is quite a wealth of materials on melancholy in the Islamicate corpus.

¹ Cf. particularly «*fasādu alfikri walṣaql*» in PAYNE SMITH, *Thesaurus* 2147 s.v.

malankūniyah ‘an ailment (probably ulcerous sores) of the legs’ *NatPhil* 4.3

A form transmitted diversely as *mālankūniyā* and *mālakūniyā* was found in a quote from ALḤIDRISĪ in by DOZY, who proposed an etymon μελικηρίς contaminated with an Arabic reflection of μελαγχολία.¹ The same etymology is supported by CORRIENTE in *DAA* 510b *{MLKL/NY}, where he further adduces a “corrupted” Syriac ܡܠܟܘܢܝܗ (for which cf. PAYNE SMITH, *Thesaurus* 2025) as further evidence. Now, neither the Syriac word is a corruption (it reflects, as usually, a non-nominative form, probably the genitive μελικηρίδος), nor does a honeycomb-like ‘cyst’ or ‘wen’ mostly associated to the scalp seem a reasonable etymon for ‘ulcers on the legs’ (an explanation that, incidentally, is confirmed by our passage).² On both etymological and semantic grounds a derivation from a Romance form seems preferable (cf. Mediaeval and dialectal Castilian *malinconía* or Catalan *malenconia*).

The word is attested also as «ملكونية» in eleventh-century Ṭulayṭulah by AL-HĀŠIMĪ.³ However, it must be noted here that «ملكونية» appears to have featured amongst the ailments of the legs and kneels in IBN MĀSAWAYH’s *Nuǧḥ* but it was not retained by ALḤILBĪRĪ in his reworked version of that chapter (see *Ther* 4.4).⁴ If this mention is original, it would evidently necessitate a different etymology than the one suggested here but there would still be no need to look to μελικηρίς.

¹ Cf. DOZY, *SDA* II 565b. For ALḤIDRISĪ’s passage, cf. IBN ALBAYṬĀR, *Ġāmiʿ* خنفساء 95–96 (B II 79₁₃).

² For Greek μελικηρίς, cf. ‘*meliceris* or *tinea favosa*, a virulent eruption on the head, from its resembling a honeycomb’ in LIDDELL–SCOTT, *Lexicon* 936a. This is the meaning recorded also in the Arabic glosses «*alwaramu ššuhdi*» and «*ǧīnsun mina ssaʿfati rraṭbah*» in BAR BAHLŪL, *Lexicon* 1022_{20–22}).

³ Cf. ALHĀŠIMĪ, *Maǧālis* I.I.40 (K 98₅).

⁴ For IBN MĀSAWAYH, cf. ZUHR, *Nuǧḥ* 127₂₈. There is no epigraph for *malkūniyah* in the text reproduced by ZUHR, however, and the word is actually mentioned only in the initial catalogue of ailments.

Complementary notes on polypharmacy

The following catalogue corresponds exclusively to *Nat* II.2 (compound drugs from other sections are not included in it unless they feature also here) and is not exhaustive. As stated at the beginning of this chapter, relocating the lengthiest footnotes to this appendix is a mere device of expediency and this list is not intended as an actual glossary. Even when added to the analogous notes appended to Chapter 4 their sum does not cover the whole catalogue of drugs mentioned in the text.

Items are arranged according to the order of the alifat (not the traditional abjad).

aṣfar Ther 4.6.1

Recipes for a drug known as *aṣfaru Salīm* are already documented in AṬṬABARĪ, *Firdaws* VI.VI.1 (§ 452₂₀–453₃), where two different formulas are collected, the second one being considered by the author the genuine one used by SALĪM ANNAKRĀWĪ; cf. also SĀBŪR, *Ṣaġīr* V [50] (K 68₁₅–69₃), whence IBN ATTILMĪD, *Aqrābādīn* IV [105] (K 78_{11–17}). A third recipe called “the yellow” is recorded by AṬṬABARĪ that is actually a musk drug (*dawāʿu misk*) and may not belong in this category (cf. *Firdaws* 455₄–456₃).

On the other hand, the formula for a *black* drug by SALĪM «السكراب» is registered by ALKINDĪ in *Iḥtiyārāt* [205] (L 133v 1 – 134r 3).

According to IBN HINDŪ, this SALĪM (for which he provides no *nisbah*) was a trustee (*wakīl*) of ʿABDULLĀH B. ABĪ BAKR, who actually had three trustees that bore the same name; the denomination “yellow”, in turn, would make reference to the saffron that enters its formula, cf. *Miftāḥu ṭṭibb* VIII s.v. (Q 82_{13–15}), thence ALQALĀNISĪ, *Aqrābādīn* XX s.v. (B 49_{10–12}). A fairly exhaustive comparison of the recipes for yellow drugs in AṬṬABARĪ, SĀBŪR, and ALKINDĪ is made by TIBI 2006: 76–79; and KAHL 2007: 210 n. 73 suggests an origin of the name based on the *contraria contrariis* principle (yellow against black bile), apparently unaware of the native tradition on its etymology.

bāsiliqūn Ther 1.8.6

As the name of a salve *bāsiliqūn* is not to be confused with the homonymous collyrium (which has been mentioned in *Nat* I.4 *On the shelf-life of drugs* and for which see *Pharm* 7.8).

In the Islamicate tradition this item is a continuation of the “royal salve” (βασιλικόν) of the Greek pharmacopoeia. In Andalus the “salve of the four [drugs]” («مرهم الأربع») is described as universally known («معلوم في جميع الكتب») by ALHĀŠIMĪ, *Maǧālis* I.I.42 (K 101_{8–9}). This alternative name mirrors Greek τετραφάρμακος

(also τετραφάρμακον as a neuter noun), which according to GALEN was a synonym for the βασιλικόν, cf. *Sec. loc.* III.1 (K XII 601₁₇–602₁); the same identification is evident in «*صلمصه ١.١١ صحتن*» in the Syriac *Book of medicines* XIII (B 252₇).

Those four ingredients of the τετραφάρμακον were wax, resin, tar, and animal fat as described in *Simpl. med.* XI.1.2 Περὶ πιμελῆς καὶ στέατος (K XII 328_{8–10}) ≡ *Mufradah* XI.2 ذكّر السمن والشحم (E 172r 20–21), where HUNAYN's translation features in fact «*المرهم الذي تقع فيه أربعة أدوية، وهو الباسليقون*» (the name βασιλικόν is not mentioned in KÜHN's edition) and the order of the ingredients is also different (fat comes first).

A recipe for the “lesser basilicon” («*مرجم الباسليقون الأصغر*») is recorded in SĀBŪR, XVII [386] (K 204_{11–13}).

For the non-identification of the basilicon and the four-drug salve as reflected in our text, let it be noted that AZZAHRĀWĪ registers the formulas for both the greater and the lesser basilica, neither of which includes any fat in its recipe, in *Taṣrīf* XXIV.37–38 (S II 194_{18–21}), whereas he registers «*المرهم الأسود الرباعي*» (ie a black τετραφάρμακον) that does require animal fat in *Taṣrīf* XXIV.46 (S II 195_{8–11}).

ḥabbu Ḡālīnūs Ther 1.1.1

For the non-Greek transmission of the formula of “Galen's pill” (= *qūqāyā* < κοκκία), cf. «*صحتن ١.١١ صلمصه ١.١١ صحتن*» (edited as «*صحتن*» by BUDGE, but then there is «*صلمصه*» in 45₁₉) in the Syriac *Book of medicines* (B 51₂₁–52₃), where the instructions to take seven or ten pills with the juice of black nightshade are already present (which confirms that the reading in *Natāʾiḡ* is apomorphic). Cf. also «*حبّ جالينوس المستى قوقاي*» in IBN SARĀBIYŪN, *Kunnāš* 82v 3–6 ≡ *Breviarium* 65vb.

Essentially the same mixture (including wormwood) but remarkably different instructions for use are noted down for «*حبّ القوقايا* [...] وهو حبّ جالينوس» in SĀBŪR, *Ṣaḡīr* VIII [125] (K 103₂₁–104₅), which is matched by «*حبّ جالينوس*», also called «*حبّ الحبيب*», in AZZAHRĀWĪ, *Taṣrīf* VI.65 (S I 414_{5–8}). The formula for «*حبّ القوقايا*» from ALMASĪḤĪ's book included in the Tunis edition of IBN ALĠAZZĀR's *Zād* I.10 (T 93₁₅–94₄) is shown by BOS and KĀS to be a later addition (cf. B–K 125 n. 225). There is yet a slight variation under the same «*حبّ جالينوس*» in *Hārūniyyah* I.11.2 (G 337_{18–15}). Several developments of the original recipe are attested, amongst which there is one introduced by IBN ḤIMRĀN that does not even contain any aloes or colocynth, cf. «*حبّ القوقايا لإسحق بن عمران*» in IBN ḤABDIRABBIH, *Dukkān* V.15 (D 45v 6–11 | L 36r 20–26).

Further attestations of the synonymy *habbu Ġālīnūs* = *qūqāyā* include «حبّ جالينوس المعروف بالقوقايا» in ARRĀZĪ, *Mawġūdah* 5r1; «(حبّ جالينوس) وهو المعروف بالقوقايا») in ABULḤASAN AṬṬABARĪ, *Buqrāṭīyyah* III.7 (B 75v8); also IBN ATTILMĪD, *Aqrābādīn* II [65] حبّ قوقايا ascribed to GALEN through ARRĀZĪ (K 67₂₋₁₀). Let it be noted that in Andalus ALĠABALĪ seems to have interpreted «القوقايا» as «حبّ الرأس» in his monograph on purging (cf. IBN ĠANĀḤ, *Talḥiṣ* [880]). For Qayrawān, BOS and KĀS register no less than six instances of the name «حبّ القوقايا» in the index to their edition of Books I–II of IBN ALĠAZZĀR's *Zād* (cf. B–K 765) and in *Maṣīdah* 128₆ he mentions «حبّ جالينوس المعروف بالقوقايا». On an anecdotal note, a fanciful etymology for قوقايا is transmitted by ALṢAṬṬĀR ALHĀRŪNĪ in *Minḥāġ* X.5 حبّ القوقايا (A 114₈₋₁₇) according to which GALEN would have prepared these pills for some potter (فاخوري) after whom they were named, قوقايا being Greek for φαخورι according to an explanation that he affirms to transmit from the qaḏī ḌIYĀZUD-DĪN B. ALQAFFĀSĪ. In modern times the origin of Arabic قوقايا in Greek κοκκία (the plural of κοκκίον, a diminutive of κόκκος 'pill') was already identified by DOZY, *SDA* II 420a; cf. also KAHL 2007: 197 n. 46, who suggests the same etymology and considers the Arabic compound name “a curious tautology”.

The purging aloe pills («τὰ διὰ τῆς ἀλόης δὲ καταπότια τὰ καὶ τῆς σκαμμωνίας καὶ τῆς κολοκυνθίδος ἔχοντα») are prescribed by GALEN against alopecia in *Sec. loc.* I.2 (K XII 383₃–385₇) and they are referred to as «τοῖς δι' ἀλόης κοκκίοις καὶ κολοκυνθίδος καὶ σκαμμωνίας» a little later in *Sec. loc.* I.9 when dealing on the treatment of several conditions of the scalp (K XII 496₉₋₁₀). It is also recorded as τὰ διὰ τῆς ἀλόης καταπότια and described in GALEN, *Euporista* I.2 (K XIV 327₇₋₁₁). Their formula is afterwards echoed in abridged form by ORIBASĪUS, *Ad Eunap.* IV.138 τὰ διὰ τῆς ἀλόης Γαληνοῦ καταπότια καθαρτικά (R 496₂₅₋₂₇); and with the full original instructions by PAUL OF AEGINA, *Pragmateia* VII.5.1 καταπότια διὰ τῆς ἀλόης (H II 280₁₇₋₂₀). A wider range of aloe pills (ἀλοηδάρια) is documented by AETĪUS OF AMIDA, *Iatrica* III.101|105–107, where a formula virtually identical to GALEN's is reported from PHILAGRIUS (O I 299₁₃₋₁₇).

habbu ššabyār Ther 1.5.5 / *aššabyār* («الشيار» P) 1.6.2

Having become unintelligible outside of its original Iranian context, the second element of this name circulated mostly in corrupt form (often as شيبار), as for instance in a quite parallel passage in AZZAHRĀWĪ, *Tašrīf* II.VII.4.3 in which it is likewise prescribed against halitosis, where the Istanbul manuscript reads «او حبّ السّار» (S I 123₁₉; cf. also the same unpointed spelling in *Tašrīf* I 89₁₁). It was also occasionally subject to clerical reinterpretation, as in ALHĀŠĪMĪ, *Maġālis* I.I.3, where manuscripts SBḤ read «والشونيز» against «والشيار» (sic) in the edited text (K 20₇).

The name can nonetheless be safely restored to its primitive Persian form *šab-yār* ‘night friend’ = Arabic رفیق الليل (cf. KAHL 2007: 197 n. 45; also BOS, KÄS, LÜBKE, and MENSCHING 2020: 527; ‘(noctis amicus) nom. electuarii vel potionis somniferae’ and also ‘aloe’ in VULLERS, *LPLE* II 409b s.v. شَب يار; ‘[a] soporific electuary, a night-potion’ in STEINGASS, *CPED* 732), which ULLMANN 1970: 298 surprisingly interprets as a reflection of Greek προσθετόν and describes as a suppository (“Zäpfchen”) even if the reference he gives to PSEUDO-TĀBIT’s *Daḥīrah* III (S 11₁₃) states quite clearly that the pill must be *given to drink* (which is, indeed, the universal way of administration of this drug).

As usually, an explanation of the term is provided by ALQALĀNISĪ in *Aqrabādīn* XX (B 51₁₆₋₁₇), where the synonym «حَبّ الصبر» is justified because “شَب يار is Persian for صبر”. This passage is explicitly borrowed from IBN HINDŪ, cf. *Miftāḥu ṭṭibb* VIII s.v. (Q 82₁₈₋₁₉).

A minimal formula (two parts of aloes and one part of mastic) was transmitted by ARRĀZĪ in *Alkāfi* according to IBN ĠANĀḤ, *Talḥiṣ* [348]; which can be compared to ARRĀZĪ, *Qūlanġ* IX (Ḥ 84₁₋₃). Widely different recipes are handed down, in turn, by SĀBŪR B. SAHL, *Šajīr* VIII [107] (K 97₂₋₆); IBN ATTILMĪD, *Aqrābādīn* II [64] (K 66₁₄₋₁₆); ALQALĀNISĪ, *Aqrabādīn* XXXI.1 (B 111₁₂₋₁₄).

From AHRUN’s book IBN ĠANĀḤ borrowed a synonym «حَبّ المصطكى والصبر» (cf. *Talḥiṣ* [971]), which is also echoed by AZZAHRĀWĪ with «حَبّ الكيئة المعروف عندنا» in *Taṣrīf* XXIX (S II 422₂₀₋₂₁; where the proportion of aloes to mastic is said to be 3:1)—to be read thus rather than as “globular pill’ (*ḥabb al-kubba*)” in BOS, KÄS, LÜBKE, and MENSCHING 2020: 527.

In view of this synonymy this *šabyār* pill should correspond to the mastic pill described, twice, in *Pharm* 4.26 and *Pharm* 6.9.

On a side note, IBN SĪNĀ appears to use *šabyār* as a subcategory of pills (ie those to be taken at night) judging from his use of the plural «شبيارات» in *Qānūn* III.1.1 (B II 21₄₋₅; also «حبوب الشبيار» in B II 22₉) and of the phrase «على سبيل الشبيار» in *Qānūn* III.III.4 (B II 143₁₉).

daḥmurtā Ther 1.5.9

A drug named دحمرتا (perhaps originally /-t-/) is mentioned twice by AṬṬABARĪ: first in the treatment of ailments of the stomach, where it is described as “an electuary that does good to women”, then in the discussion of womb pathologies, where it is glossed as *bādmuḥraġ*, cf. *Firdaws* IV.vi.3 and IV.IX.19 (§ 214₂₄, 277₂₄). AṬṬABARĪ himself provides a recipe for this remedy (edited now «دحمرتا» by ŠIDDĪQĪ) in *Firdaws* VI.vi.1 (§ 452₁₁₋₁₉), where ailments of the liver and spleen are mentioned first amongst the benefits attributed to this remedy.

Two recipes are noted down, in turn, by SĀBŪR B. SAHL: the first one, inscribed simply as *daḥmurtā*, corresponds essentially to the formula transmitted in *Fir-*

daws; the second one is styled «دمحرتا اللؤلؤ» and does indeed include two mithqals of pearls, cf. *Ṣaḡīr* V [31|32] (K 56₁₉–57₁₉). In Andalus an echo of SĀBŪR's first recipe is found in IBN ʿABDIRABBIH, *Dukkān* IV.9 معجون الدحمرتا (D 35r | L 26v 22 – 27r 1; the header is missing from L); cf. also IBN WĀFID, *Tadkirah* G 26v.

As for the etymology of the Syriac name, no explanation is provided by BAR BAHLŪL, who simply states rather tautologically that ܕܗܡܪܬܐ is an electuary known by this name (cf. *Lexicon* 551₂₀). CORRIENTE (who documents the word exclusively through DOZY, *SDA* I 862b) suggests Aramaic *d-ḥmartā* “of the she-ass” or *d-ḥmartā* “of the female tavern keeper”, cf. *DAA* 174b *{DḤMRT} n. 3; whereas SOKOLOFF sees in the Syriac word a calque from Arabic لؤلؤي on account of the meanings ‘bead’ and ‘gem’ of ܕܗܡܪܬܐ, cf. BROCKELMANN–SOKOLOFF, *Lexicon* 462 (see also the equation of ܕܗܡܪܬܐ with Arabic خرز in BAR BAHLŪL, *Lexicon* 759₃₋₄ and further documentation for the meaning ‘bead’ in PAYNE SMITH, *Thesaurus* 1310–1311). Now, AṬṬABARĪ's Persian gloss *bādmuhraḡ* seems to confirm SOKOLOFF's Iranian etymology for Syriac ܕܗܡܪܬܐ (cf. VULLERS, *LPLE* I 165a s.v. (بَادُ مُهْرَه), no mineral beads enter the recipe for the *daḥmurtā*, and SĀBŪR's recipe for the “pearl *daḥmurtā*” appears to further support his identification with Arabic لؤلؤي (although the direction of the calque may not be so clear).

In any case, a totally different interpretation of the name is transmitted by Arabic sources: IBN HINDŪ explains *daḥmurtā* (edited thus following the vocalisation shown by the manuscript) as «الحادرة، كأنها يُحدر الرياح والطمث وتُحطها» (بَادُ مُهْرَه), cf. *Miftāḥu ṭṭibb* VIII s.v. (Q 82₉₋₁₀); but I am unable to find such a meaning for the lexematic root √HMR.

kustaḡ 1.8.6, 4.3.6 | also the “*kustaḡ* of sagapenum” in *Ther* 3.1.4 and 4.4.9

Manuscript P reads invariably -s- in all four instances of the word (once even with a disambiguating character ش).

The references to AṬṬABARĪ are taken from *Firdaws* IV.vii.5 on the treatment of dropsy: the ingredients of the “hospital pill” («*alḥabbu lbīmāristānī*») must be beaten up and made into a *kuštaḡ* («*wayuttaḥadu kuštaḡā*» 223₂₁₋₂₃), then drinking «كشج السكينج» is prescribed against all kinds of dropsy unaccompanied by heat in *Firdaws* 224₁₅₋₁₆ (in view of the overwhelming prevalence of the form *kustaḡ* in the Islamicate tradition and given that AṬṬABARĪ was himself an Iranian, this reading ought to be checked against the manuscript transmission of *Firdaws*).

The lemma *kustaḡ* is explained by IBN HINDŪ as a well-known Persian word meaning ‘ground, beaten up’ (*madqūq*), since it is a drug that is “first beaten up, then used”, cf. *Miftāḥu ṭṭibb* VIII s.v. (Q 8₇₋₈), thence ALQALĀNISĪ, *Aqrabādīn* XX s.v. كشجات (B 51₁₄₋₁₅, with /-š-/). For the original Persian *kusta* ‘pounded’, cf. VULLERS, *LPLE* II 834a; and STEINGASS, *CPED* 1029.

marhamu lʿarbaʿ see above *bāsiliqūn*

muġīt Ther 4.4.7 / *almuġītu lhindī Ther 1.5.3* (probably also *Ther 1.5.5*) [see also *Pharm 3.6*]

A mention of the drug known as المغيث الهندي was located by DOZY in IBN WĀFID's *Tadkirah* and he defined it as “électuaire qui passait pour une panacée” in *SDA* II 230b s.r. √غوٹ (inherited without further references by CORRIENTE, *DAA* 385a *{ĠWP}). Two consecutive recipes are, indeed, recorded in *Tadkirah* G 21v 5–10 («صفة معجون المغيث», which is affirmed in the header to be a panacea agreed upon by Persian, Roman, and Indian physicians) and G 21v 11–14 («صفة المغيث»).

As a metonymical name مُغِيث ‘aider’, ‘succourer’ (synonymous to غِيَاث in LANE, *AEL* 2306 s.r. √غوٹ) is reminiscent of such Greek names as σωτήριον ‘saving, delivering’ (whence Syriac ܣܘܬܝܪܝܘܢ and Arabic سوطيرا, doubled in ܣܘܬܝܪܘܩ and فاروق).

In the east the *muġīt* drug was known also as “Abū Muslim’s electuary” («معجون مسلم») because it was first prepared in his age (which is somewhat fantastically affirmed to predate GALEN) according to ALQALĀNISĪ, *Aqrabādīn* XX (B 51₃₋₄), who does not however record any formula for it.

In Qayrawān *muġīt* is apparently used as a qualification («وهو مغيث سريع النجح») for a golden electuary («معجون يُسقى الذهبي») by IBN ALĠAZZĀR in *Zād* T 427₁₃–428₈, but the word in question reads rather «عجيب» in the quote transmitted in AZ-ZAHRĀWĪ, *Taṣrīf* I 370₂₇–371. Then AZ-ZAHRĀWĪ himself notes down the formula for a «معجون يُعرف بالمغيث» in *Taṣrīf* I 371₁₋₁₃ that is not even similar to the one in *Ther 4.4*.

Significantly, a similar recommendation for the treatment of the teeth includes a mention of MAṢṢŪR’s and IBN ALĠĀBALĪ’s own recipes for this drug («أو المغيث لمنصور أو لابن الجبلي ينفعه») in ALHĀŠIMĪ, *Maġālis* I.1.25 (K 65₁₇).

Nat IV Regimen

As described in Chapter 2, in the Paris manuscript the dispensatory is abruptly interrupted on fol. 116v 16 after the recipe for the pastilles of wormwood. From a formal or codicological point of view, therefore, the dietetic materials introduced by an explicit mention of GALEN's *Ağdiyah* are physically interpolated between two chapters of the pharmacopoeical section *Nat V*. However, despite the lack of any cross-references to or from other sections of the book and even if the title of the book does not mention it as an integral part of *Natāʾiğ*, the fact that the two manuscript witnesses transmit a substantial part of this section and the presence of the characteristic locution «*iʿlam, waḥḥaqaka llāh*» that features twice in its text can be interpreted as positive (albeit certainly not conclusive) evidence against the suspicion of *Nat IV* being an *extraneous* interpolation. I hope that future consultation of the additional items contained in the Damascus manuscript may shed some light on this particular question.

Several major text subunits can be distinguished in *Nat IV* that are simply juxtaposed with no hierarchical arrangement (they are all marked as *qawl*). Only the trophognostic treatise shows some internal organisation. The author's original intention may be intuited as far his aim at thematic comprehensiveness is concerned,² but there is no explicit theoretical framework, nor is any general introduction provided (not even a simple transitional sentence).

On the semantic level, the section is made up of two quite different parts: on the one hand there is a descriptive epigraph on the primary qualities and medical properties of a relatively comprehensive catalogue of items of both animal and plant origin; this is labelled here as the *Trophognostic treatise* (= *Reg*

² However, despite the wide range of topics covered by this section and *pace* CARABAZA and GARCÍA 2009: 385, there are no genuine allusions to the *sex non naturales* in this section.

1) and represents an abridged but otherwise quite standard *Ağdiyah* tract of the basic type. On the other hand a series of loosely connected epigraphs that are all paraenetic in nature conveys straightforward instructions on what must be done and what should be avoided in order to preserve the health of the reader. These epigraphs are dealt with separately in this overview (= *Reg 2–5*) but they could be gathered under a common rubric *Dietary advice* in a future version of this study.

Given that the structure of this section is much less homogeneous than the others (the patchwork here is even more evident than in *Nat I APOTHECONOMY*), the analysis of the different epigraphs shall be on an individual basis. Once again, the limited (and at times admittedly digressive) survey of the contents offered hereunder is by no means exhaustive and the remarks appended at the end of the chapter are necessarily provisional.

7.1 *Reg 1* — Trophognostic treatise

The word ‘trophognosy’ is coined here by analogy to ‘pharmacognosy’ and is based in the traditional dichotomy between food (*ǧidāʔ* ≡ τροφή) and drug (*dawāʔ* ≡ φάρμακον).¹ Whenever specific reference is made to the Islamicate written tradition, in turn, *Aǧǧīyah* shall be used as a convenient label for the epistemic genre that deals with trophognosy, be it as a chapter of a medical compendium (eg in AṬṬABARĪ’s *Firdaws* or in AZZAHRĀWĪ’s *Taṣrīf*) or in the form of an independent treatise.²

A further distinction is introduced here between the basic *Aǧǧīyah* (which discusses exclusively foodstuff, with some variability as to the comprehensiveness of this category) and the “extended *Aǧǧīyah*” that through incorporation of much dietetic material became almost coterminous with regimen (*Ḥifḍu ṣṣiḥha*) as an epistemic genre. This evolution by accretion is quite perceptible in IBN ZUHR’s largely extended *Aǧǧīyah*, but in the case of IBN ḤALṢŪN it is only on account of its title that the book can be classed within the trophognostic genre, whereas its overall plan and its contents make of it a typical representative of regimen literature.³

¹ In the earliest extant Greek tradition the boundary between ‘food’ (τροφή, also βρώμα, σιτίον, ἔδεσμα, ἐσθιόμενον) and ‘drug’ (φάρμακον), and therewith a clear-cut separation between dietetics and pharmacognosy, “was left deliberately blurred” (TOTELIN 2015: 31, 34–35), but GALEN advocates for a positive *functional distinction* (cf. VAN DER EIJK 1997: 51) between the two categories in *Alim. fac.* I «ἀλλὰ κἀνταῦθα διορισμός τις ἐστὶ χρησιμώτατος» (H 210₁₄ | K 469₅₋₆). Despite a differential and usually non-overlapping approach to the trophognostic and pharmacognostic characterisation of each substance, most edible items actually show a dual nature as both food and drug that was often emphasised by the recurring phrases ὡς τροφή / ὡς φάρμακον, cf. in reference to milk «*yaǧrī maǧrā lǧidāʔi waddawāʔ*» and «*ṣalā ṭariqi lǧidāʔ* [...] *ṣalā madhabi ddawāʔ*» in GALEN, *Mufradah* X.2 ذك اللب (E 160v 5–6) ≡ *Simpl. med.* X.11.7 (K XII 263₁₃₋₁₆), while IBN SULAYMĀN is terminologically consistent with the formula *ṣalā sabili lǧidāʔ* / *ṣalā sabili ddawāʔ* throughout his *Aǧǧīyah*. The prevalence of either of this two natures in an item (that is its “foodness” or its “drugness”) is likewise reflected in such denominations as *ǧidāʔun dawāʔi* and *dawāʔun ǧidāʔi* (no doubt inspired by the adjectives φαρμακώδης and τροφώδης in GALEN) as used, for instance, by IBN SULAYMĀN himself in *Aǧǧīyah*.

² See the remarks at the end of this chapter for a list of the sources consulted in this survey.

³ The author’s prologue confirms this assumption, cf. IBN ḤALṢŪN, *Aǧǧīyah* Proem (G 11₅₋₁₂₃). Regarding IBN ZUHR’s *Aǧǧīyah*, its comprehensiveness far beyond the traditional exposition of the qualities and properties of foodstuff was already pointed out by COLIN 1911: 152: “il peut être considéré, tout à la fois, comme un *Traité de matière médicale* et comme un *code d’hygiène*, en particulier d’hygiène alimentaire” (echoed by AZAR 2008: 35). A proper discussion of the diachrony of these two genres could not be included in this preview. For the pre-Galenic διαίτα, cf. particularly THIVEL 2000, STEGER 2004, JOUANNA 2008; for Islamicate literature on hygiene and allied traditions, see the references in the concluding remarks at the end of this survey.

Troph 1

The segment opens with an explicit but blatantly wrong reference to GALEN's "fourth" book of *Ağđiyah* (ie *De alimentorum facultatibus*),¹ where the basic tenet of the relativity of the primary qualities would have been explained: things are hot, subtle, or balanced in temperature, only in relation to other things, most especially with regard to the temperament or complexion (*mizāğ* ≡ κρᾶσις) of the human body. This concept or relativity (expressed in Arabic through the word *idāfah*) regarding the human complexion underpins indeed the whole tropho-pharmacognostic (and more generally medical) doctrine in the Helleno-Islamicate tradition and sets the framework, in fact, for GALEN's own conceptualisation of qualities and krasas as established in *De temperamentis*.²

After this small bit of theory and with no further explanation of the general plan of the chapter meats are introduced. In accordance to the aforementioned

¹ There is, of course, no such fourth book, since the original Περὶ τῶν ἐν ταῖς τροφαῖς δυνάμεων has only *three* books and so does HUNAYN's translation *Ağđiyah* (cf. ULLMANN 1970: 47; let it be noticed that Paris, BnF MS 2857 transmits only a part of GALEN's *Ağđiyah*, alongside an equally fragmentary copy of his *Mufradah*, and that Escorial, RBME MS Árabe 802 preserves IBN MAYMŪN's abridgement rather than the original translation). With regard to the text of *Natā'iğ*, unlike other ordinals (especially رابعة / ثالثة / ثالثة, both in P and D is not especially liable to be misread. Incidentally, there is a somewhat ambiguous reference in GALEN, *Quod anim. mores corp. temp. sequ.* X «δοσις δὲ βούλεται καὶ χωρὶς ἐμοῦ [τούτου M] γυνῶναι τι περὶ πάσης τῆς ἐν ταῖς τροφαῖς δυνάμεως, ἔνεστιν ἀναγιγνώσκειν αὐτῷ τοὺς τρεῖς περὶ τοῦδε τῶν ἡμετέρων ὑπομνήσεις, καὶ τὸ τέταρτον ἐπ' αὐταῖς, περὶ εὐχυμίας τε καὶ κακοχυμίας» (K IV 814₁₋₅ | the locus is edited rather as «αὐτῷ τρία (περὶ τοῦδε βιβλία τὰ ἡμέτερα κακοχυμίας)» in M 72₁₈₋₂₂) ≡ *Qiwā nnafs* X «fi ttalāti lmaqālāti llati waḍaṣtuhā fi lraṣimati waḍi lmaqālāti rrābīyati llati waḍaṣtu fiḥā ḡawdata lkīmūsi waradāʔatahū» (B 38); as registered by MUELLER in his apparatus, NICCOLÒ DA REGGIO has also «tres de hoc libros nostros et quartum ultra eos eum qui de euchimia». Now, GALEN's Περὶ εὐχυμίας καὶ κακοχυμίας τροφῶν (*De bonis malisque sucis*) was translated into Arabic at least twice (= *Kitābun fi lkīmūsi lḡayyidi warradiʔ* | *Kitābu lkīmūsayn*, cf. ULLMANN 1970: 47 no. 46; SEZGIN 1970: 118), but there is nothing there even remotely reminiscent of the passage ascribed to GALEN in the *incipit* of *Troph 1*.

² Cf. especially *Temp.* I.v (H 17₂₂₋₁₉ | K I 536₉₋₅₃₈₁₀). There the relativity of the basic qualities is expressed through the comparative form of the pertinent adjectives (eg θερμότερα, ξηρότερον) and diverse forms of the verb παραβάλλω 'to compare'. I have been unable to get access to HUNAYN's Arabic translation, but the passage is certainly being quoted from by IBN SULAYMĀN when he explains the two different meanings of 'balanced', the second *specific* (*ḥāṣṣī*) meaning being «mā kāna muṣtadīlan bilʔidāfati ilā kulli mizāğin ḥāʔidin ṣani liṣtidāl», cf. *Ağđiyah* I.I (S I 98₋₁₀ | § 13₂₋₃). Very much the same idea is repeated by GALEN, in a different wording, in his monograph on simple drugs, cf. *Simpl. med.* I.II.1 (K XI 382₁₋₇ | P 158₄₁₋₄₆) ≡ *Mufradah* I (E 19r 7–10); cf. further *Simpl. med.* I.21 (K XI 416–419) and III.9|13 (K 557–560, 570–573), as well as similar use of the ἐν τῷ πρὸς τι formula in *Per gen.* I.17 (L XIII 446₁₁₋₁₄). This prepositional phrase became part of the phraseological stock of Islamicate pharmaco- and trophognostic literature, cf. for instance the description of jerky or dried meat (*qadīd*) as «wahiya bilḡumlati qalilatu lḡidāʔi bilʔidāfati ilā llaḥmi ttari» in ARRĀZĪ, *Ağđiyah* I.VII (Q 24₃₆).

principle, items are regularly described in comparison to other members of the same set. Thus beef is better than goat meat for those who live a dynamic and toilsome life, deer meat is the slowest meat to digest and the worst for the stomach and the liver, kid meat is most nourishing, the meat of cranes and geese is thicker and less hot than the meat of any other fowl. These qualifications are sometimes further justified: ostrich meat is close to the meat of cranes but it leans more towards coldness on account of the scanty and moist nourishment of this bird, which feeds on sand, the worst dates,¹ dyer's bugloss,² acacia,³ and devil's thorn.⁴

The list of meats comprises quadrupeds («*addawābbu llatī tadibbu ṣalā arbaʿ*») and also birds, but no animal organs (brains, liver, testicles) are ever mentioned, nor is fish included in this catalogue. Despite generous rubrication it is not always easy to decide where an epigraph ends and a new one begins, and the edition proposed here is not the only possible interpretation of the text.

The species mentioned (but not always separately developed) in the text are the following:

¹ The dates mentioned here as *ḥaṣaf* are universally considered to be of the worst kind and they are usually described as stoneless, rotten, and dried up, cf. IBN MANḌŪR, *Lisān* IX 47b 3–10 s.r. حشف; see also CORRIENTE, *DAA* 128a *{ḤṢF}, where they are defined as 'fruits of the doom palm', apparently with no negative connotation and with no Andalusī source cited, yet the two alternative descriptions recorded in *Ṣumdah* [1551] حشف point towards *stoneless* dates (B–C–T 143₂₈). For an attestation of the word already in a verse of IMRUʿULQAYS, cf. BOS, KÄS, LÜBKE, and MENSCHING 2020: 879.

² According to IBN ALBAYṬĀR, *Tafsīr* 4:23 (B 278₂₋₆) Perso-Arabic *šingār* (for which he also records the spellings شنكار / شنقال / شنقال / شنقال) corresponds to Greek ἀργουσα, which is indeed HUNAYN's translation of GALEN, *Simpl. med.* VI.1.4 Περὶ ἀργούσης καὶ τεττάρων ἀργουσῶν (K XI 811₁₀–813₁₀) ≡ *Mufradah* VI.4 ذكر الشنكار (E 95v 4–20). The plant intended here, therefore, seems to be dyer's bugloss or alkanet (*Alkanna tinctoria* (L.) Tausch), cf. DIETRICH 1988: II 536 n. 6; and CORRIENTE, *DAA* 292a *{ŠNJ/KR}. For the Persian origin of the word, cf. VULLERS, *LPLE* II 471a s.v. شنگار and also STEINGASS, *CPED* 763 s.v. شنگار *šingār*.

³ Arabic *umm ḡaylān* may be here a generic name for some species of acacia tree (which would match the usual biome of the bird), but for IBN ḠULḠUL it translates DIOSCORIDES' λευκάκανθα (which IṢṬIFĀN had left untranslated), whereas IBN ḠANĀḤ equates *umm ḡaylān* with the Egyptian thistle; cf. IBN ḠULḠUL, *Tafsīr* 3:19 (G 47₆ | D 79₂ | P 59r); DIOSCORIDES, *Ḥaṣāʾiṣ* 3:19 لوفاقنا (P 59r 8–11 | T 247₁₂₋₁₅) ≡ *Materia medica* 3:19 λευκάκανθα (W II 26₄₋₉) with DIETRICH 1988: II 365–366; also IBN ḠANĀḤ, *Talḥiṣ* [965] and the commentary that accompanies that entry in BOS, KÄS, LÜBKE, and MENSCHING 2020: 1085.

⁴ I translate thus *ḥasak*, which refers to *Tribulus terrestris* L., and features already in DIOSCORIDES, *Ḥaṣāʾiṣ* 4:15 حسك (P 82v 21–83r 7 | T 315₂₂–316₁₀) ≡ *Materia medica* 4:15 τρίβωλος (W II 180₁₂–182₃).

⁵ The phrase is apparently not HUNAYNĪ: GALEN's «περὶ τῆς ἀπὸ τῶν πεζῶν τροφῆς» is rendered by him as «*mimmā yuḡtaḏā biḥī mina ḥḡayawānāti lmawāšī*», cf. *Alim. fac.* III.1 (H 332₈ | K VI 660₆) ≡ *Aḡḏiyah* III.1 (E 11v 24 | P 45r 16). An analogous periphrasis is used in *Natāʾiḡ* at the end of the discourse on meats to refer to bipeds: «*addawābbu llatī tadibbu ṣalā riḡlayn*».

- young lambs, cattle, goats, gazelles and wild cows and deer, suckling kids;
- chicken, partridges, cranes and geese, pigeons, turtle-doves,¹ small sparrows, and ostriches.²

There follows a relatively dense epigraph on milk and its derivatives, introduced by a new instance of direct address of the author to his reader with the same formula used in the proem to *Nat* II.1 («*iʿlam, waḥḥaqa llāh, anna...*»). GALEN's opinion is quoted again, now on all kinds of milk being hot and moist (to which some physicians would have added that it is so in the first degree), and a little further GALEN's comparison of milk to water as to its taste is also mentioned. The threefold composition of milk is probably also Galenic in inspiration, although the text does not explicitly acknowledge so and the terminology is certainly not the one transmitted in ḤUNAYN's translation.³ Then cheese and

¹ This would seem to be the meaning of *fawāḥit* (singular *faḥītah*) in Classical Arabic, cf. LANE "a species of collared turtle-dove, of a dull white colour, marked with a black neck-ring" in *AEL* 2348c s.r. √فتح. Although Arabic ornithonymy is a thorny field, one may assume that at least for ALʿILBĪRĪ's source *fawāḥit* were not *haḡal* (which has been previously mentioned in a separate epigraph and is translated here as 'partridge') unlike for some unnamed authority reflected in IBN BIKLĀRĪŠ' *Mustaḥḥimī*, cf. DOZY, *SDA* II 244b s.r. √فتح (which is the only reference provided in CORRIENTE, *DAA* 391b *{FXT}), where the plural is interrogatively translated as 'partridges'. Nor was it for AZZAHRĀWĪ, who also includes these two birds in two different epigraphs, cf. *Taṣrīf* XXVII.1.8,1-2 (S II 325₁₈₋₂₈); nor for ARRUNDĪ, who describes *fawāḥit* as one of the species of true wild pigeons in *Aḡḍīyah* IV.19 (W 84v 1-2), whereas partridges are classed by him amongst wild birds in *Aḡḍīyah* IV.21 (W 85v 15 - 86r 10). A noticeable degree of fluctuation and uncertainty with regard to the names of some bird species seems to have obtained quite early in the tradition, as reflected for example in IBN ĠANĀḤ's entry on طيهوج in *Talḥiṣ* [421] (cf. BOS, KĀS, LÜBKE, and MENSCHING 2020: 588).

² The copyist of P strove to make some sense of a passage that he clearly was not understanding, as shown not only by a number of misreadings («وباظلافه» instead of «وبالإضافة»!) but also by the unmotivated rubrication of some items («لحم الأيل» and «الرزور») as if they were new epigraphs. The text as extant jumps from ostriches to deers (which would then indeed be related both to birds and bipeds), only to go back to flying creatures. On the other hand, even if the mention of sterlings were actually to represent a separate epigraph, their flesh could hardly be compared to that of goats (معز), but the word should be read as نغر (either generic *nuḡar* or plural *naḡar*), probably some species of the genus *Corvus* (cf. DOZY, *SDA* II 692b s.r. √نغر; CORRIENTE, *DAA* 534a *{NGR}) rather than sparrows as in the sources gathered by LANE, *AEL* 2817bc s.r. √نغر. Now, there is the possibility that ALʿILBĪRĪ himself may have mingled materials that did not originally belong together. Let the passage be compared to IBN ZUHR's words on sterlings: «*fakaʿannahā šayʿun bayna lʿaṣāfiri wabayna nnaḡgar*» in *Aḡḍīyah* III (G 17₉). The word, which is recorded for late Ġarnāḥī Arabic as «grajo o graja *nāgra nagār*» in *Vocabulista arávigo* 263b 20 (= CORRIENTE, *LAPA* 204a **ngr*) is assigned a Latin origin *nigra* 'black' by CORRIENTE in the aforementioned entry in *DAA*. If this etymology is correct (descendants of Latin *niger* are indeed attested as names of different birds both in Oc and Oil languages, cf. MISTRAL, *Tresor* II 402a s.v. *negre*, and VON WARTBURG, *FEW* VII 131 s.v. *niger*) نغر ought to be added to the list of Andalusi features shown by *Natāʿiḡ*. For IBN ĠULĠUL's equation of *nuḡayr* to DIOSCORIDES αἰθυρία 'shearwater', see the discussion of *Materia medica* 2:55 in Part III Chapter 1 of this dissertation.

fresh and salted butter are cursorily surveyed before noting down the standard catalogue of milks with their respective qualities and medical benefits.¹

Troph 2

A textual boundary *faṣl* signals the beginning of a new subchapter *On vegetables* («*fī lbuqūlāt*»). It comprises seventeen separate lemmata discussing the properties and medical benefits of the following garden herbs and edibles:

1 fresh coriander (<i>kuzburatun raṭbah</i>)	10 beetroot (<i>silq</i>)
2 purslane (<i>baqlatun ḥamqā?</i>)	11 cabbage (<i>kurunb</i>)
3 blite (<i>baqlatun yamāniyyah</i>)	12 artichoke (<i>qinnāriyyah</i>)
4 radish (<i>fuḡl</i>)	13 asparagus (<i>hilyawn</i>)
5 onion (<i>baṣal</i>)	14 pumpkin (<i>yaqṭīn</i>)
6 garlic (<i>tūm</i>)	15 aubergine (<i>bādanḡān</i>)
7 leek (<i>kurrāt</i>)	16 truffles (<i>kamʔah</i>)
8 turnip (<i>salḡam</i>)	17 mushrooms (<i>ṣaḡmatu lʔarḡ</i>)
9 carrot (<i>ḡazar</i>)	

³ The explicit description of the three basic elements (οὐσῖαι ≡ *ḡawāhir*) of milk is found in GALEN, *Simpl. med.* X.II.7 (K XII 266₂₋₃) ≡ *Mufradah* X.2 ذك اللبن (E 161r 1–2), where the fractions distinguished are cheese-ish (τυρώδης ≡ *ḡubniyyah*), whey-ish (ὀρρώδης ≡ *māʔiyyah*), and butter-ish (λιπαρά ≡ *zubdiyyah*); cf. also GALEN, *Bon. mal. suc.* IV (H 398₂₁₋₂₃). Virtually all texts in the Islamicate corpus that discuss the nature of milk transmit the same explanation, but cf. especially the phraseology in AṬṬABARĪ, *Firdaws* VI.I.5 (S 386₁₄₋₁₆) ≡ *Hifḏ* §54 (K 82₁₀₋₁₁).

¹ The milks mentioned here are: cow milk, camel milk, ewes' milk, and goat milk; no human milk is mentioned. Incidentally, by “fresh and salted butter” I translate, not without hesitation, *zubb* and *saman*, which were not synonyms in chaste Bedouin Arabic as recorded by Arabic lexicographers and which the *Aḡḏiyah* tradition never fails to mention as different items. Confronted with the semantic asymmetry of the concepts of “butter” in Greek and in Arabic, ḤUNAYN resorts to a combination of both words to translate GALEN's βούτυρον, cf. *Mufradah* X.4 الزبد والسمن (E 67r 17 | P 124v 10) ≡ *Simpl. med.* X.II.10 Περὶ βουτύρου (K XII 272₉)—unlike IŞṬIFAN, who renders DIOSCORIDES' βούτυρον simply as *zubb* in *Ḥaṣāʔiṣ* 2:63 (P 35v 11 | T 152₁₂) ≡ *Materia medica* 2:72 (W I 146₁₃). As for the plethora of milk derivatives regularly produced in the Islamicate east, even as tireless an author as AZZAHRĀWĪ leaves some of them unmentioned «*liqillati taṣarru-fihā ṣindanā*», cf. *Taṣrif* XXVII.1.7,8 (S II 323₁₇₋₁₉).

The catalogue of vegetables is entirely standard, as is the nature of the information provided for each item and even the phraseology used throughout. There is no doubt that the author is drawing from a pre-existing compilation of the *Ağdiyah* type, but the exact data transmitted in *Natāʔiğ* does not coincide in a significant way with any text known to me.

All the entries show a common basic pattern inherited from the tradition, although the order of the segments may vary from lemma to lemma:¹

NAME — rubricated on the manuscript, in six of the seventeen entries it is further complemented by a synonym (usually, but not always, a western/Andalusī one).

PRIMARY QUALITIES — either hot or cold, dry or moist. For ten of the entries a precise degree is provided according to the standard Ḥunaynī terminology (that is by the word *darağah* ≡ τάξις / ἀπόστασις).² The degrees registered here are not all Galenic in origin, nor do they always agree with what is generally found in other sources.³

DIGESTIBILITY — expressed basically in the form of a dichotomy *fast / slow to digest* and only for some of the items. A logical justification is only exceptionally added: the digestion of purslane is slow on account of its viscousness.

¹ The interpretive framework that I propose here is evidently Galenic and it must be emphasised that nowhere in *Natāʔiğ* (not even in *Nat* II.1 NATURAL PHILOSOPHY) does ALʔILBĪRĪ show any interest in the discussion of the nature and classification of the qualities and properties of food or drugs. The word *quwwah* that in the Islamicate tradition mirrors DIOSCORIDES' and GALEN'S δύναιμις since the earliest translations is never used in *Nat* IV for the description of these “powers” or “properties”. On the other hand, modern (and therefore anachronistic) terminology has been preferred in this particular case given that here the text is not translated but rather interpreted, and also in order to avoid cumbersome periphrases where a single word may suffice.

² An archaic alternative terminology involving *ğuzʔ* is typical of some ninth-century texts, cf. IBN MĀSAWAYH «*aššaʔiru bāridun raṭbun fi lğuzʔi lʔawwal*» in *Šaʔir* 20₃; AṬṬABARĪ only once for chickpeas «*wahuwa fi lğuzʔi lʔawwali mina lḥarr* [...] *wahiya qaribatun mina ġuzʔi ttānī fi rruṭubah*» in *Firdaws* 374₁₇₋₁₉ (everywhere else he resorts to a sui generis hybrid *darağah*-system). In Andalus the *ğuzʔ*-scale is exclusive of IBN ḤABĪB's pioneering book on medicine, cf. citron peels characterised as «*ḥārrun yābisun fi lğuzʔi ttālīt*» in *Ṭibb* 80₁₀₋₁₁, and garden orach as «*bāridun raṭbun fi lğuzʔi ttānī mina lburūdati warruṭubah*» in *Ṭibb* 85₄ (further examples are found in *Ṭibb* 85_{7|8|10-11}, 86_{1|7|13}, 87₄, 88₁₃, 90_{7|10|18}).

³ Occasional disagreement was already noticeably in the Byzantine period: in some instances PAUL OF AEGINA differs from GALEN in the exact characterisation of a given item—and it is the former's opinion that is normally followed by SIMEON SETH whenever his two predecessors diverge (cf. HARIG 1967: 250–251). As shall be shown in Chapter 3 of Part III of this dissertation, supplying the missing degrees appears to have been one of the main tasks of learned physicians working during the earliest phase of Islamicate (then mostly Graeco-Syriac) medicine.

SECONDARY AND TERTIARY QUALITIES OR POWERS — indications are for the most part organ- or ailment-related. The items can be diuretic, litholytic, antihelminthic, aphrodisiac, emmenagogues, alexipharmic, etc. Only rarely is a more general property mentioned, as in the case of fresh coriander, which is not only sleep-inducing but also haemostatic (and it can therefore staunch nosebleeds if instilled into the nose), or radish, which “cuts” phlegm. The mention of medical benefits is often complemented with instructions for use: radish purges raw phlegm if it is ground and two ounces of its juice are taken with another two ounces of honey; if onion juice is applied on the eyes, it cleanses the sight; etc.

SPECIFIC PROPERTIES — some properties are introduced as the *hāṣṣah* (perhaps originally *hāṣṣiyah*) of the herb. No justification or explanation is provided for this particular consideration, which certainly does not reflect the author’s own opinion on the subject but rather reproduces an inherited tradition that is well represented in the early corpus. Vegetables for which such specific properties are mentioned are: garlic, leek, and beetroot.

CONTRAINDICATIONS — negative effects (mostly related to excessive ingestion) are mentioned more than once, as in the case of coriander, garlic, leek, turnip, beetroot, and cabbage. The most remarkable example in this regard is aubergine, as the almost apocalyptic list of ailments that it is affirmed to cause is longer than most entries in the subchapter. The harm it brings with itself can be avoided, however, if this vegetable is cooked with meat, vinegar, and spices.¹

There are, moreover, a number of remarks that do not lend themselves to be classified in any of the above categories. For instance, fresh coriander takes away any unpleasant odour of meat; and carrots are more nourishing if boiled, but then they become harder to digest. A solitary echo of the *Abdāl* genre (ie drug substitutes) is found in the entry on asparagus: in the absence of rhubarb, it can be substituted for by twice its weight of the bark of asparagus roots.

Identification of the species referred to in *Troph 2* is overall unproblematic, with the only remarkable exception the vegetable alluded to in 2.12 under the rubric “the †cabbage known as *qinnāriyah*”. In view of the intended meaning of entry and with the support of external evidence I tentatively suggest reconstructing «كككر» (the well-known and often-mentioned Persian name for the artichoke) from «ككب» as transmitted in P.² In any case, that the several vegetables

¹ That entry is all the more interesting because it includes an intriguing and necessarily pseudographic quotation from GALEN, according to whom “Whoever eats aubergine regularly for sixty days shall fall victim of unhealable leprosy”.

referred to here are thistles of the artichoke kind (*Cynara cardunculus* var. *scolymus* and other variants) is confirmed beyond doubt by the synonyms *qinnāriyah* and *lašf*.¹ This entry is, indeed, a telling example of the interest that *Natāʾiğ* certainly has regardless of its uncertain chronology and quasi-anonymous authorship.

The synonyms assigned to the lemmata are all well attested in Andalus but most of them are by no means specifically Andalusī.² A caveat must be added here with regard to these synonyms: reflecting as they do a source (or, less likely, a plurality of sources) different from the one exploited for the compilation of the sections *Nat* II.2 THERAPEUTICS and *Nat* V PHARMACOPOEIA, there is no reason why one should assume that the same synonymy (and thence the same botanical identification) obtains consistently throughout the whole text of *Natāʾiğ*. Put in other words, some names may refer to different species in different loci within the text. An incontrovertible and somewhat obvious proof in this respect is *šaḥmatu alʾarḍ* ‘earth’s fat’, which here designates some “plant” species (actually some fungi) but in *Nat* III ḤAWĀṢṢ is one of the names for earthworms.

As for the explicit sources of the tract, GALEN is the only medical authority mentioned (twice),³ while a ḥadīṭ from MUḤAMMAD quoted in the entry for truffles (“Truffles are a gift and their juice is a cure for the eyes”) shows quite clearly the interconnectedness of epistemic traditions in an Islamic milieu—and at the same time confirms the noticeable similarity of some segments of *Nat* IV to compilations of Islamic medicine such as IBN ḤABĪB’s *Ṭibb*.⁴

² For كنجر / كنجر (both of them reflections of Persian *kangar*, cf. VULLERS, *LPLE* II 901a) in the Arabic corpus, see the references provided by DIETRICH 1988: II 363–364 n. 4; and also BOS, KĀS, LÜBKE, and MENSCHING 2020: 634. As it seems highly unlikely that the artichoke (or any other thistle for that matter) should have been known by the hyperonym ‘cabbage’, the form «كرب» in P must be the result of a misreading (the spelling may have been ambiguous and the word actually unknown to the copyist), perhaps further contaminated by the preceding lemma on the actual cabbage.

¹ For the geolectal distribution and the etymology of *qinnāriyah*, see Chapter 9.

² Even if undeniably interesting in themselves, especially with regard to the Andalusī tradition, none of these synonyms is exceptional enough to be dealt with in this summary and their analysis shall be conducted elsewhere. In the meantime, the reader can consult the remarks and references included in the critical apparatus.

³ The metaphorical name τῶν ἀγροίκων θηριᾶκῆ is indeed bestowed upon garlic by GALEN in *Meth. med.* XII.8 (K X 866₅₋₆). As stated above, the quote on aubergine, on the contrary, cannot possibly be a genuinely Galenic one.

⁴ Cf. IBN ḤABĪB, *Ṭibb* 42₅₋₈ ≅ *Muḥtaṣar* 21₅. In his entry on *kamʾah* IBN QIYYAM ALĠAWZIYYAH includes a lengthy exposition of the diverse meanings implied in that ḥadīṭ, both on theological and medical grounds, cf. *Nabawī* 279₁₂–284₁₂ (where he even cites ALĠĀFIQĪ).

Troph 3

The next chapter (*bāb*) *On fruits and their natures and benefits* follows essentially the same scheme than the preceding one and includes sixteen different species of fruits:

1 dates (<i>tamr</i>)	9 mulberries (<i>firšād</i>)
2 figs (<i>tīn</i>)	10 peaches (<i>firsik</i>)
3 grapes (<i>šinab</i>)	11 apricots (<i>mišmiš</i>)
4 apples (<i>tuffāh</i>)	12 citrons (<i>utruǧǧ</i>)
5 quinces (<i>safarǧal</i>)	13 medlar (<i>zurūr</i>)
6 pears (<i>kummatrā</i>)	14 jujube ² (<i>nabiqān</i>)
7 pomegranates (<i>rummān</i>)	15 palm heart (<i>ǧummāru nnaḥl</i>)
8 plums (<i>iǧǧāṣ</i>)	16 nuts (<i>ǧawz</i>)

Dependence from an eastern source is most noticeable in the use of the standard names of all the fruits as the main lemmata, whereas Andalusī synonyms are only added as glosses.¹ Synonyms are indeed provided for plums (but not for pears), mulberries, peaches, and apricots. All of them are well documented in the western tradition but, again, since some of them are attested also in the east it is only probable, but not beyond dispute, that they might reflect the author's geographical context—as opposed to having been simply inherited from the source text that provided the actual materials for the epigraphs.

Botanical identification is unproblematic with one sole exception: in 3.14 the reading «النبقین» seems to point to النبقان “the two *nabiq* fruits” and the dual suggests that it is not the “Arabian *nabiq*” (ie the fruit of *Ziziphus spina-christi* (L.) Desf.) that is meant here, but rather the two species (namely domestic and wild) of λωτός.²

¹ This feature is only implicitly recognised by GARCÍA 1995: 201–202, who nevertheless comments quite consistently on the geographical distribution of the names recorded by ALZILBĪRĪ here.

² GARCÍA SÁNCHEZ 1995: 202 n. 46 identifies these as the fruits of *Ziziphus lotus* (L.) Lam. and of the true jujube or red date (*Ziziphus jujuba* Mill.) without further discussion. Now, the story behind this phytonym may be a complex and interesting one and can be sketched as follows. There is a *tree* called λωτός in Greek (probably the nettle tree, *Celtis australis* L.) that IŞTIFAN leaves untranslated in *Ḥašāʾiṣ* 1:124 (P 28r 2–5 | T 114_{12–17}) ≡ *Mat. med.* 1:117 (W I 110_{1–5}) and which ḤUNAYN identifies as *nabiq* / *nibq* in *Mufradah* VII.91 ذكّر النبق (E 122v 18–23) ≡ *Simpl. med.* VII.x.24 Περὶ λωτοῦ τοῦ δένδρου (K XII 65_{12–66}). The latter identification is received and established also for DIOSCORIDES' λωτός by IBN ĞULĜUL in *Tafsir* 1:91 (G 22₁). On the other hand there is a totally different plant (actually several different *herbs*) also called λωτός in Greek that is found in two varieties: garden lotus (λωτός ἡμερος) and wild lotus (λωτός ἄγριος). This second plant is translated unanimously as *ḥandaqūqā* (and *ḥandaqūqā barrī*) by IŞTIFAN in *Ḥašāʾiṣ* 4:108–109 (P 94v 22 – 95r 7 | T 350_{7–20}) ≡ *Mat. med.* 4:110–111 (W II 263_{5–264}) and by ḤUNAYN

Another ḥadīṭ from MUḤAMMAD is mentioned for figs: “Let those who want their hearts to be subtle add some figs to their nourishment”.

7.2 Reg 2 — Dietetic apophthegms

On account the briefness that characterises these sentences and in order to avoid any pretentious association with the well-established genre of aphoristic literature,¹ the denomination *apophthegm* is chosen here for the five succinct epigraphs that follow, without any separation, the trophognostic treatise. They are all five individually emphasised by rubrication of their first words on manuscript P and they all convey axiomatic instructions that warn against the following dangers:

- 1 — The coincidence of different foods in the stomach. One single combination is mentioned: if fish and milk coincide in the belly, this shall result in itch, mange, and colic winds.²
- 2 — Abusive ingestion of eggs causes dizziness (*duwār*) and freckles (*kalaf*). If roasted, eggs are lighter on the stomach than when fried; boiled eggs are the heaviest.
- 3 — Eating salty things after bloodletting and cupping causes excrescences and ulcers.
- 4 — On bathing: whoever enters the bath on a full stomach shall be assailed by colic and hypochondrial winds.
- 5 — Eating citrons at night induces a swoon (*ġāšīyah*) and causes abscesses (*dubaylah*), therefore doing so must be always avoided.

in *Mufradah* VII.90 الخندقوقا ذكر (E 122v 15–18) ≡ *Simpl. med.* VII.x.23 Περι λωτοῦ ἡμέρου (K XII 65_{v-11}). The matter is further complicated by the fact that IBN ĠULĠUL establishes *nafal* (*nafalun bustānī* = λωτὸς ἡμερος, and *nafalun barrī* = λωτὸς ἄγριος) as the equivalence for DIOSCORIDES' second λωτός in *Tafsīr* 4:97–98 (G 82₄₋₇ | D 148₁₆)—which means that «النبقین» might even derive from النبقین*. The force of genre conventions (the author is reproducing *Aġḍīyah* materials with little or no regard to the pharmacognostic tradition) suggests that the easiest explanation (ie GARCÍA's identification) is quite probably the correct one, but in any case the matter deserves further examination.

¹ Despite the quasi-synonymy that obtains between ‘aphorism’ and ‘apophthegm’ in contemporary use, what is under scrutiny here bears no resemblance to HIPPOCRATES' *Aphorisms*, let alone to ARRĀZĪ's and IBN MAYMŪN's homonymous elaborate expositions, so ‘aphorisms’ (ἀφορισμοί ≡ *fuṣūl*) would certainly be a misleading label in here. By the same token *nawādir*, which might in a different context be a suitable qualification, is too closely associated to IBN MĀS-AWAYH's own emulation of the Hippocratic treatise to be used in this case.

² Cf. ARRĀZĪ, *Aġḍīyah* II.XIX الأظعمة فيما يجب أن لا يجمع بينها من الأظعمة (Q 59₁₈–60₈), where the combination of fish with any sort of milk (either *māst*, *rāʾib*, or *laba?*) is equally interdicted. A similar warning is found also in ARRĀZĪ, *Aḥlāq* 40₈–41₁, which is quoted below. In neither of these two passages is any mention made, however, of the consequences of this combination.

No single text appears to transmit these five recommendations with the exact same wording but individual parallels can be gleaned from several sources, which points to an early dietetic tradition that has been so far underexplored and some of the major representatives of which are actually no longer extant. Thus ARRĀZĪ, who had himself penned a treatise on the benefits and harms of food, affirms that physicians should refrain from commenting on such dietetic matters except for the particular case of some harmful combinations. The first one mentioned by him corresponds precisely to apophthegm no. 1 in our text:

ARRĀZĪ, *Aḥlāq* 40₈-41₁

مثل أن يجتمع على مائدته السمك والرائب، أو الحين والبيض، أو أشباه هذا مما لا يجوز أن يُجمع بينها في وقت واحد البتة.

Apophthegm no. 4, in turn, echoes an Hippocratic piece of advice on the time of bathing that was selected by AṬṬABARĪ for his chapter on the preservation of health, in which he draws extensively from HIPPOCRATES. After having discussed eating, walking, sleep, rest, and drinking, bathing is mentioned:¹

Firdaws III.IV.3 حفظ الصحة (§ 101₁₋₂) *Hifḍ* §16 (K 50₉₋₁₀)

وقال إن الاستحمام قبل الطعام نافع، لأنه وأما الاستحمام قبل الطعام، فإنه يُذيب يُذيب الفضول ويُخرجها بالعرق؛ وأما بعد الفضول ويُخرجها؛ والاستحمام بعد الطعام، الطعام، فرديء لأنه يُورث سدد الكبد. يُورث سددًا في الكبد.

The same recommendation is repeated for centuries in slightly different variants:

ṬAYFÜR ∈ ALHĀŠIMĪ, *Maǧālis* III (K 159₆₋₇)

¹ The origin for this paraphrase is identified by KAHL 2020: 50 n. 23 in HIPPOCRATES, *Acut.* [65] «καὶ μήτε νεορρύφητον μήτε νεόποτον λούεσθαι μηδὲ ρυφείν μηδὲ πίνειν ταχὺ μετὰ τὸ λουτρὸν» (K I 143₁₂₋₁₄ | L II 368₁₋₃), but there only taking some barley gruel or porridge (πιτσάνη) and drinking are mentioned and, moreover, the actual contents of the prescription are far from similar to the passage transmitted by AṬṬABARĪ. Nor do GALEN's recommendations for bathing include this particular doctrine in *San. tu.* III.4 (K VI 182₁₆-189₁₁ | Ko 80₁₆₃₅-83₃₅). As far as the second segment of AṬṬABARĪ's passage is concerned, it seems to derive from some locus reflected also in the pseudo-Galenic *Ren. affect.* VII «ἄριστος δὲ καιρὸς βαλανείων ἡνίκα ἢ μὲν χθесινή τροφή τελέως ἢ κατεργασμένη [...]. οὐ δεῖ οὖν οὐδὲ μετὰ τὴν τροφήν λούεσθαι σε, ἵνα μὴ ἔμφραξις κατὰ νεφροῦς καὶ ἡπαρ γένηται» (K XIX 692₁₂-693₂). On the other hand, that a bath must only be taken once the digestion is completed is positively stated in GALEN, *De marcore* [= Περὶ μαρρασμοῦ] IX «παραλαμβάνειν δὲ αὐτὸ [sc. βαλανεῖον], πεπεμμένης ἤδη τῆς τροφῆς, οὐκ ἐπ' ἐνδείᾳ μακροτέρᾳ. τῷ μὴν γὰρ ἀρτίως ἐδηδοκότει προσεισφερόμενον λουτρὸν ὤμων καὶ ἀπέπτων χυμῶν ἐμπίπλησι τὸ σῶμα» (K VII 702₁₅-703₁).

فلذلك تأمر الحكماء أن لا تدخل الحمام شابع [ولا جائع] — وخير الأمور أوسطها.

IBN ZUHR, *Aǧđiyah* XV.4 مراتب دخول الحمام (G 1136-7)

ولا يجب أن يدخله الداخل وهو على امتلاء في معدته، بل [يجب أن] يجتنب دخوله.

IBN ḤALṢŪN, *Aǧđiyah* III.5 (G 56₁₈₋₁₉)

ولا يدخله عند امتلاء المعدة — فإنه يُؤلّد السدد والحمى العفونية.

So far the most interesting parallel for this segment is the dietetic treatise ascribed to Imām ARRIDĀ (d. 818):¹

Dahabiyyah 134₁₂₋₁₃, 1337-9₁₁₋₁₂15-17

³ ولا تأكل طعامًا مالحًا بع ذلك [= الحجامة] بثلاث ساعات، فإنه يُخاف أن يعرض من ذلك الجرب. [...].

² ومداومة أكل البيض يعرض منه الكفل في الوجه.

³ وأكل المملوحة واللحان المملوحة، وأكل السمك المملوح بعد الفصد والحجامة يعرض منه البهق والجرب. [...].

⁴ ودخول الحمام على البطنة يُؤلّد القولنج.

والاعتسال بالماء البارد بعد أكل السمك يُورث الفالج.

⁵ وأكل الأترج بالليل يقلب العين ويوجب الحول. [...].

² وكثرة أكل البيض وإدامته يُؤلّد الطحال ورباخًا في رأس المعدة؛ والامتلاء من البيض المسلوق يُورث الربو والانبهار.

It is only here in *Nat* IV (and more precisely in the bits of dietetics that complement the trophognostic treatise) that any significant overlap between our text and Islamic medicine can be perceived. On chronological grounds, however, it seems that ALṢILBĪRĪ collects pieces of Helleno-Islamicate (inclusive of Syriac and Iranian) regiminal lore that would eventually become incorporated into the genre of Islamic medicine.

¹ In the quote I signal with a superindexed number the corresponding apophthegm in *Natāʾiṣ*. There seems no to be an exact match for apophthegm no. 1 in *Dahabiyyah*, but a typological parallel is transmitted there in which the caliph is warned against mixing *eggs* and fish because such a combination can cause gout, colic, haemorrhoids, and toothache, cf. *Dahabiyyah* 1334-6.

7.3 *Reg 3* — Monthly dietetic calendar

Still with the same axiomatic and almost compulsory tone, some concise indications are provided for each month of the year about what should and should not be done in order to preserve one's health. The text is very much of a dietetic dodecalogue in style—in *Natā'iğ* actually a decalogue, since January and November are missing from the text transmitted in P:

⟨ January — ⟩

During the month of February take two draughts of hot water every morning, for this shall prevent any evil affection from happening during this month.

During the month of March do not eat fish and take two licks of honey every morning, for this shall avail against any evil affection that may happen during this month. In April do not eat radish, nor any vegetable stems.¹ Drink honeyed syrup of roses every morning, for this shall prevent any evil affection from happening during this month.

In May do not eat the head of any animal.

In June drink some cold water after boiling it and letting it cool.

In July avoid intercourse.

In August do not drink either cow or goat milk, whether sweet or sour.

In September do not eat leek or onion.

In October do not enter the bath.

⟨ November — ⟩

In December do not eat cabbage.

There is more than meets the eye in this calendar (or more precisely *behind* it) and even if the matter must be exhausted elsewhere,² an admittedly disproportionate excursus at this point may be justified, as the subject is not without interest and deserves to be dealt with at some length. The following remarks

¹ As in cabbage stems or artichoke stems. Arabic *ʕusluğ* (also *ʕuslūğ* and *ʕislāğ*) refers to tender twigs as well as to slender green shoots and stalks; but it can also be the name of several edibles (such a lion's turnip, broccoli, and mountain spignel or meu), cf. IBN MANḌŪR, *Lisān* II 324b 15 – 325a 10 s.r. $\sqrt{\text{عسلج}}$; also DOZY, *SDA* II 128b s.r. $\sqrt{\text{عسلج}}$; and CORRIENTE, *DAA* 353a *{'SLJ}. In Andalus *ʕusluğ* (plural *ʕasaliğ* or acrolectal *ʕasaliğ*) is well documented until the terminal phase of local dialects, cf. PEDRO DE ALCALÁ's testimony for Ġarnāḩi Arabic in *Vocabulista arávigo*: «bretón yerva âazlúch âacîlich» 119a 18, «cogollo âazlúch âacîlich» 148a 12, «tallo de yerva azlúch acîlich» 409b 10 (all of them also recorded in CORRIENTE, *LAPA* 136a *{'slj}). As shall be shown below, a generic meaning is probably the original one. Mark also «عسلج البساس» in the *Qurṭubah Calendar* 33₄ (≡ «*turiones fenuculi*» in *Liber anoe* 33₄₋₅), which is missing from ʕARIB B. SAʕID, *Anwāʕ* 165₆₋₇ and from *Tafṣil*.

² The preparation of a paper that bears the provisional title of *Western Witnesses to the Arabic Iathromenological Tradition* has been awaiting publication for a long time now and it is only fair to include here the most relevant data collected during these years in order to make it available for further research.

focus deliberately only on those texts that are closest to *Natāʾiǧ* and most especially on the ones less extensively covered by modern scholarship.

Within the Islamicate tradition, the calendar included in *Natāʾiǧ* has nothing to do, as far as its contents are concerned, with the subgenre of *seasonal* dietetic calendars¹ and very little in common with the diverse “extended monthly calendar” types as represented by IBN MĀSAWAYH’s *Azminah* in the east and by the *Qurṭubah Calendar* in Andalus. The lack of any significant resemblance to the later text is all the more striking given the geographical and chronological context of the two calendars, but the origin and exact nature of the constellation of text related to ʿARĪB B. SAʿĪD’s *Anwāʾ* remains, as seen in the survey of *Nat* II.1, shrouded in mystery despite all efforts.

With regard to the eastern *Azminah* tradition, differences are as obvious as they are significant. Besides the minor (albeit not entirely trivial) fact that IBN MĀSAWAYH’s calendar follows the Syrian months, beginning with the first Tišrīn and ending with Aylūl, the epigraphs on each month in a “extended monthly dietetic calendar” are not limited to one straightforward counsel conveyed in a short sentence but they are, on the contrary, well-structured units, about twenty lines long and regularly divided into two thematically different paragraphs. The information gathered for each month is by no means exclusively medical but comprises very disparate data.

The contents of the first paragraph of each month are astronomical-astrological (the zodiac sign assigned to each month, references to lunar mansions), humoral (the humour that prevails in each month is indicated, the phraseology being actually the same as previously seen in *Nat* II.1), socio-religious (Christian festivities), meteorological, and agricultural (the diverse tasks associated with each month). The second paragraph, in turn, is devoted mostly to medical matters: first and foremost which foods and drinks are recommended and which are to be avoided, but also other health-related subjects as sexual intercourse and bathing.

There can be no doubt, therefore, that IBN MĀSAWAYH’s *Azminah* and the tradition to which it is one of the oldest extant witnesses cannot be regarded as a close cognate, let alone a source, for the calendar in *Natāʾiǧ*. There are, nonetheless, a few passages that are so close in their meaning and even in the exact wording that it is hard to admit that there is absolutely no genetic affiliation between the materials transmitted in the two texts:

¹ Dietetic calendars arranged according to the seasons of the year are most pertinent, however, for the analysis of the materials contained in *Nat* II.1.

	<i>Azminah</i>	<i>Natāʿiğ</i>
Tiṣrīn-1	ويُستحب أن يشرب في أوائل النهار جرعة من الماء الحار على الريق	Feb
Nisān	ويُجنب أكل الفجل وكلّ حلو ومالح	Apr
Ayyār	ويُجنب فيه أكل ... والرؤوس والمقادم	May
Ḥazirān	ويُجنب الجماع	Jul

The recommendation to take a draught of hot water on an empty stomach is, as a matter of fact, repeated for a number of months in *Azminah* and Ḥazirān is certainly not the only month in which sexual activity is disapproved of in that text, but not to eat radish or to abstain from ingesting heads and trotters are extremely specific recommendations and they feature in the same month in both texts. In this light the label “extended monthly dietetic calendar” becomes self-explanatory: as far as the Islamicate tradition is concerned, there is a basic monthly dietetic calendar type (*Natāʿiğ*) and an extended monthly calendar type that is abundantly documented in several subtypes and which is, in fact, the only kind of calendar to have received any scholarly attention so far.

Now, in the course of the research summarised in this dissertation a second witness surfaced that transmits a text virtually identical to *Natāʿiğ* and which must share a close common source with it. In his literary encyclopaedia the belletrist IBN ʿABDIRABBIH (d. 940) reproduces a letter (*kitāb*) that IBN ʿIMRĀN, the renowned Baḡdādi-Qayrawānī physician, would have addressed to some “brother” (ie a colleague or a companion) of his. In this letter a dietetic calendar is found.¹ This second calendar is not mutilated (it includes the months of January and November) and in its second half, beginning with June, it coincides mostly word by word with the text of *Natāʿiğ*, whereas for the first five months the overlap is less literal and for some of them it is actually non-existent. Some of the differences clearly reflect apomorphic transmission (eg الحوت / الحلو / الكرنب / الأرناب / الأرناب) and they would be hopelessly inconclusive in the absence of additional witnesses (for which see below).

Moreover, although comparison of the two versions reveals that more than one severe eyeskip has altered the text of *Natāʿiğ* (or perhaps already that of its source), the text quoted in *Ṣiqd* is not free from clerical mistakes either. The

¹ Cf. IBN ʿABDIRABBIH, *Ṣiqd* VIII 41₈–43₂₂, where the calendar is found in the middle of the text (*Ṣiqd* VIII 42₆₋₁₇) and is followed by seasonal dietetic instructions. The fact that the quotation is signalled as «*Kitābu Ishāqa bni ʿImrān*» rather than «*min kitāb*» seems to support an interpretation of the word *kitāb* in the sense of ‘letter’ or ‘epistle’ (as in the proem to *Natāʿiğ* II.1). Now, traditional epistles can be remarkably long and we simply do not know how much of the original text is preserved in this excerpt. At the very least, the paragraphs on the regimen to be followed during winter and spring are missing. On the other hand, according to ALʿARYĀN’s index (cf. *Ṣiqd* IX 21) this is the only mention of IBN ʿIMRĀN in the whole text.

only solid basis on which to draw a conclusion as to the genetic affinity that links these two texts can be found in the entry for the month of April:

ALḤILBĪRĪ	العساليج
IBN ḤIMRĀN	الأصول التي تنبت في الأرض

which bear all the signs of being two synonymic expressions for the same concept, and *Natāʾiq* transmits in fact the *difficilior*. However, since it is impossible to assess the level of literality of IBN ḤABDIRABBIH's quotation (he could be paraphrasing or glossing his source) and given that IBN ḤIMRĀN's calendar may have circulated in more or less diverging forms, the matter cannot be settled in a conclusive manner.

Were these two texts to be interpreted exclusively in the light of the Islamicate tradition, the most likely outcome would be a hopeless crux. However, invaluable external evidence can be garnered from the much richer and much better studied tradition of dietetic calendars in Christianate Europe. Of these only the subgenre of monthly dietetic calendars are of interest here, those that were generally known in the Latinate tradition as *Regimina duodecim mensium* and as *Zwölfmonatsregeln* by contemporary German-writing scholars.

The earliest Latin witnesses to that tradition are typically pseudepigraphic and take the form of calendars that are either appended to medical compendia or circulate independently within medical and computistic miscellanies. While PSEUDO-PLINY's *De obseruatione totius anni, ut sanus custodiatur* and the fragment added at the end of the *Diaeta Theodori* are both mostly irrelevant here, the monthly regimen included in PSEUDO-SORANUS' *Isagoge in artem medendi* as chapter XIX *Quam nam singuli menses dietam utiliter exigant* transmits some materials that appear to be genetically connected to the tradition represented by *Natāʾiq*:¹

Isagoge

¹ PSEUDO-PLINY's calendar was printed in Basel in 1528 within a collection of texts entitled *De re medica* on fols. 98r–98v. The one appended to the *Diaeta Theodori* is found on lines 555–569 of SUDHOFF's edition and even if instructions are provided only for the months of March and April, the text appears to have intended to include all twelve months: «*Exponimus atque ordinamus qualiter per unum quemque mensem et tempus potionari debebis*» (cf. SUDHOFF 1915). Neither of these two texts bears any resemblance to the calendar contained in *Natāʾiq*. As to PSEUDO-SORANUS' *Isagoge*, it is cited after the aforementioned collection printed in Basel in 1528 on fols. 8r–8v (a passing-by reference to the two calendars contained there is made in FISCHER 2000: 10–11). A text quite similar in its contents but with a remarkably different distribution of the instructions across the months circulated as *Medicina Ypogratia, quid usitare debeat, per singulos menses* (cf. London, British Library MS Harley 3271, fols. 122v–123v, edited in CHARDONNENS 2007: 473–475).

Mense Aprili sanguinem expedit minuere, potionem solutionis accipere, carnes recentes comedere, **a radicibus abstinere**, calidum usurpare [...].
 Mense Iunii singuli diebus mane **aquam frigidam bibat**, uinum quantum uolueris [...].
 Mense Iulii **uenere abstinere** oportet, neque sanguinem minuere, saluia et ruta usitari, potionem ad soluendum non accipere.
 Mense Augusto **maluis et caulis abstinere**, acria comedito, ceruisiam et medium recens noli bibere.
 Mense Octobri racemis uti confert, [...] **porris item plurimis utendum est**. Mense Nouembri cinamomum bibere est utile, et **balneis nullis lauare, caputque nullum comedere** [...]. Mense Ianuario **tres gluppos de uino ieiunus cotidie bibe**, aliis uero potionibus quæ uentrem laxant non utere.

In the *Isagoge* instructions are longer and more complex than in *Natā?iġ* (but nowhere as developed as in *Azminah*) and they typically involve more than one single piece of advice. Literal coincidences, however, are striking (they are colour-marked in the quote above) and non-correspondence with regard to the months (ie what prescriptions are ascribed to which month) is not higher between the *Isagoge* and the two Arabic texts than it is between any two texts within the small corpus under analysis here.

Since the Latin and vernacular (mostly Germanic) corpus of monthly regimens has been quite thoroughly covered over the last century, it will suffice to note here that the oldest *manuscript* containing a fragment of such a text is the eight-century Codex Bambergensis Medicinalis 1 (well known to Mediaevalists as the transmitter of the *Lorscher Arzneibuch*) and that analogous dietetic instructions for each month can be found scattered throughout the Carolingian *Reichskalender* dated to the 9th c. Although many more witnesses may probably lie unedited in manuscripts all over Europe, excellent critical editions and meticulous studies are available for the main texts, and even a detailed typological classification of the multiple versions has been proposed.¹

¹ Without, again, any aim at exhaustiveness in the references, cf. STOLL 1992 for an edition and analysis of the *Lorscher Arzneibuch*; while the section *Qualem potionem per singulos menses usare debemus* (STOLL 1992: 76) is not related to the materials dealt with here, the fragmentary calendar (it only covers the months of March, April, May and June) edited on pages 236–239 is essentially identical to the one attested to by the *Medicina Ypogratia*. For the complex tradition of the text of the Carolingian calendar, cf. BORST 2001. A commendable effort to clarify the intricate—often plainly chaotic—tradition of monthly dietetic calendars and to establish a taxonomic classification is made by GROENKE 1986 [n.v.], while an analogous, yet more modest, analysis of the Mediaeval German corpus is provided by HIRTH 1983. A historical survey-cum-

Now, if the specific subgenre of monthly calendars is generally associated to “cloister medicine” (*Klostermedizin, médecine claustrale*) and if they are sometimes considered “un produit de la médecine monastique occidentale”,¹ the very existence of the calendar transmitted by ALḤILBĪRĪ and IBN ḤIMRĀN requires an explanation. To put it in simplifying dichotomies: either texts of this kind were available for translation in the Islamicate east or they were not. If they were, it would be only by accident that no eastern texts have been preserved and that the only two identified witnesses are from the west. If they were not, and given that an Islamicate origin should be disregarded on chronological grounds, the question would arise as to a possible *western* translation from Latin into Arabic—which bears, of course, on the old question of the Roman legacy both in norther Africa and the Iberian peninsula.

Enticing as may be the possibility of having unearthed new evidence in support of the substratist hypothesis, the evidence provided by the Byzantine tradition may not warrant such a hasty conclusion. Regimens arranged by months are not attested in the Greek corpus until Byzantine times,² and they are generally considered not only late but also derivative from Latin given the chronology of the manuscripts that transmit them. Unlike the majority of Latin texts, however, Byzantine calendars provide extensive instructions for each month very much like those found in IBN MĀSAWAYH’S *Azminah*. Furthermore, literal coincidence of some passages of HIEROPHILUS’ treatise with *Natāʾiḡ* is never lower, and most often higher, than in the case of the *Isagoge* and the *Medicina Ypogratia*, to the point that its text can be quite safely consulted in order to choose between ALḤILBĪRĪ’S and IBN ḤIMRĀN’S readings when they differ, especially when this evidence is additionally backed by Latin parallels.³

bibliography of secondary literature on the subject is conveniently offered by PUCCI 2004. On a side note, a hitherto mostly unexplored Ashkenazi Hebrew tradition for the same genre has been only recently overviewed by ISSERLES 2014.

¹ Cf. BARBAUD 1988: 339. Even if he shows to be aware of the profound differences between these two calendrical genres, BARBAUD makes this observation apparently extensive to “les calendriers diététiques” in general. The evolutionary line proposed there is likewise unsatisfying: a Hippocratic origin is given as granted and an ignorance of drug prescriptions (“prescriptions médicamenteuses”) is attributed to the Greek dietetic tradition, which would make the shift in focus allegedly introduced by monk medicine all the more original. As far as the latter point is concerned, the Islamicate dietetic corpus, which draws largely—as most branches of medicine—from Graeco-Byzantine sources, is an eloquent witness against such an assumption. It can be no coincidence that BARBAUD should consider any analogous calendars in the Arabo-Islamicate tradition inexistent or very rare (“il est possible qu’il n’y en ait pas – ou fort peu”, which once again is by no means the same thing) as a consequence of the fact that the Graeco-Latin texts that transmit them would have not reached the east.

² Cf. BAADER 1984: 257a.

³ Three different versions of the text ascribed to HIEROPHILUS have been considered in this re-

Thus, the *šarāb* in January is confirmed to be ‘wine’ («οἴνου καλοῦ εὐωδιστάτου» BC, «οἴνον γλυκύν, καὶ κόνδυτον» A), which might perhaps have been expurgated by ALZILBĪRĪ.¹ For March, IBN ḤIMRĀN’s passage is, albeit conspicuously contradictory, closer to the primitive version in its mention of sweetness («Ἀρμόζει πᾶσι τοῖς γλυκέσι χρᾶσθαι ἐν τροφαῖς καὶ ἐν πότοις» BC, «Ἀρμόζει γλυκοποτεῖν καὶ γλυκοτροφεῖν» A) rather than fish, but then fish is interdicted for the preceding month of February in the Byzantine versions and ALZILBĪRĪ mentions honey quite explicitly unlike any of the other extant texts. In April, if *fuḡl* is unproblematic (cf. «ῥάφανον» ABC), the two Arabic periphrases correspond to a relatively long series of vegetables (generically qualified as *δριμέα* ‘pungent, acrid’) in the Greek versions.

Where the two Arabic texts agree on the interdiction of eating “the head of any animal” during the month of May, the Greek versions include also the feet («ποδοκέφαλα» ABC).² All versions coincide in the basic advice for the months of June (drinking cold water, «ὑδωρ ψυχρόν») and July (abstaining from sexual intercourse, «ἀφροδισίων ἀπέχειν»). After that, discordance is prevalent. On the one hand, for August, September, and October *Natāʾiḡ* seems to copy the instructions for the month that follows, which must be somehow related to the absence of November in that text. For August, however, IBN ḤIMRĀN’s “Do not eat fish” bears no resemblance to the Byzantine versions AC (B lacks this month), which mention exclusively *vegetables* either as recommended or as warned against.³ The prescription not to drink either cow or goat milk is not only misplaced in *Natāʾiḡ* but it is also opposed to the recommendation to do so in the rest of the witnesses.⁴ Moreover, IBN ḤIMRĀN mentions just cow milk and the Greek texts simply milk («γαλακτοτροφεῖν καὶ γαλακτοποτεῖν» AB, but

search. The A version was first edited by BOISSONADE 1827: 178–273 on the basis of Paris, BnF MSS Grec 396 and 985, then included in IDELER 1841: 409–417. The publication of version B after BnF MS Grec 3035 followed a few years later in BOISSONADE 1831: 409–421 and was equally selected for inclusion in IDELER 1841: 423–429; a few gaps could be filled by DAREMBERG 1854: 19–40 with the help of Berlin MS Phillipicus 1527, fols. 62v–66v (where the text is attributed to HIPPOCRATES). Still a third version C (bearing the title Ἱεροφίλου φιλοσόφου πῶς ὀφείλει διατάσθαι ἄνθρωπος ἐφ’ ἑκάστῳ μηνί) was identified in Berlin MS Phillipicus 1568, fols. 22r–33r and edited by DELATTE 1939: 455–466. Instructions in version A are consistently longer than in B and C, which are actually closer to each other than they are to A, and also closer to the Arabic texts examined here.

¹ As a matter of fact, the two draughts of hot water may have originally substituted for the wine, since that instruction does not seem to belong in February, which in the rest of the witnesses includes a warning against eating beetroots («*silq*» in IBN ḤIMRĀN, «σεύτλον» ABC).

² For this and other examples of *dvandva* in Late Greek, cf. SOPHOCLES, *GLRBP* 37.

³ Might «الحيتان» be a misreading of الحيات (الحيات) in unpointed script, cf. «μολόχης» in AC)?

⁴ The negative nature of the advice is, in fact, much more emphatic in *Natāʾiḡ* («*lā... walā...*») and can hardly be imputed to mere misreading on the side of the copyist.

not in C).

The asymmetry between the Arabic and the Byzantine versions is even more noticeable for the month of October: the two Arabic texts (in *Natāʾiḡ* in the passage for September) agree in the negative (*lā taʾkul*) against the unanimous testimony of the Greek texts. The mention of November is missing from *Natāʾiḡ*, but the instructions not to enter the bath belong here («εις λουτρὰ μὴ λούεσθαι, μηδὲ χρίεσθαι» B, «λουτρῶν ἀπέχεσθαι μηδὲ χρίεσθαι» C). Finally, in December *Natāʾiḡ* preserves the primitive reading («الكرب» = «κράμβην» AC) against the hares («الأرنب») that were certainly introduced by a clerical misreading in the transmission of IBN ʿIMRĀN's text. A relatively satisfactory reconstruction can be proposed, therefore, for the Arabic Ur-Text; however, where the two traditions differ in the polarity of the counsel (whether one should or should not do such and such thing) the decision cannot be based on internal evidence alone.¹

As a matter of fact, it is also in the Byzantine tradition that the closest precedent for the prototype reflected in *Natāʾiḡ* and in IBN ʿIMRĀN's text can be found. A brief fragment on the Roman months (Μῆνες κατὰ Ῥωμαίους) is ascribed by a great number of manuscript witnesses to JOHN OF DAMASCUS (d. 749) and it was included in MIGNE's *Patrologia*. While there is a possibility that the text might be spurious, the oldest manuscript witnesses that transmit it can be dated to the 10th c.,² which largely predates the date of the earliest witnesses of HI-EROPHILUS' treatise. The fragment begins with March and instructions for each month are simple and take the form of an imperative:

¹ Let it be recalled at this point that this is a summary exposition of matters that shall be dealt elsewhere with much more attention to detail. The collation conducted here is biased (and therefore any provisional conclusions are intrinsically flawed) insofar as it prioritises these Greek texts over the Latin ones. This preference, nevertheless, is not entirely unmotivated: on the one hand, the translation-cum-assimilation movements in the Islamicate tradition do not seem to have included Latin texts until a remarkably late date; on the other, none of the Latin texts consulted shows the same level of literal agreement as the three Greek texts analysed here.

² The fragment is marked with a question mark about its authenticity in HOECK 1951: 51 no. 142, who in a footnote adds that it might be an excerpt from the author's *Expositio*, either by himself or by some compiler. Exhaustive information on the manuscript tradition of the text can be found in <https://pinakes.irht.cnrs.fr/notices/oeuvre/3146/> [last accessed 25 Sept 2023], where no less than seven tenth-century witnesses are registered.

March	Γλυκοφάγει, γλυκοπότει
April	Ῥαφάνης μὴ φάγῃς
May	Ποδοκέφαλα μὴ φάγῃς
June	Πίνε ὕδωρ ὀλίγον
July	Ἀπέχου ἀφροδισίων
August	Ἦμά λάχανα μὴ φάγῃς
September	Γάλα μὴ φάγῃς
October	Ἀπέχου ὄξυφαγίας
November	Ἀπέχου πολυλουσίας
December	Κράμβην μὴ φάγῃς
January	Ἦρα ἰβ' πίνε ἄκρατον ὀλίγον
February	Σεῦτλου μὴ φάγῃς

Lexical affinity shows an unmistakable link to the material transmitted under the name of HIEROPHILUS (mark especially γλυκοφάγει, γλυκοπότει and ποδοκέφαλα), of which JOHN OF DAMASCUS' would seem to either excerpt the most simple indications or to provide an earlier testimony of the basic elements on which more complex calendars may have been built. While that question, like so many others posed in this digression, can only be answered by scholars competent in the field, I hope to have shown at least that a Byzantine Greek model of minimal monthly dietetic calendar was available for translation into Arabic probably by the first half of the 8th c. and at any rate certainly prior to its first documentation in the Islamicate tradition.

As to its transmission, although a local translation in the west (the Magrib and Andalus) cannot be entirely ruled out, it is more likely that the text was translated in the east and thence imported, just like the whole medical corpus, into the west. In fact, it may have been brought to Qayrawān by IBN ḤIMRĀN himself, who, even if he is mostly regarded as a western author, had arrived to Ifrīqiyah already as a physician and whose medicine (sources and terminology alike) is essentially a representative of the eastern medical tradition. Whether ALḤILBĪRĪ borrowed his calendar from him just like IBN ḤABDIRABBĪH did for *ṣiqd* or rather found it in some other source cannot be known until additional evidence is produced.

It may not be unfitting to close this digression by drawing the reader's attention to the striking resemblance of a few of the recommendations included in these calendars to some prescriptions found in ancient Mesopotamian hemerology. Here are a few examples excerpted from a Neo-Assyrian hemerological compilation:¹

1 2 3 Nisannu	<i>nūna u karāša lā ikkal</i>	“Let him not eat fish or leeks”
2 Tašrītu	<i>nūna lā ikkal</i>	“Let him not eat fish”
28 Tašrītu	<i>šēr šaḥi lā ikkal</i>	“Let him not eat pork”

It is not impossible that some of these warnings were incorporated into the wholly different context of ancient Greek medicine, where they might have been reinterpreted and justified according to the prevalent humoral theory at least in the more elaborate versions of the calendars. Since there is no pre-Byzantine documentation to support the hypothesis of a continuity in the transmission, however, this similarity might not be significant but merely accidental.

7.4 *Reg 4* — On clothing

The exact five lines that are devoted to the subject of clothing on manuscript P include an unexpected—and most needed—piece of evidence that confirms that this epigraph, and by inference probably the whole section of *REGIMEN*, did originally belong to *ALḪLBĪRĪ*'s *Natāʔiḡ*. The epigraph opens, indeed, with the characteristic “Know, may God grant you success” with which the author addresses the recipient of the book both in the proem and throughout the text of *Natāʔiḡ* II.1. The rhetorical imperative *ʔslam* is then repeated before the first of the brief recommendations that close the section.¹

The instructions about clothing stuff are terse but a logical basis is provided to justify them: silk is the hottest fabric that one can wear, therefore (consequentiality being only implicitly marked by the conjunction *wa-*) it is convenient for patients suffering from cold and most suitable for their bodies,² whereas linen

¹ The text is catalogued as KAR 178 and the fragments quoted correspond to KAR 178 face 18|18|23, KAR 178 reverse 420|25, and KAR 178 reverse 315, respectively, as edited in LABAT 1939: 50–52, 112, 120. For a general overview of the extant versions of this hemerology and the edition of the fullest known text for the month of Tašrītu (which included the explicit mention of the negative consequences of transgressing these interdictions), see HULIN 1959. A non-hygienical interpretation of the text is proposed by CASABURI, who suggests that the interdiction to eat some products, and more particularly fish and leeks, “può essere intesa sia come un atto penitenziale sia come atto preliminare al raggiungimento della purezza rituale dell'officiante” (CASABURI 2003: 9). Two late reflections of this tradition, dating from Achaemenid and Seleucid times, are edited and analysed in JIMÉNEZ 2016. Incidentally, according to the traditional Mesopotamian calendar *Nisannu* (from Sumerian *nisag*) and *Tašrītu* (from Akkadian *šurrū* ‘to begin’) are the names of the first and the seventh months, respectively, which signal the beginning of the two halves of the year (cf. CAD XI 265–266 and XVIII 297–298).

¹ It may be argued, however, that such discourse markers are (as shown in the overview of *Nat* II.1) ubiquitous in the Islamicate tradition and that their presence in different sections of the book may be purely coincidental.

² The particular use of the lexeme $\sqrt{hšb}$ in a medical context does not seem to be properly recorded in Arabic lexicography. The basic meaning of ‘abundance of herbage’ and ‘fertility’, as

is the coldest stuff and is most convenient for heated bodies. On the other hand all new garments, so the author says, are extremely hot, old linen clothes being in turn the best ones to be worn and the most convenient for all kinds of bodies.

The inclusion of clothing amongst the things to be considered within the frame of a correct regimen is quite a traditional feature in the Islamicate tradition. The earliest extant example of such an epigraph may be found in *Firdaws*, where AṬṬABARĪ devotes a brief chapter (*bāb*) to clothes and furs after having dealt with aromatics and before his discourse on simple drugs.¹ There he mentions some fabrics: linen, cotton, silk, wool, and camel fleece; as well as the pelts of several animals: weasels (or stoats or even beavers, since all of these are referred to as *sammūr*),² kids, lambs, foxes, and hares. Although the description focuses mostly in the basic quality of each item (whether it is hot or cold), it also includes a few indications on specific medical benefits. Linen, for instance, makes flesh grow (the usual rendering of Greek *σαρκώω*) and lamb skins (the text is to be read «الحملان») are hottest and most beneficial for the kidneys.³

well as a tropical extension that includes ‘generosity’ when referred to humans, are recorded everywhere, but only DOZY registers a more specific sense for *ḥaṣīb* ‘qui a de l’embonpoint, corpulent’ (cf. *SDA* I 376a). This particular meaning he draws from the glossary to ARRĀZĪ’s *Manṣūrī*, where IBN ALḤAŠŠĀʿ defines both the abstract substantive and the corresponding adjective: «*ḥiṣḥun: huwa riḥāqatu lʿayṣ. walḥaṣību lʿbadani: annāʿimuhu min dālīka*», cf. *Mufid* [402] (C–R 438). In *Natāʾiq* √*ḥṣb* is used exclusively in the dietetic section, both in the intensive or causative D-form of the verb («*wyuḥaṣṣibu lǧism*» predicated of grapes) and in the elative (as here on silk and also previously when describing the meat of young lambs, which is said to be, of all meats «*waʿaḥṣabuhā fi lǧism*»); in all three instances it is complemented by the word ‘body’. This lexical root is extremely well documented in the early corpus of Graeco-Arabica, cf. «*mā kāna mina ḥayawāni muḥṣiban ḥasana ḥāl*» in ARISTOTLE, *Ḥayawān* XII 828–9 and a very similar phrase in XIV 183_{1–2} (≡ εὐτροφία in *Part. anim.* 651a 22, 680b 7), and the verb *ḥaṣṣaba* is also attested there; HIPPOCRATES ἐπανατρέφειν in *Aphor.* II.7 (L IV 470_{19–29}) is rendered as «*iṣādātuhā bittaqḍiyati ilā ḥiṣḥ*» in *Fuṣūl* II.7 (T 11₁ | B 4r 8–9); the title of GALEN’S brief monograph Περὶ εὐ-εξίης (K IV 750–756) was translated as *Fi ḥiṣbi lʿbadan* (cf. Madrid, BNM MS 5011, fols. 144r–147r; also ULLMANN 1970: 40 no. 9). The lexeme is actually far from rare in the Arabic medical corpus, cf. also AṬṬABARĪ, *Firdaws* II.iv.3 (§ 99₁₅).

¹ Analogous excerpts showing an essentially identical phraseology are preserved in indirect transmission from even earlier sources. Thus, two quotes from from MĀSARĠAWAYH and IBN MĀSSAH on linen clothes are noted down by IBN ALBAYṬĀR, *Ġāmīf* كنان 18 (B III 51_{20–23}); the passage from IBN MĀSSAH was actually first recorded in ARRĀZĪ, *Alḥāwī* XXI [696] كنان (H XXI 329² | B 326_{29–30}), where an additional quotation from the same authority on the huge حوصل bird is copied in *Alḥāwī* XXI [253] (H XX 332² | B 303_{210–11}). As an ornithonym حوصل appears to have referred to a big aquatic bird, probably the pelican or the cormorant, but as signalled by DOZY, *SDA* I 296b s.v. IBN ALḤAŠŠĀʿ glosses it as “the downy skins of the breast and belly of vultures from which light, warming, well-scented pelts are prepared”, cf. *Mufid* [331] (C–R 35_{17–36}). From IBN MĀSAWAYH a passage mentioning fox fur is excerpted in *Alḥāwī* XX [196] ثعلب (H XX 214² | B 2988_{23–2989}).

² Cf. particularly DOZY, *SDA* I 683a s.i. √*ḥṣr* and also CORRIENTE, *DAA* 261b *{SMR} v (where an Arabic hypocoristic derivation from Syriac ܚܫܪܐ is proposed).

In the *Hārūniyyah* clothing advice is provided in a heterogeneous chapter that may belong to the primitive core of MASĪḤ's *Kunnāš* and which includes also recommendations on the best rooms to be inhabited within a house in each season of the year. While the latter information is borrowed from HIPPOCRATES,¹ it is ARISTOTLE that the author quotes on clothing:²

Hārūniyyah I.v.8 (G 133₁₈₋₂₀)

قال أرسطاطاليس الفيلسوف: «يُستحب من اللباس في أيام الصيف والربيع الكتان البالية؛ وفي الشتاء والخيف الكتان الجديدة، والحز والقطن والفراء اللين — وهذا كله يتقوى به على صحة الجسم، بإذن الله تعالى.

The inclusion of this chapter in *Firdaws* and in the *Hārūniyyah* is significant inasmuch as it reveals a similar wish for comprehensiveness on the side of their compilers.³ The information transmitted in those two texts, in turn, is quite different, both typologically and contentually, from what ALḌILBĪRĪ transmits in *Natāʾiḡ*. Moreover, as far as the edited version of the *Hārūniyyah* is concerned, even when it coincides with *Natāʾiḡ* in the mention of the same item, the two texts stand in remarkable disagreement: in the *Hārūniyyah* both linen

³ Cf. AṬṬABARĪ, *Firdaws* VI.I.16 الفراء والنياب (§ 399₁₋₁₀). Incidentally, *allibāsu lʿabrišamī* refers unequivocally to silk (it is in fact closer to its Persian etymon than the usual Arabicised form *ibrīsam*, cf. LANE, *AEL* 188a; and *abrišam* / *abrišum* in STEINGASS, *CPED* 8; as well as *ابريشم* in PAYNE SMITH, *Thesaurus* 21; also BROCKELMANN-SOKOLOFF, *Lexicon* 5b), but it is unclear whether the *hazz* mentioned after the furs represents 'raw silk' or rather the skin of some animal (cf. LANE, *AEL* 731b s.r. *حز*). Judging from the context and from ALMAḠŪSĪ's parallel locus (for which see below), the latter interpretation should be preferred.

¹ The passage seems ultimately inspired by HIPPOCRATES, *Aer. aqu. et loc.* [5-6] (D 326-34₁₅ | K II 22₁₅-26₈) ≡ *Bilādīyyah* I.4-5 (M-L 35₁-45₁₀), where a health-focused correlation is established between the orientation of *cities* and the nature of their inhabitants, with explicit mention of the winds and the different seasons of the year.

² Cf. *Hārūniyyah* I.v.8 (G 133₁₆-135₁₉); the segment 135₁₋₄ on linen is quoted literally by IBN AL-BAYṬĀR, *Ġāmiʿ* كتان 18-ك (B III 51₂₄-28). The passage is certainly pseudepigraphic and typological resemblance to and even several literal coincidences with the parallel text of *Firdaws* show that they both draw ultimately from a common source of which the *Hārūniyyah* transmits a noticeably less abridged excerpt. The ascription to ARISTOTLE and the seasonal arrangement of the material in the first paragraphs in the *Hārūniyyah* would seem to point towards the dietetic sections of the pseudo-Aristotelian *Sirr* but none of the versions consulted contains anything even remotely similar. Clothing is not even mentioned in the *Dahabīyyah*, but Sunnah compilations ought to be examined for possible echoes of these materials.

³ The presence of a chapter (or at least a separate epigraph) devoted to clothing is characteristic, indeed, of *kunnāš*-type medical encyclopaedias that include a section on regimen. The subject is not dealt with, for obvious reasons, in texts of the therapeutic genre, except for a few sporadic remarks, as for instance a passing-by reference to clothes made of hare and lamb skin in IBN ZUHR, *Taysīr* I (H 14₁₃₋₁₄).

and silk (*ibrīsam*) are described as the most balanced in temperature, whereas in *Natāʾiġ* they represent the two extremes of the spectrum.

Further precedents and parallels with which to compare *On clothing* can be easily found in later representatives of *kunnāš* literature and in some treatises of the “extended *Aġdīyah*” genre—but the survey conducted so far has not yielded any cognate worth noting.¹

¹ For medical encyclopaedias, cf. particularly ARRĀZĪ, *Almanṣūrī* III.22 في الملابس (B 160₂₀–162₄), where the materials surveyed are: linen, cotton, and silk (*ibrīsam*); wool and fleece, soft goat wool (*mirʿizzā*, cf. IBN MANDŪR, *Lisān* V 354b 22 – 355a 10 s.r. √عز, where this form is quoted from SĪBĀWAYH and several variants are also recorded; DOZY suggests an Aramaic origin in *SDA* I 536b, for which cf. also Syriac حختا in PAYNE SMITH, *Thesaurus* 2923 s.v. حختا); *ħazz* as a generic term for pelts; and the skins of squirrels (*sinġāb*), foxes, weasels (*sammūr*), fennecs (*fanak*, ie *Vulpes zerda* Zimmermann, cf. DOZY, *SDA* II 285a) and ermines (*qāqum*, which is described by ADDAMĪRĪ as a small snow-white squirrel-like animal whose fur resembles that of the fennec and is more expensive than squirrel fur, cf. *Ḥayawān* [793] التاقم [§ III 461_{11–12}]), and finally pelicans/cormorants (the *ħawāšil* commented upon above). Contrariwise to what might be expected, ALMAĠŪSĪ, *Kāmīl* LV.34 في طبائع اللباس وما يفعله في البدن (B I 210₁₈–211₄ | S I 241_{7–25}) is quite different from both *Firdaws* and *Almanṣūrī* and it is therefore of great interest for the reconstruction of the early medical tradition on clothing. The stuff discussed by ALMAĠŪSĪ includes linen, cotton, wool, soft goat fleece (*mirʿizzā*), silk, the *ħazz* fur that varies according to the animal from which it is obtained, the skins of weasels (*sammūr*), foxes, fennecs and ermines («*alfanaku walqāqum*», the same collocation found in *Almanṣūrī* but with different contents in the epigraph), and finally kids and lambs. In Andalus, the earliest extant text on the subject is AZZĀHRĀWĪ, *Taṣrīf* XXVII.1.11 في قوى الثياب والألوان (S II 331_{6–23}), with an epigraph that comprises a brief introduction on the general qualities of clothes, then a mention of individual fabrics: cotton, silk (*ibrīsam*), wool, goat fleece (*mirʿizz*, which is an accepted form of this word); weasel or beaver (*sammūr*), foxes, hares, rabbits («السلاب» in S II 331₁₉, to be read as *quṇilyāt*), which are said to be similar to the skin of hares but colder; «الحروب» (?), pelicans or cormorants and vultures (*alħawāšil wannisr*), cats (*alqitt*), and even elephants. As for *Aġdīyah* literature, cf. IBN ZUHR’s rubric «القول في اللباس» which follows the discussion of bathing and perfumes in *Aġdīyah* XV الأعدية في مراتب القول في مراتب (G 121₃–122₄, 124_{4–8}). The text is rather brief and mentions linen, cotton, and silk; then animal furs in a very superficial way (small kids and lambs, small mountain deers, hares, and fennecs).

7.5 Reg 5 — Dietetic recommendations

Unlike the previous cautionary apophthegms, the equally telegraphic instructions that follow the epigraph on clothing are all of a *positive* nature. They inform the reader about which items and actions have a beneficial effect against a number of complaints and diseases. They are all introduced by rubrics in manuscript P and, as has been said before, the segment opens with the allocutionary imperative “Know”. The contents of the epigraphs discuss:

- 1 — Things that strengthen the heart and the eyesight: the best of them being green plants (?),¹ for that strengthens the heart and the sight. The eyesight is strengthened also by looking to running water and beautiful faces, and taking pleasure in foliage and fine wood (?)—which has also the virtue to take worries away.²

¹ There is one short word (perhaps even two) that is almost completely erased from the manuscript. *Ad sensum* reconstruction of the damaged locus might suggest something in the line of «inna aḥsana mā (yunḍaru ilayhī minā) nnabāt: alʾaḥḍar», but there is not enough space, nor do the first two letters of the now-unreadable word match such an emendation. As a matter of fact the word «النبات» may well be a later addition since it is written in a noticeable thinner script than the neighbouring text. If it were so, a much more satisfactory reconstruction of the sentence would be «inna aḥsana mā (yakūnu minā) lʾabwān: alʾaḥḍar». In the Islamicate tradition, green was indeed often considered the most agreeable and beneficial colour for the eyesight, cf., for instance, ALĠAZĀLĪ, *Ḥikmah* I «faʾinna nnaḍara ilā lḥuḍrati wazzurqati muwāfiqun lilʾabṣār; wataǧidu nnuḥṣu ʿinda ruʾyati ssamāʾi fy saʿatihā naʿīman warāḥah» (Q 16₁₋₂) (see also the following footnote and the passages from MĀSARĠAWAYH, AZZAHRĀWĪ, and others quoted below).

² The sentence «الزاهة في الورق والنضار» admits two quite different interpretations: if *nzh* is understood in the sense ‘to stroll’, ‘to go on a promenade’, then ورق should probably be read as *waraq* ‘foliage’ and نضار might accordingly refer to ‘fine wood’ (cf. DOZY, *SDA* II 682a s.r. √نض). Otherwise, if the last word is taken to be *nuḍār* in its most common sense of ‘gold’, then ورق might be understood as *wariq* ‘silver’ and زاهة would convey a less physical sense of ‘enjoyment, pleasure’ (cf. DOZY, *SDA* II 663 s.r. √زه). There is still the possibility that gold might not be coordinated to the preceding phrase; then one should omit the conjunction *wa-* after it and interpret the last segment as “And the virtue of gold too is taking worries away”. The interpretation that I suggest here is based on the absolute exceptionality of gold and silver being referred to by these synonyms in non-literary texts and on the aforementioned consideration of green as the best of colours especially for the eyes since at least MĀSARĠAWAYH (for whom see the fragment quoted below), and on the aphorism ascribed to the ancient sages’ according to which “Three things improve the eyesight and take sadness away: looking to running water, to greenery, and to beautiful faces”, cf. IBN ḤALṢŪN, *Aǧḍiyah* II.2 (G 31₉₋₁₀).

2 — Things that strengthen the heart and avail against oblivion: having intercourse with plump buxom slave girls,¹ smelling perfumes and anointing oneself with oil of violets, as well as wearing raw silk and light garments.

3 — Things that avail against black bile, heart conditions, catarrh, and diverse ailments: partaking in conversation, listening to others' talk, diversion (*lahw*), and smelling perfumes.

4 — Things that strengthen the brain: suffumigation with frankincense (*lūbān*) and costus.

5 — Things that avail against catarrh, excessive sneezing, and ulcers in the nose, especially in elderly people: suffumigation with the little ambergris (that is labdanum).²

6 — Things that avail against head- and earaches: washing one's head with hot water and lupine meal.

7 — Things that avail against itch and mange: washing one's body with water in which some fresh coriander has been boiled after perspiration in the bath.

8 — Things that avail against excessive sweating: cleansing oneself with water in which some myrtle (*rayḥān*) has been boiled.

Parallel documentation for [1] is as abundant as it is formally diverse, but the tradition overall agrees in considering green the best (occasionally the second best) colour for the eyes. One of the earliest references to this doctrine is an anecdote related to MĀSARĠAWAYH:³

¹ The same adjective *مُحَمَّلَة* has been previously predicated of chicken (*farārīġ*) in the trophog-nostic treatise. None of the lexicographical sources consulted records any satisfying meaning s.r. \sqrt{hml} , $\sqrt{ġml}$, or \sqrt{hml} . In this case, if metathesis were presumed, it would provide an unproblematic reading *mutaġammilah* 'beautified, embellished, adorned' that would make perfect sense here but hardly so when speaking of chicken. All in all, given the collocation with 'buxom' and the parallel qualification for fowl, I provisionally propose understanding the word as a reference to plumpness and embonpoint, and even if I edit it as *مُحَمَّلَة*, very much the same meaning might be conveyed by *مُحَمَّلَة** (which nevertheless appears to be unattested) and even by *مُحَمَّلَة / مُحَمَّلَة* (cf. DOZY, *SDA* I 406b s.r. \sqrt{hml}).

² Labdanum or ladanum (*λάδανον* \equiv *lādan*, the Arabic form with /d/ may reflect Syriac mediation, cf. *لادن* and related forms in PAYNE SMITH, *Thesaurus* 1894) refers to the resin obtained from different species of the genus *Cistus* (cf. DIETRICH 1988: II 151–152). Although the motivation for the metaphorical denomination 'little ambergris' (*alṣanbaru ṣṣaġīr*) is quite clear, I have been unable to find any parallel for this synonym.

³ What little is known of the life of this Persian physician has been summarised above in a note to the remedy called "Māsarġawayh's drug of seeds" (see *Ther* 3.6). He seems to have compiled a hygienic treatise in which he recorded such dietary instructions as were agreed upon by Persian

IBN QUTAYBAH, *Suyūn* IV (B II 490₄₋₇ | Q II 108₃₋₅)

قيل لماسرجويه: «ما بال الأكرة وسكان البساتين مع أكلهم الكزاث والتمر وشربهم الماء الحار على السمك المالح أقلّ عميائًا وعورانًا وعمشائًا؟». قال: «فكرت في ذلك فلم أجد علةً إلا طول وقوع أبصارهم على الخضرة».

الأكرة [الأكرة B | عميائًا] عيانا B.

In an epigraph in which GALEN is repeatedly quoted on different exercises (*dumūr*) AṬṬABARĪ lists the worst and the best colours to look at, and almost two centuries later in Andalus AZZAHRAWĪ echoes a slightly different version of the same tradition that holds purple to be the best colour for the eyesight of both ill and healthy people, followed closely by green and black:

Firdaws III.v.7 (§ 114₄₋₆)

ويضّر بالعين النظر إلى النار أو الشيء الأبيض اليقّ مثل الثلج؛ وينفعها النظر إلى الصفرة والخضرة ولون الساء والسواد خاصّة — فإنّ جميع ذلك يقوّي الحدقة ويجمع النور.

Taṣrīf XXVII.I.11 (S II 331₂₃₋₂₅) في قوى النياب والألوان

الألوان — أفضل الألوان للبصر: اللون الأزجواني، ثم الأخضر، ثم الأسود. وأما اللون الأبيض، فرديء للبصر، ثم الأحمر. وأعدلها: اللون الأرجواني، لأنّه جيّد للمرضى والأصحاء؛ ويقرب من فعل(ه) اللون الأخضر والأسود.

As for most recommendations in *Nat* IV, the sapiential tenor of these materials made them perfectly suited to be transmitted as aphorisms ascribed to non-medical authorities. In an Islamicate context, moreover, the description of the blessed gardens that await the believers and doers of righteous deeds according to Qurʾān 18:31, stimulated a task of exegesis that is most relevant to the analysis of [1]. In that verse flowing rivers, golden bracelets, and green garments of silk are mentioned as part of the reward and early Islamic authorities further elaborated on some of these features. A particular love for the green colour is ascribed in the Sunnah to both MUḤAMMAD and ʿALĪ, and the combination of looking to green things and running waters is actually transmitted amongst these traditions:

AḌḌAHABĪ, *Ṭibb nabawī* II.III.3 (B 254₁₋₇)

and Roman physicians. That description is strikingly coincident with the title of a *Risālatun fi ḥifẓi ṣṣiḥḥati mimmā ttafaqa ʿalayhi aṭṭibbāʿu Fārisa warrūm* authored by IBN MĀSAWAYH (see the concluding remarks at the end of this chapter).

وعن أنس: «كان أحب الألوان إلى رسول الله ﷺ الخضرة». قال تعالى ﴿وَيَلْبَسُونَ ثِيَابًا خَضْرَاءً﴾.
 زوي: «إنا لبأس أهل الجنة في الجنة: الأخضر».
 وعن ابن عباس: «كان النبي ﷺ يُعجبه النظر إلى الخضرة والماء الجاري». وروي عن بريدة مرفوعاً: «النظر إلى الخضرة يزيد في البصر، وكذلك النظر إلى الماء الجاري» — رواه ابن الجوزي.

AZZAMAḤṢARĪ, *Abrār* LXV [60] (M IV 209₂₋₃)

عليّ ﷺ: «الطيب نُشرة، والغسل نُشرة، والركوب نُشرة، والنظر إلى الخضرة نُشرة».

The context in which this segment of *Natāʾiḡ* (and, in fact, the whole of *Nat* IV) ought to be analysed is a wide and heterogeneous one, indeed. The five apophthegms above and these eight brief recommendations are a minimal expression of dietetic doctrines that have old roots that spread from the Indian subcontinent to the Mediterranean. Whether this lore was encapsulated in aphoristic form as here or it rather reworked into a more elaborated discourse, that seems to depend mostly on the individual character of the author and on the nature of each text. Suffice it to compare [1–3] with a full-blown epigraph written by AṬṬABARĪ on the specific subject of cheering up and stirring the libido in which he appears to blend different traditions, including Indian medical lore:¹

Hifl §22 (K 56₁₋₉)

وما يُفْرَح القلب ويُبَيِّح الباه: تعهّد البدن بالطهارة والاستحمام بالمياه الحارة، ووجدان الشهوة للمألوفة المعتادة من الأطعمة والأشربة والرياحين والطيب ولزومها؛ والملابس المصبغة، والأشياء التي تفرح وتعجب بها النفس ويدخلها لها الابتهاج والعجب؛ والشرب مع الأحتبة، والنظر إلى الوجوه الرائقة المعشوقة، وتعهد الاستياك والاكنتال والادهان بأدهان موافقة للبدن، والنظر إلى الحيوانات إذا سافت، والفكر في أنواع الجماع، والنظر في الشعر والكتب التي تصف ذلك وتحكيه، واستماع الأغاني والملاهي التي تُشوق إلى الحلائل والأحباب، والتلهي بملامسة الأبدان الناعمة الغضة ومغازلة الغنجات منهنّ، ومفاكهة الخنثات ومحادثهنّ والتوهم لمحاسنهنّ. فربّما ذكر الشاب الشبق لمن يُحبّه فيتعظه التوهم أو يُمديه — وذلك عنديّ بما يُحقّق بعض أقوال الهند في الوهم.

¹ References to pertinent Ayurvedic sources and a long and informative excerpt from the *Aṣṭāṅ-gaḥṛdayasaṃhitā* are provided by KAHL 2020: 56–57 n. 27. The parallel locus in *Firdaws* III.v.6 (§ 112₁₂–113₁₀) is remarkably different in its contents and does not contribute significantly to this survey, although it contains a reference to a *Kitābu lʾiḡdāḥ* in which these matters would have been discussed (on this title, cf. KAHL 2020: 11).

7.6 Concluding remarks

The contents of *Nat IV* cannot be properly contextualised without a previous discussion of the evolution of several thematic genres in the Islamicate written tradition, and a limited preview like this is not the place to attempt such a discussion.¹ A few indications for future research shall be provided below, but this much can be said now: precedents and parallels can be located for most pieces of information recorded by ALṢILBĪRĪ, but some bits resist source criticism and no single text shows the exact same combination of subjects. Moreover, identity in wording between those parallels and our text obtains only rarely, despite the fact that terminology and phraseology are entirely typical. In this regard, the section on regimen is no different from *Nat I* on apothecology: most specific treatises offer much more information on every single thematic segment of these two sections, but there are very few that bring together all these data from such a wide range of genres and subgenres.

The most evident affinities shown by each subsection have been already highlighted in the above survey, but I should emphasise that dietetic materials are particularly transgeneric and that the exact relationship (in genetic terms) between the Helleno-Islamicate tradition (basically *Hifḍu ṣṣiḥah* and *Aḡḍiyah* texts in all their variety of forms) and Islamic medicine is yet to be established. Much Graeco-Arabic trophognosy was already integrated into religiously approved medicine as reflected by ninth-century IBN ḤABĪB, and the earliest manifestations of this epistemic strand must be included (even if it is as parallel witnesses) in any systematic study of Islamicate dietetic and regiminal literature.²

¹ The following remarks are extracted from the ongoing commentary on this section and I introduce them here as food for thought, with no aim at comprehensiveness.

² Much has been written about Islamic medicine (otherwise the Prophet's medicine or *Nabawī* medicine) and I cannot give in to the temptation of entering the arena here. I shall simply say that, on the one hand, the same medicine that would come to be known as *Islāmī* or *Nabawī* was conceived as "the medicine of the Arabs" (*ṭibbu l'arab*) by IBN ḤABĪB and probably also by his sources, and that the assimilation of foreign (more precisely Greek) materials was already complete by the mid-9th c. This process should probably be compared to the synthesis of pre-Islamic Arabian and non-Arabian astronomical traditions attested likewise by IBN ḤABĪB's *Nuḡūm* but also by the early *Anwāʾ*? (see Chapter 4). On the other hand, regardless of its chronology, its underpinning criteria of authority, and its apparent lack of dynamism, defining Islamic medicine as "an exponent of theology rather than medicine" (KAHL 2020: 2) is somewhat of a gross misconception.

Peculiarities of Nat IV

Before trying to showcase some of the most characteristic traits of this section I must be quite emphatic in the assertion that *Nat IV*, like most other sections of the book, is essentially a piece of literature. It transmits bits of information that were already centuries-old when the author selected them for inclusion and it is not in the least reflective of the knowledge or the everyday practice of the Andalusī society of his time. There can be no mistake here: the description of the qualities of gazelle and ostrich meat or the recommendation to look at green things or to have intercourse with a particular type of slave girls must be interpreted, when handed down by an Andalusī physician, as written artefacts with no relation whatsoever to actual medical experience. The only substantial difference between such passages and the quotes collected in *Nat III* is that the latter are ascribed (*per* the conventions of that *Ḥawāṣṣ* genre) to an authority, whereas dietetic lore (like overall therapeutics) is transmitted most often in anonymous form.¹

Then, in addition to its idiosyncratic mixture of thematic comprehensiveness and formal compactness, *Nat IV* shows a number of features that distinguish it from most texts that were written in accordance with the same basic genre conventions and which drew from very much the same ultimate sources.² There is no doubt that the trophognostic micro-treatise must be inscribed in a tradition that stems, from an Islamicate perspective, from GALEN's *Alim. fac.* (although not necessarily through ḤUNAYN's translation) and which gave rise to the standard *Aǧdiyāh* genre.³ Even the lack of an elaborate prologue is a trait found already in the Hippocratic Περὶ διαίτης (= *Vict.*), in which the alleged impossibility to encompass all substances in a general discourse is adduced as a justification for dealing with their properties individually in separate epigraphs.⁴

¹ Needless to say, this self-evident observation is addressed mostly to beginners, who should always bear in mind the specific nature of each genre and the context of the object of their study. A simple look at other representatives of the Islamicate *Aǧdiyāh* would have precluded the description of IBN ZUHR's book as "a pragmatic text" that "offers an informative tabulation of foods and dishes available during Ibn Zuhr's time" and which "shows the merit of composing a book based on personal knowledge and experience, and not one merely summarizing and conveying the work of others" (AZAR 2008: 35–36).

² Most of what I could say here and now about the brief segments *Reg 2–5* has already been said above. The remarks in this epigraph refer therefore to the brief trophognostic treatise *Reg 1*.

³ On GALEN's original text, which may have been written ca 175–177 and draws extensively from previous works by DIOCLES, MNESITHEUS, PHYLOTIMUS, and the Hippocratic Περὶ διαίτης, cf. particularly SMITH 2002: 116.

⁴ Cf. HIPPOCRATES, *Vict.* II.39: «περὶ μὲν οὖν ἀπάντων οὐχ οἶόν τε δηλωθῆναι, ὅποιά τινά ἐστι· καθ' ἕκαστα δέ, ἤντινα δύναμιν ἔχει, διδάξω» (J–B 162 | L VI 534₈–536₄). On the Hippocratic *Vict.*, cf. particularly BARTOŠ 2015 and CRAIK 2015: 266–276. Not even GALEN's unbridled verbosity

The adherence of our author to this tradition is, moreover, quite explicit. He invokes, somewhat insistently indeed, GALEN's unappealable authority throughout this segment (but the name of the physician from Pergamon vanishes from the rest of the section) and he does so from the very beginning (the title of the section is almost an advertisement).¹ The architecture of the text also follows a scheme that GALEN himself had borrowed from his predecessors and that he simply canonised for posterity.² A comparison of *Reg 1* to any Islamicate text on foodstuff shows no essential deviation from the standard pattern.

Within this overall standardness there is room, however, for differences. At the macro-level, the trophognostic segment represents a drastic abridgement of the inherited catalogue, for the author skips the mention of cereals and, most noticeably, legumes. Nor are fish, eggs, or any animal organs included in the exposition and, unlike in most *Aġdiyāh* texts, the exposition excludes also water, vinegar, wine, honey, and all elaborate dishes. On the other hand, the order of the categories of food discussed in it (first meats and milk, then vegetables, finally fruits) corresponds to the Hippocratic *Vict.*, in which the epigraphs on cereals and seeds are followed by those on edible animals (Περὶ δὲ τῶν ζώων τῶν ἐσθιομένων) in *Vict.* II.46, then cheese (τυρός) in *Vict.* II.51, and finally vegetables (λάχανα, both garden and wild species) and fruits (ὄπωρα) in *Vict.* II.54–55. Curiously enough, GALEN (the apparent source of our text) favoured a different arrangement (meats are discussed after all food of plant origin) that was imitated by most later authors from ORIBASIOS (also AETIUS OF AMIDA and PAUL OF AEGINA) to IBN SULAYMĀN and AZZAHRĀWĪ (cf. *Taṣrīf* XXVII.1). The “Hippocratic” order is followed, in turn, by ARRĀZĪ in his *Aġdiyāh*, and in Andalus by IBN ZUHR and IBN ḤALṢŪN in their homonymous books.

Divergences extend to the micro-level too. A general one is that the degrees

altered this format and only a relatively brief polemico-theoretical introduction is added to essentially the same catalogue of items in his *Alim. fac.* (although the order of the categories is admittedly different). Authors in the Islamicate tradition, in turn, at the most glossed and commented upon that Galenic introduction, as for instance IBN SULAYMĀN, who devotes the whole first part of his bulky and detailed *Aġdiyāh* to trophognostic theory (this part was translated into Latin as *Dietae uniuersales* as opposed to the *Dietae particulares* that comprise the discourse on the individual foods).

¹ As shown above, this ostensible ascription is belied not only by the non-existence of a Book IV of GALEN's *Alim. fac.* but also by the overall non-coincidence of the alleged source and the actual text transmitted by ALḤILBĪRĪ. Nevertheless, there is no reason to assume fraudulent intention. The author may have thought that he was reproducing genuine Galenic materials here, and some of the data are certainly Galenic in origin (although at times it is rather *Simpl. med.* that appears as the most likely source).

² The matter cannot be pursued here but the categorisation and arrangement of foodstuff shows a remarkable stability, even in its minor details, from the Περὶ διαίτης included in the Hippocratic collection down to the latest authors of Islamicate *Aġdiyāh* treatises.

assigned to each item are not in every case the standard ones. One of the very specific divergences is that no distinction at all is made between different varieties of pomegranates and that their three traditional flavours are apparently merged into one single characterisation.

Synonyms (both inherited ones and those that may reflect an actual geolectal context) ought to be considered here amongst the particular features of the text. The complete picture remains to be drawn but there are unmistakable hints to linguistic adaptation, even if it was not implemented in a systematical way.¹

Before turning the attention from the trophognostical treatise, let me add that on a semantic level it fills, at least in part, a conspicuous void in *Natāʾiğ*: pharmacognosy. And it does so in a way that is actually medicine-focused, unlike the chapters on simple drugs and minerals in *Nat I*.

Work done and work to do: Helleno-Islamic sources

The time shall come to sketch a history of Islamicate dietetics and hygienic literature. At the present time, the best available synthesis is still the survey of authors and works on *Diätetik* in ULLMANN's groundbreaking survey of Islamicate medicine, which ought to be complemented with more recent data provided in the introductions to the individual texts mentioned hereunder and especially with KAHL's introduction to his edition of AṬṬABARĪ's *Ḥifẓ*, which is itself an invaluable addition to our knowledge of this early tradition.²

As far as Graeco-Arabic sources are concerned, the corpus against which *Nat IV* has been compared so far comprises mainly (but not exclusively, since information from other genres, especially pharmacognosy, has been also integrated in the comparison) the following texts in roughly chronological order: HIPPOCRATES, *Vict.* (no Arabic translation is known to exist); GALEN, *Ağdiyah* (≡ *Alim. fac.*); IBN ḤABĪB, *Ṭibb/Muhtaşar*; AṬṬABARĪ, *Firdaws* and *Ḥifẓ*; ARRĀZĪ, *Ağdiyah* and *Taqdim*; IBN SULAYMĀN, *Ağdiyah*; AZZAHRĀWĪ, *Taşrif* XXVII.1.1–10 (S II 274₁₈–331₆); IBN ZUHR, *Ağdiyah* (for which the Hebrew translation ספר המזונות

¹ Thus, plums are glossed (*iğğāş* = *ṣaynu lbaqar*) but pears are not (*kummatrā*). Most lemmata do show, however, a local synonym whenever there was one available. I could not include the linguistic data contributed by *Nat IV* in the analysis of geolectal markers in Chapter 9, nor are any “Complementary notes on fruit names” to be found as an appendix to this preview. The subject is fortunately extensively covered by secondary literature and the same synonyms feature in virtually all Andalusi treatises on trophognosy, pharmacognosy, and agriculture for which excellent annotated editions are available.

² Cf. ULLMANN 1970: 199–203, and KAHL 2020: 15–17, respectively. The reader is referred also to the compact analysis in BRISVILLE 2020 (available at <https://doi.org/10.4000/hms.3689> [last accessed 25 Sept 2023]), whose doctoral thesis remains unavailable to me (cf. *L'alimentation carnée dans l'Occident islamique. Productions, consommations et représentations*, Université Lumière-Lyon 2, 2018).

and the Catalan abridged version *Viandes* have also been consulted); IBN ḤALṢŪN, *Ağđiyah*; ARRUNDĪ, *Ağđiyah* (both in AL-KHATTABĪ'S expurgated edition and in the Welcome manuscript); ALʔAWRIYŪLĪ/ALʔARBŪLĪ *Ağđiyah*.

The critical apparatus appended to the current edition of the Arabic text is a positive one: it only includes literal or remarkably and significantly close parallels, whereas divergences and omissions are only exceptionally indicated. For practical reasons it was impossible to record all significant *similia* for each datum and layer B of the apparatus ought perhaps to be improved in a future version of the edition. The extent to which ALʔILBĪRĪ'S seemingly unspecial treatise agrees and disagrees with other texts in the written tradition shall be dealt with elsewhere, hopefully with not limitations of space.

On the other hand, having learnt my lesson from the analysis of *Nat* II.2 and *Nat* III, the obvious move is to look to ninth- and tenth-century texts in order to identify a possible source (or sources) for ALʔILBĪRĪ'S materials. There are some texts that ought to be included, if circumstances allow, and a few that may be no longer possible to consider.

For the trophognostic treatise, I must continue with the reconstruction of IBN MĀSAWAYH'S food-related output as preserved in indirect transmission and also in some manuscripts to which I could not gain access so far.¹ Then, there is ḤUNAYN'S own *Ağđiyah*, which has proved so far impossible to access.²

As far as non-trophognostic materials are concerned, a *prima facie* promising text is IBN MĀSAWAYH'S treatise on hygiene (*Risālatun fi ḥifđi ṣṣiḥah*) that he compiled according to the principles agreed upon by Persian and Roman physicians (*mimmā ttafaqa ṣalayhi aṭṭibbāʔu Fāris warrūm*). It had long been referred to in secondary literature as a treatise on phlegm (*Risālatun fi lbalğam*) due to a mistake in its identification by the owner of the only known manuscript of the book (which is currently held at the Vatican Library). According to TROUPEAU'S description, in the second segment the author discusses briefly clothing, sleep and wake, and exercise and rest; then there follows a fragment on entering the bath. As seen in Chapter 4, this text might also be of some interest for the prehistory of *Nat* II.1 since the opening segment on phlegm shows a Galenic ascription and deals with the four humours, their abodes, and the ailments caused by each

¹ For his *Kitābu lʔağđiyah*, cf. SEZGIN 1970: 235 no. 20, who refers to SBATH'S index. A copy of his *Kitābu daffi mađārri lʔağđiyah* is identified as Berlin 6408 by ULLMANN 1970: 199 (= AHLWARDT 1893: 620, no. 6408). The status of the brief *Ḥawāṣṣ lʔağđiyah* edited by DÍAZ 1978 is dubious and the comparison to the passages quoted from IBN MĀSAWAYH on the exact same items has yielded very meagre results so far.

² Needless to say, this is just an indicative reference and the reader shall find several additional titles by these two authors related to the trophognostic genre in SEZGIN 1970: 235 and 253–255, respectively.

one of them.¹

For the paraenetic section (with exclusion of the calendar) ĞIBRİL B. BUḤTİŞŪ'S letter to the caliph Almaʿmūn ought to be explored in further detail.²

Islamicised (and enriched) pre-Islamic Arabian medicine

A cursory survey of the earliest representatives of so-called Islamic medicine has been extremely helpful. With regard to non-trophognostic materials, the *Dahabiyyah* reveals itself (despite its probable pseudepigraphic nature) as a witness to early eastern dietetic lore that is worth exploring in as much detail as possible. In the western tradition, IBN ḤABĪB'S *Tibb* has confirmed and further expanded the invaluable information contributed by the *Muḥtaṣar*. Were it not for the prevalence of some deep-rooted prejudices amongst historians of Islamicate (and particularly Andalusī) medicine, this instrumental text would be a priority in the list of titles deserving a systematic study.³ I have myself given some attention to IBN ḤABĪB'S oeuvre and shall continue to do so in the near future as it has proved to be a true mine for all kind of data, including much information that is relevant also to the analysis of *Nat* II.1 and even *Nat* II.2.

For chronological reasons the later thematic genre of self-proclaimed Islamic medicine is of secondary importance to my research, but the intriguing details of its genesis and development are far from uninteresting and its texts often transmit echoes of pre-standard practices centuries after they had vanished from canonical Helleno-Islamicate medicine.

¹ Cf. TROUPEAU 2003: 245–247, who corrects ULLMANN 1970: 113 and SEZGIN 1970: 235, both of which depended on SBATH 1928: 62–63 no. 110. The text opens indeed with «قال جالينوس في كتاب» «البلغم», which, as pointed out by TROUPEAU, appears to be pseudo-Galenic.

² I have consulted it through Baghdad, MS Mathaf 649, 246r 14 – 249r 1. The letter has been edited from a Turkish manuscript (namely Istanbul, Süleymaniye Kütüphanesi ms Halet Efendi 401, fols. 91r–94r) in KARIMI ZANJANI ASL 2008: 907–911. For similar letters ascribed to ĞIBRİL'S father, cf. SEZGIN 1970: 243).

³ To be clear, the Islamocentric bias that focuses exclusively on IBN ḤABĪB'S Sunnah-based reports conspires with the Islamo-allergic approach (which tends to consider all non-Galenic elements in the book as superstitious pre-rational medicine) against a balanced assessment of *Tibb*. As with so many emblematic texts, its status as “the first Andalusī book on medicine” appears not to have inspired a proportionate interest in its enigmatic origin.

Nat V Pharmacopoeia

The reconstruction of what may have been the primitive form of the dispensatory apparently included in *Natā?iǵ* involves two fragments that differ both in length and, most importantly, in their contents. On the one hand there is the bulky section transmitted in P, which comprises over one hundred recipes for all kinds of compound drugs from pills and electuaries to collyria and oils (this is the actual dispensatory referred to as *Nat V* here). On the other hand, manuscript D transmits two brief series of recipes the origin of which is rather dubious and its inclusion in the original compilation is arguable.

Given that there is no overlap whatsoever between the two witnesses their contents are surveyed separately in this chapter. On account of its brevity the fragments included in D are surveyed first, but for the sake of coherence, and in order to avoid redundancy, the analysis of micro-structure at the recipe level is collocated with the description of the macro-structure of the dispensatory as transmitted in P. The observations on the formal pattern of the recipes, however, apply equally to the two segments.

The *Concluding remarks* at the end of the chapter focus particularly on matters of intertextuality and genetic affiliation, while the appended *Complementary notes* are essentially philological in nature and relocate a few overlong footnotes that would have been a distraction in the body of the text.

8.1 The Damascus supplements

The formal aspects related to this fragment transmitted exclusively in manuscript D have already been discussed in some detail in Chapter 2. Here the focus shall be laid on the text itself. For ease of reference, the two segments that are separated in D by the title of the collection are labelled here (but not in the edited text) as *Supplement^A* and *Supplement^B*.

Supplement^A

With regard to *Supplement^A* codicological data is inconclusive and the analysis of the actual recipes contained in it yields ambiguous results.¹ On the one hand, the strictly medical sequence of compound drugs at the beginning of the segment does not include any element that might make its origin in *Natāʾiġ* impossible or even suspect. The series comprises two formulas for opiates (*murqid*) that are separated by several instructions for the application of analogous remedies to induce sleep in a patient, then a recipe for Hermes' drug, and finally a panacea for ailments of the eyes. The second narcotic drug is explicitly ascribed to IBN ʿIMRĀN,² while the recipe for Hermes' drug is allegedly borrowed from AHRUN's book («هارون» in D, but this is certainly a misreading), both authorities being explicitly mentioned as sources in the dispensatory transmitted in P.³

Now, the collocation of such disparate drugs does not quite correspond to what would be expected from a pharmacopoeical fragment, as these recipes would normally be placed in separate chapters. The intervening addition of two «ولمثل ذلك أيضًا» epigraphs (which are not simple recipes but more complex passages involving more than one remedy) between the two opiates provides far

¹ As explained in the description of the contents of manuscript D in Chapter 2, there is no solution of continuity whatsoever (not even a blank or a line-filler) between the text of *On the shelf-age of drugs* and the first recipe of this series, and the same unbroken textual unity is maintained until the title of the collection is reiterated on D fol. 40r 2. This is nevertheless essentially an *ex silentio* argument with admittedly little (if any) probative force. The presence of an instance of *wuqīyyah* in the formula for Hermes' drug is certainly suspect, but the regular *uqīyyah* is used everywhere else even within this supplement and it may be a simple clerical innovation.

² This attribution is externally confirmed by an identical recipe noted down by IBN ALĠAZZĀR also from IŠHĀQ B. ʿIMRĀN in *Zād* I.17 (B–K 154₂₋₉ | T 106₃₋₁₂). The same text and ascription are transmitted also in AZZAHRĀWĪ, *Taṣrīf* II.11.8 (S I 70₂₀₋₂₇), where it is labelled rather as an oil («دهن لإسحق بن عمران»); and also, as shown below, by *Hārūnīyyah* II.2.2 (G 341₁₋₈), where it is styled «المرقد الأعلى» without any mention of its author. Let it be noted that the *nasab* of the Qayrawānī physician is misspelled by the copyist of D as «بن عمران».

³ For IBN ʿIMRĀN, cf. *Pharm* 1.3 and 4.32. A reference to AHRUN's book is given for a hypoglottic pill in *Pharm* 3.9, and one of the manuscripts of IBN ʿABDIRABBIH's *Dukkān* reads actually «هرون» at the parallel locus (cf. *Dukkān*¹ 33v 8).

more compelling evidence in this regard. Such an arrangement and phraseology are uncharacteristic (although not entirely unprecedented) of standard dispensaries but they are typical, in turn, of *therapeutic* texts.¹ As a matter of fact, a remarkably similar sequence is found in *Hārūniyyah* II.2.2 that shows not only an overall typological (and topological) resemblance but also several contentual coincidences with *Supplement*^A.

Within a variegated (and at times apparently chaotic) section that follows a roughly head-to-toe order the edited version of the *Hārūniyyah* includes several remedies for a patient that cannot sleep:

Hārūniyyah II.2.2 (G 339₄–341₅)

- ¹ لمن لا ينام: أفيون، يُجَلِّمَاء الكزبرة الرطبة ويُطلى به على الجبين والصدغين.
² وله أيضًا: زريعة الخس، تُسحق وتُعجن بدهن ورد ويُطلى به على الجبين.
³ أو يؤخذ زعفران، وورد رطب أو يابس، وأفيون: يُدق ويُنخل ويُعجن بالطلاء، ويُقرص أقرصًا ويُجفف في الظل. فإذا احتيج إليه، أُذيب منه قرصة بالخل ويُطلى به على الصدغين.
⁴ مغيث إدريس عليه السلام وضعه بالوحي — أخلاطه: فريون وقاقلة [...]..
⁵ عمل المرقد الأعلى — أفيون وجندبادستر وزعفران [...]..
^{1b} عمل المرقد الكبير لمن لا ينام [وأضره السهر]: أفيون، يُجَلِّمَاء الكزبرة الرطبة ويُطلى به على الجبين والصدغين.
^{2b} وله أيضًا: زريعة الخس، تُسحق وتُعجن بزيت ورد ويُطلى به على الجبين.
^{3b} وله أيضًا: زعفران وورد وأفيون: يُدق ويُنخل ويُعجن بالطلاء، ويُقرص أقرصًا ويُجفف في الظل. فإذا احتيج إليه، أُذيب منه قرصة بخل ويُطلى به على الصدغين.
⁶ وله أيضًا: أفيون وبزر بنج: من كل واحد جزء. يُدق ويُنخل ويُعجن بالماء، ويُترك للشمس خمسة أيام. الشربة منه: قيراط.

Leaving aside the strange quasi-duplication of passages 1–3,² remedy [2b] (with «*zaytu ward*» rather than «*duhnu ward*» in [2]) corresponds quite literally to the first prescription after the strong opiate in *Supplement*^A, then [1b] here is strongly reminiscent (except for the presence of opium in the mixture)

¹ Cf. in *Nat* II.2 itself an epigraph introduced by the same marker in *On the mouth and the tongue* (= *Ther* 1.5.5), where the instructions for the preparation of a nameless drug are appended to the recipes for the stomach pill and the middle stomachicum.

² None of the three remedies is reproduced in both instances in the exact same wording and [1b] even provides a name for the drug (“the great narcotic”) that was not included in its previous mention in [1]. A possible explanation for this duplicity would be to assume that the compiler of the *Hārūniyyah* was drawing his materials from at least two sources that at this point may have transmitted a virtually identical sequence, but even in that scenario it is rather unusual for an author (but perhaps not so for a copyist) not to notice such a blatant redundancy in so few lines. Some remarks on the compilatory strategy of the *Hārūniyyah* are to be found in Chapter 1 of Part III of this dissertation.

of the use of fresh coriander there, and the recipe for the “superior narcotic” (*almurqīdu lʿaʿlā*) is essentially the same as the drug reported in D from IBN ʿIMRĀN. Even invoking the authority of IDRĪS can be contextually interpreted as parallel (or even synonymous) to the mention of HERMES as the inventor of the wondrous drug copied in the Damascus manuscript. This locus in the *Hārūniyyah* is, therefore, a significant match for *Supplement*^A and the implications of this relatedness ought to be explored in the future.¹

Moreover and regardless of the exact affiliation of these two texts, it must be borne in mind that the extant fragment of THERAPEUTICS lacks precisely the entire chapters on brain diseases (of which insomnia is a major representative) and on the ailments of the eyes. These two chapters were certainly included in the primitive plan of the treatise, however, and one cannot help wondering whether the brief excerpts transmitted in manuscript D might be the only remnants of the lost text.²

After this medical sequence there follows the recipe for a wondrous red ink (*midād*) made of white lead and red vitriol (*qalqant*),³ and then an alchemical excerpt introduced by a quotation from the Sage («*qāla lḥakīm*») on the treatment (*tadbīr*) of arsenic and sulphur. The alchemical fragment includes also an epigraph on the treatment of white or blue marcasite and another one on how to moisten dry bodies («*tarṭibu lʿaḡsāmi lyābisah*»).

Although the preparation of the ongoing commentary on *Nat* I has necessitated perusing a considerable amount of technical literature both on the preparation of inks and on practical alchemy, I have been so far unable to locate any close parallel to these three epigraphs. Besides, unlike in the case of the medical recipes transmitted in the two segments of the Damascus supplement, I cannot even imagine where in the original plan of *Natāʾiḡ* these passages might have belonged. In the epigraph *On vitriol* in APOTHECONOMY 3.2 reference is made to the fact that green vitriol blackens inks («*wayusawwidu lmidād*») and to the

¹ Further evidence for the origin of these passages in a therapeutic text (or in a section of a text) is provided by the inclusion of a partial parallel (same ingredients, different instructions) to the plaster of mandrake, henbane, and opium in IBN ALĠAZZĀR, *Zād* I.17 في السهر (B-K 158₁₋₂ | T 107₁₂₋₁₅), where it follows a recipe for narcotic pills borrowed from IBN ʿIMRĀN.

² Comparison to ZUHR’s excerpt for I.2 *On the brain* suggests, however, that IBN MĀSAWAYH may have not included this condition in his therapeutic treatise, but the contents of that chapter as reflected by the Iṣbili physician are strikingly poor.

³ As a continuation of ancient Mediterranean traditions (for which cf. CHRISTIANSEN 2017: 171–175), inks in an Islamicate context can be made of carbon (*midād*), a combination of iron and galls, or a mixture of these basic ingredients. Cf. further FANI 2021: 115, and particularly 116 n. 37, for a possibly different semantic distribution of the terms *ḥibr* and *midād* in Andalus. An overview of inks in the Islamicate manuscript tradition is provided by GACEK 2009: 76–77, 132–135; and a fairly thorough survey of Arabic literature on ink making can be found in FANI 2021: 105–112.

generic use of vitriol in the preparation of inks («*fi lmidād*»). The technical concept of “treatment” (*tadbīr*) is also mentioned twice in the same section, first in an authorial remark on artificial stones and counterfeits (where Nature’s *tadbīr* is opposed to human art), then in the brief entry on eggshells (in which their treatment is mentioned rather in a therapeutic context). The author’s extensive information about (perhaps even interest on) alchemical matters has been highlighted in the survey of that section in Chapter 4. However, nowhere in *Nat I* (or, for that matter, in the whole compilation) are practical instructions given for these kind of operations.

In sum, the first segment of *Supplement*^A must be provisionally considered of dubious origin. It certainly stems from the early western tradition and is thus somehow related to *Natāʿiğ*, but there is not enough evidence to link it to our text. The second segment, on the other hand, I would qualify as highly suspect.

Supplement^B

The formulas for three clysters or enemas (*huqnah*) are copied immediately under the general title of the collection as included for the second time in D before the *incipit* of *Nat II.1*. This placement of the fragment renders the possibility of its inclusion in the original compilation much higher, and the homogeneity of the brief sequence is quite compatible with their possible origin in a pharmacopoeical section.¹

Clyster–1 describes a purging remedy for aches in the back, the joints, and the lower bowels (including colic pains).²

Clyster–2 is a libido-stirring drug that is also beneficial for weak kidneys. It must be applied on an empty stomach and held inside as long as possible for three consecutive days. The presence of the kidney fat, backbone marrow, kidneys, and testicles of a he-goat amongst the ingredients of this preparation is a good indicator of the extent to which the doctrines of sympathy had penetrated all quarters of the medical art.

¹ In this respect it should be recalled here that *Nat V* does not include a chapter on clysters, but this, again, proves nothing, as even remedies universally included in dispensatories, such as plasters and liniments, are equally missing from that section. In fact, judging from the indexes of the three extant copies of IBN ʿABDIRABBIH’s *Dukkān*, clysters were never included amongst the drugs described in that book either. Nor are clysters granted a separate chapter (not even an epigraph) in AZZHRĀWĪ’s comprehensive pharmacopoeical books in *Taṣrīf*. Incidentally, in manuscript P of *Natāʿiğ* the rubric for a clyster is found on the margin to *Ther 2.3.3 On the heart* in a locus in which mild clysters are prescribed in the body of the text for the treatment of swellings of the heart.

² Contrary to what popular opinion might induce to imagine, not all clysters in the Helleno-Islamicate tradition had a purging function and recipe no. 2 below is an excellent illustration in this regard.

Clyster-2 is affirmed by its header to give some relief from thick flatulence. The recipe is a minimal one, as it only requires half a ladleful of cow ghee and the same amount of extract of leek.

All three recipes are found in an identical (*Clyster*-1|3) or almost identical (*Clyster*-2) form in AZZAHRAWĪ's *Taṣrīf* and all three have close precedents in SĀBŪR B. SAHL's small dispensatory too.¹ The first two, in fact, can be traced back to Book VII of IBN SARĀBIYŪN's *Kunnāš*. Nothing in the wording of these formulas would contradict the origin implied by their presence under the explicit title of *Natāʾiġ*,² but once again the exact place of this sequence in the primitive collection cannot be inferred from available evidence.

¹ They do not seem to be included, in turn, in IBN ALĠAZZĀR's *Zād* in any of the relevant chapters. A passing-by recommendation to apply heating clysters («*wayuḥtaqanu bilḥuqani lmushīnah*») is made there when discussing aphrodisiacs in *Zād* VI.1 (B 90₉-91 | T 511₂), but no recipes are provided.

² On a side note, some sort of (accidental?) complementarity could be intuited between this three recipes and the omission of aphrodisiacs in *Ther* 4.2 *On the testicles and the penis* and also of any enemas in *Ther* 3.5 *On the intestines* (where only a *das(s)ās* is mentioned, for which see above the corresponding remark in the survey of the contents of that section). And yet IBN MĀSAWAYH's *Nuġḥ/Munġiḥ* must have transmitted a number of recipes in all its chapters.

8.2 *Pharmacopoeia*^P: macro- and micro-structure

As stated in the codicological description of P, the boundary with the preceding excerpts from *Filāḥah* appended to *Nat* III is clearly marked by a *basmalah* and an explicit introductory passage that identifies *Nat* V twice as a *maqālah* (a taxon that does not feature anywhere else in the whole compilation):¹

Natāʾiḡ P 93r 9–12

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ نَحْنُ ذَاكِرُونَ فِي هَذِهِ الْمَقَالَةِ مِنَ الْمَعْجِينَ وَالْأَشْرِبَةِ وَالْأَدْوِيَةِ الْمُرَكَّبَةِ
وغيرها ما فيه كفاية من صناعة الطبّ ويُستغنى به عن سؤاله ٥ ابتداء المقالة صفة إطريرفل
على رأي جالينوس [...].

Once again the text aims expressly at sufficiency rather than at exhaustiveness. The collection of recipes included in *Natāʾiḡ* is rather limited, indeed, if compared with most texts in the *Aqrābādīn* genre—which is quite an unfair comparison given that *Nat* V was never intended to be an independent dispensatory but rather one of several sections within a comprehensive multithematic pandect.²

The conventions of the genre are evident in the organisation of the materials: all recipes are clustered in chapters (systematically labelled as *faṣl* here) and, while their exact selection, grouping, and classification are likely to reflect authorial design, the contents of the section are quite standard in what concerns the categories of drugs and, more importantly, the text of the formulas chosen for inclusion.

¹ It might be tempting to relate this feature to a possible influence of the analogous pharmacopoeical chapters in AṬṬABARĪ'S *Firdaws*, which are likewise gathered within a *maqālah* comprising all kinds of theriacs and great electuaries, purgatives, pastilles, digestives, robs and syrups, oils, and unguents, cf. *Firdaws* VI.VI.1–6|8 (§ 449₆–500₂₀). However, the totally different division in chapters and above all the absence of any significant borrowings from *Firdaws* do not speak in favour of a direct influence in this case.

² The ambiguous reference to the medical profession in the *incipit* of this section (is the phrase «*min šināfati ṭṭibb*» here a partitive or rather a prepositional complement of *kifāyah*?) needs perhaps to be interpreted from the perspective of the relationship between the apothecary and the physician as reflected in *Nat* I, but the question begs further consideration. In any case, the fact that most dispensatories (and this one is no exception) did not include virtually any theoretical material does not seem to warrant the conclusion that they were not intended for the use of physicians “sondern ausschließlich für den des Apothekers” (FELLMANN 1986: 2). Physicians would find the missing theoretical instructions in any of the *medical* books that they certainly possessed (and, one must presume, assiduously consulted) in addition to their recipe collections.

Macrostructure

Recipes are distributed in eight subsections according to a canonical *κατὰ γέννη* arrangement.¹ The exact collocation of the categories of drugs is at some points idiosyncratic but falls within the limits of individual variability in the genre, as does the sequential ordering of the chapters.² All subsections are introduced by the taxon marker *faṣḥun fī* — except for the first one on triphalas and medicinal powders, which has no rubric. Subsections vary in length between a minimum of two recipes for the hieras in *Pharm 2* and a maximum of thirty-one and thirty-six in the case of syrups-and-robs in *Pharm 5* and electuaries-and-lohocs in *Pharm 4*, respectively. It is here, at the higher level of the architecture of the text, that authorial “originality” (in the sense of the author having played an active part in the compilation beyond choose-copy-and-paste) can be best discussed.

Microstructure

At the lower level, in turn, there is not a drachm of originality either in the format or in the text of the formulas collected and noted down by the author-compiler.³ Morphologically they all conform to the stereotyped pattern inherited from the Greek tradition which in *Natāʾiǧ* consists, with only marginal deviations, of the following elements:⁴

¹ This is by far the best-represented dispensatory type in the Islamicate tradition, but the alternative *κατὰ τόπους* arrangement was not altogether unknown in Andalus. The pharmacopoeical books of AZZAHRAWĪ’s *Taṣrīf* show a peculiar mixture of both criteria, as does IBN WAFĪD’s *Wisād*, whereas the latter’s *Tadkirah* is arranged from head to toe both in the therapeutic part and in the pharmacopoeia that complements it.

² The lack of correspondence amongst early Andalusī pharmacopoeias in their chapter structure is all the more remarkable considering the extent to which they share individual recipes (and even recipe clusters in the case of *Natāʾiǧ* and *Dukkān*). The availability of broad categories (such as the hyperonym *maṣāʾiǧ* in *Dukkān*) and their multiple possible combinations certainly allowed for a great deal of compositional freedom.

³ On an incidental note, given the strictly bookish nature of ALʿILBĪRĪ’s dispensatory I refer to these written artefacts throughout this dissertation as “recipes” and as “formulas” for the sake of synonymic variation but I am persuaded that in a different context POMATA’s distinction between the *formula* (as standardised instructions for the preparation of a medication) and the *recipe* (understood as a prescription for an individual patient that was based on the author’s practically or empirically tested knowledge) ought to be preferred (cf. POMATA 2013).

⁴ This is the same format, with minimal variations (as for instance the use of *ṣifah* here rather than *ṣanṣah* there) that KAHL describes in his analysis of two of the extant recensions of SĀBŪR B. SAHL’s dispensatory (cf. KAHL 1994: 6–7 and 2009: 9–10) and which CHIPMAN applies also to ALʿAṬṬĀR ALHĀRŪNĪ’s *Minhāǧ* (cf. CHIPMAN 2010: 13). In fact, there is a remarkable continuity in the formal structure of medical recipes since Akkadian times as demonstrated by SCOTTI, who proposes a two-level interpretation of the basic structure of the standard recipe. On the

header — introduced here almost invariably by the word *ṣifah* followed by the name of the drug and optionally (in *Natāʾiğ* only exceptionally) by the mention of its alleged author.

indications — in the form of an appended segment stating the range of ailments against which the drug is affirmed to avail. It is characteristically marked by the use of “beneficial” (*nāfiṣ* or any other form of the lexematic root \sqrt{nf}) and can be either included as a part of the header or located at the end of the recipe. It varies greatly in length from one single disease to a full page-long catalogue.

core — which is made up of (1) the list of ingredients and the specific amount to be taken of each one, (2) the instructions for the combination of the ingredients and for the preparation of the drug, and (3) the dose and any complementary information regarding the conditions or circumstances in which the remedy ought to be taken or administered (eg “on an empty stomach”, “at night”).

With regard to the actual text of the recipes *Nat V* belongs to what may be labelled as *strictly derivative* dispensatories—those in which authors-compilers have limited their task to simply culling a number of recipes from one or more sources.¹ Within this type, ALʿILBĪRĪ’s rôle can be characterised as a true “passive transmitter”, lowest in the scale of authorial intervention, given that most of the recipes gathered here can be proved to reproduce word by word, virtually without any intentional alteration at all, a text that is attested also elsewhere in the tenth-century works of IBN ALĠAZZĀR and IBN ʿABDIRABBIH. Even in the

one hand there is a *rhetorical scheme*, according to which the text of the recipe must include a *header* (“testata”, a term that I borrow from him in my analysis), the *contents* proper, and a sort of *conclusion* with additional technical instructions (cf. SCOTTI 2003: 337–339). The second level of analysis, what SCOTTI calls the *semantical scheme*, concerns the characteristics of the ingredients themselves and cannot be dealt with in this summary. The structural analysis of medical recipes has been given growing attention in recent scholarship (as in the case of the *Médecinaire liégeois* in XHAYET 2010: 76–78) and historians of Islamicate medicine should certainly profit from new developments in the research of these cognate traditions.

¹ To be sure, the whole of the Helleno-Islamicate pharmacopoeical tradition can be said to match this description, as most (if not all) dispensatories from GALEN’s predecessors to modern times are largely based on pre-existing collections. Now, the extent to which the author’s “voice” is present in the text (use of the first person and self-referentiality, claim of personal inventions or adaptations, appraisal and criticism of others) may help to distinguish between several levels of intensity within a scale of authorial activeness. Thus, GALEN’s *Comp. med.* (= *Sec. loc.* + *Per gen.*) comes across as a remarkably personal (ie authorial) text on the whole despite its massive and usually acknowledged indebtedness to the works of previous authors and so do, in the Islamicate tradition, ALĠAZZĀR’s pharmacopoeical sequences within *Zād* or IBN WĀFĪD’s *Wisād*. I hope to elaborate on these provisional (and still largely intuitive) remarks in a forthcoming commentary to PHARMACOPOEIA.

case of those few recipes for which no close precedent or cognate could be identified, the chances are rather low that any of them might be an elaboration (let alone an invention) of the author.¹

Now, the same consideration applies large and by to IBN ṢABDIRABBIH, whose *Dukkān* has probably no more claim to originality than *Natāʾiġ* as far as the bulk of its recipes is concerned. Even the original contribution of AZZAHRĀWĪ to his own dispensatory is little more than a drop in the ocean of formulas that he brings together from the widest range of sources. At the other end of the spectrum, a remarkably more personal approach is revealed by the pervasive presence of the first person singular in the pharmacopoeical contents of *Zād*, whose author, IBN ALĠAZZĀR, never shies from adding his own experience and preparations to the recipes that he transmits from his predecessors (including his uncle)—although some of his alleged improvements and inventions ought to be taken with a pinch of salt.²

¹ See below the remarks on *Pharm* 6.9 «حَبِّ الْمُؤَلَّفِ», which may not be what it seems.

² The reader ought to recall here that IBN ALĠAZZĀR is the author of an epistle on the specific properties of things (= *Ḥawāṣṣ*) in which he does not even mention the name of the source for almost its entire contents (ie ARRĀZĪ) and that in his *Iṣtimād* he reproduces extensively and likewise silently the pharmacognostic treatise of IBN ṢIMRĀN, the founder of his own school of medicine in Qayrawān.

8.3 The contents of *Nat V* (= *Pharmacopoeia*^P)

In the overview that follows priority has been given to diachrony and intertextuality, with only a limited discussion of terminology. Additional details on textual transmission and further references to sources and parallels can be found in the critical apparatus that complements the edition of the Arabic text and shall be generally abridged here. A limited discussion of the most evident genetic affinities and the sources of the materials collected by the author for this section is included in the *General remarks* that close this chapter.

Pharm 1 — *On triphalas and medicinal powders*

The opening chapter of the section bears no title and contains two different sets of recipes: a series of four triphalas (*Pharm* 1.1–4) and five medicinal powders (*Pharm* 1.5–9). These two categories of drugs differ greatly in their composition and are actually dealt with in separate epigraphs in most, if not all, Islamicate pharmacopoeias.¹ The chapter, on the other hand, is quantitatively rather modest: it compares favourably with the small recension of SĀBŪR B. SAHL's dispensatory (three triphalas and apparently no powders), but only partially so with ALMAĠŪSĪ's epigraph (two triphalas and twenty-one powders), and it does definitely not fare well when placed side by side with *Dukkān* (eleven triphalas and eight powders), let alone with the massive collection of *Taṣrīf* (which contains no less than thirty-three recipes for drugs named triphala and about one hundred different medicinal powders further subclassified according to their effect).² This comparative observation applies in general to the whole of PHARMACOPOEIA.

¹ In the immediate Andalūsī context of our text, in IBN ʿABDIRABBIH's *Dukkān* triphalas are classed amongst electuaries in Chapter IV المعاجن (A 100v 12–105r 7 | D 33r 1–43v 9 | L 24r 24–34v 28), whereas medicinal powders have their own epigraph as Chapter VIII في السفوفات (D 49v 11–50v 10). The same picture obtains in AZZAHRAWĪ's *Taṣrīf*, where triphalas are accorded a more prominent rank in Book X في الإطريقات والبنادق (S I 461₁₇–473₂₉) and powders are also registered in a separate Book XVI في السفوفات (S I 567₃₁–584₂). The collocation of these two categories of drugs would therefore appear to be an original feature of ALʿILBIRĪ's (or his source's) compilation. Incidentally, for the sake of variation *saḥīf* 'medicinal powder' (for which a Latinate form *sufuf* would be available) is also translated here as 'catapasm' (from Greek καταπάσμα) following KAHL 1994: 233 and CHIPMAN 2010: 14.

² For triphalas, cf. SĀBŪR B. SAHL, *Ṣaġūr* IV [223–224|226] (K 140₁₄–141₇, 141₉–142₈); the apparent absence of remedies labelled as *saḥīf* there must be checked against the Ṣaḥūdī recension, which devotes a whole chapter to them, cf. *Ṣaḥūdī* VII في السفوفات [119–125|126–129] (K 60₁–62₈). For the similarly limited collection of ALMAĠŪSĪ, cf. *Kāmil* II.v.16,14–15 في صفة الجوارشانات (S II 2 369_{8–17}) and II.v.17 في صفة السفوفات (S II.2 373₁₇–376₂₀). Even IBN SĪNĀ records no more than three triphalas in *Qānūn* V.I.3 (B III 351_{9–18}, 358₃₀–359₂), whereas catapasmes are much better represented with twelve recipes in V.I.4 (B III 359₈–360₂₃).

With regard to onomastics, all powders in *Pharm 1* are described rather than named.¹ Triphalas, on the contrary, have either specific names (the “middle triphala” and the “great triphala”) or are explicitly related to an authority (“the triphala according to Galen” and “Ibn Sīmrān’s triphala”).

As for the genetic affiliation of the formulas, all four triphalas are attested in identical form in *Dukkān* and *Taṣrīf*, while the recipes for all five powders are found even in the exact same order already in IBN ALĠAZZĀR’S *Zād*. The latter coincidence may be all the more significant because none of the recipes for that category is recorded in IBN ṢABDIRABBIH’S corresponding chapter.

إطريرفل — Despite the explicit attribution to GALEN of *Pharm 1.1*,² triphalas or triferas are not of Graeco-Hellenistic stock but have an indisputable Indian origin, which is unmistakably shown by the etymology of their name.³ The original Sanskrit form त्रिफला *trīphalā* (literally ‘the three fruits’) reflects the mixture of all three kinds of myrobalans that contributes the basic formula for all standard triphalas: हरीतकी *harītakī* (borrowed by Persian then Arabicised as *halīlaġ*) ‘mirabolan’, अमलक *āmalakī* (*amlaġ*) ‘emblic’, and विभीतक *vibhītakī* (*balilaġ*) ‘belleric’.⁴ The proliferation of formulas for different triphalas, in turn, is an Islamicate phenomenon and there is some evidence that this great diversity of compositions was not a purely bookish fashion.⁵

¹ By this I mean that the drugs are alluded to by their medical effect: “a purgative powder”, “a powder beneficial for a cold liver”, “an easy-to-make powder that purges dropsy”, or “a digestive powder”. This is indeed the most usual way of naming cataplasms in the Islamicate corpus, but there are alternative modes of denomination that are based on a characteristic ingredient (as, for instance, *safūfu ḥabbi rrummān* ‘the powder of pomegranate seed’, *safūfu ṭṭīn* ‘the powder of earth/clay’, or *safūfu l’isqīl* ‘the powder of squill’) or on authorial ascription (‘Aristotle’s powder’, ‘Albarmakī’s powder’), or that are inherited from the Syriac tradition (as *safūfu *mqlyātā* or simply **mqlyātā*, from *مقلية*).

² This ascription is shared by IBN ALĠAZZĀR *apud* AZZAHRĀWĪ, *Taṣrīf* X.9 (S I 463₂₇–464₃), by IBN ṢABDIRABBIH, *Dukkān* IV.25 (D 39r 22 – 39v 12), and also by *Hārūniyyah* II.2, where it is styled “the triphala of iron” (G 331₁₆–333₃). In his section on triphalas AZZAHRĀWĪ gathers three additional recipes ascribed to GALEN, cf. *Taṣrīf* X.15|19|21 (S I 465₁₁₋₂₀, 466₁₅₋₂₆, 467₁₋₁₀), which are all mediated by YAḤYĀ (ie IBN MĀSAWAYH) in his *Baṣīrah*. A specific origin is mentioned in the case of *Taṣrīf* X.21, namely the pseudo-Galenic *Naṣā’iḥu rruhbān*, and the formula for this *trifera* is found indeed in PSEUDO-GALEN, *Secr. ad Mont.* 384₄₁₋₅₈. For an illustration of how this kind of pseudo-Galenic material entered the European Christianate tradition, cf. also the *trifera Galieni* in MESUE, *Grabadin* I.1B.4 (V 51ra 32–51).

³ See the *Complementary notes* appended to this chapter.

⁴ According to SUŚRUTA as quoted in the sixteenth-century *Toḍārananda* XXX.24: “Fruits of three drugs viz., *harītakī*, *āmalakī* and *vibhītakī* taken together are called *trīphalā* or *phala trika*. For this purpose, one part of *harītakī*, two parts of *vibhītaka* and four parts of *āmalakī* should be taken” (cf. BAḠWAN and LALITESH 1980: 421–422).

⁵ The use of a triphala («اطريرفل الاصغر»), to be precise) in an actual prescription appears to be documented in the fragment T-S Ar. 41,81 of the Cairo Genizah (cf. CHIPMAN and LEV 2011: 83–87).

The recipe in *Pharm* 1.2 may be of some interest for establishing intertextual affinities as it is apparently shared only by *Dukkān*.¹ The triphala ascribed to IBN ʿIMRĀN in 1.3, in turn, is much better documented, and so is the great triphala in 1.4.²

سفوف — With regard to medicinal powders³ I have already said that IBN ALĠAZZĀR's *Zād* provides identical matches for all five recipes in *Natāʿiġ* and that they are found there in the same exact order. All five are likewise recorded in AZ-ZAHRĀWĪ's *Taṣrīf*, whereas there is a striking unrelatedness with the analogous section in IBN ʿABDIRABBIH's *Dukkān*: none of the eight recipes collected there bears any resemblance to the ones in *Natāʿiġ* other than the obvious fact that they are classed within the same category.

The a priori straightforward derivation of all the recipes from the Qayrawānī physician might not be unproblematic, because AZ-ZAHRĀWĪ (who has no qualms with mentioning his Ifriqī predecessor) does not ascribe any of them to him, not even the one that IBN ALĠAZZĀR claims as his own adducing a particular case

The vitality and reputation of triphalas is further confirmed by ALṢAṬṬĀR ALHĀRŪNĪ, who in *Minhāġ* V.42 transmits a recipe by the hand of IBN MAYMŪN (A 76₁₋₂₄) and in the next entry records a personal version that he prepared for his own ailments of the stomach.

¹ Cf. *Dukkān* IV.29 (D 40r 6–10 | L 31v 7–12). The problematic phrase «على صنعة الحلب» is omitted by manuscript D, whereas L reads «على صنعة الحلب». If the word is to be read as «الحلب», several interpretations are possible from $\sqrt{h}lb$, some of them being more plausible than others. A reference to *ḥalab* 'wine' (cf. DOZY, *SDA* I 314a) would certainly make better sense than 'milking' (an odd concept to collocate with *ṣanʿah*), but the allusion would still be enigmatic. Some form derived from the lexemes $\sqrt{ġ}lb$ or even $\sqrt{h}lb$ is likewise possible.

² IBN ʿABDIRABBIH ascribes two different triphalas to IBN ʿIMRĀN: a great royal triphala that he prepared for the Banū Aġlab, cf. *Dukkān* IV.20 (D 36v 14 – 37v 4 | L 28r 31 – 29r 16) \equiv AZ-ZAHRĀWĪ, *Taṣrīf* X.7 (S I 463₇₋₂₂); and a simpler one that actually corresponds to ours in *Dukkān* IV.28 (D 40r 1–6 | L 31r 30 – 31v 6). For *Pharm* 1.4, cf. IBN ʿABDIRABBIH, *Dukkān* IV.22 (D 37v 13–19 | L 29r 29 – 29v 7). The aforementioned triphala of iron that is ascribed to GALEN in *Hārūniyyah* 331₆–333₃ is actually closer to this one in its composition.

³ Arabo-Latin *sufuf* does not seem to have entered the technical lexicon of Middle English, in which the prevalent denomination is *powder* (cf. NORRI, *DMVE* 871b–878a). There is therefore no good reason not to stick to the common translation 'medicinal powder' here—let it be noted, nevertheless, that 'powder' is also the generic name for an 'ophthalmological powder' (Arabic *darūr*). In Arabic a lexicographic definition of *safūf* is registered by IBN HINDŪ, *Miftāḥu ʿtibb* VIII s.v.: «*mā yustaḥḥa, kassawīqi wanaḥwihī, wahuwa lqamiḥah*» (Q 84₂₋₃), which is echoed afterwards by ALQALĀNISĪ, *Aqrabādīn* XXI s.v. (B 56₋₇). A much more instructive description is provided by AZ-ZAHRĀWĪ in *Taṣrīf* XVI, where *safūfāt* are described as short-lived drugs that are unprotected from the corrupting power of air (unlike electuaries, that are preserved by honey, and pastilles, which are preserved by gums), so that they must be stored in hermetically closed tight-mouthed vessels (S I 567₃₂–568₂). In any case, three of the "powders" described in *Natāʿiġ* involve moistening or stirring about (cf. LANE, *AEL* 2649 s.r. \sqrt{t}) the pounded herbs with some oil and even adding sugar to the mixture. With this in mind, perhaps 'digestive powder' would be a more accurate translation.

history. In the absence of any external evidence and without a thorough analysis of the quoting strategies deployed in *Taṣrīf*, one can only note the certainty of a Qayrawānī origin for this particular sequence and leave the door open to the possibility of a direct borrowing from some no longer extant text by IBN ṢIMRĀN.¹

Pharm 2 — On hieras

Despite the major rôle played by the “sacred remedies” in the Helleno-Islamicate medical tradition,² *On hieras* contains one single duplicated recipe for the bitter hiera (*iyārağ* *fiqrā* ≡ ἱερά πικρά).³

This extreme meagreness matches, perhaps in a significant way, the absolute prevalence of the bitter hiera in *Natāʾiğ* II.1–2, but it is nevertheless surprising that no recipe should be recorded for any of the other hieras that are actually mentioned elsewhere in the book, especially in the case of LOGADIUS’ hiera (or logodion/hieralogodion), which is relatively often prescribed for a diversity of complaints.⁴ In any case, this manifest discrepancy between the compound drugs recommended in the therapeutical section and the recipes actually collected in the pharmacopoeia is not limited to hieras.

¹ The corresponding loci are: *Nat* 1.5 ≡ *Zād* V.8.7 (T 438_{2–19}) ≡ *Taṣrīf* XVI.III.1 (S I 573_{30–574}); *Nat* 1.6 ≡ *Zād* V.8.8 (T 438_{20–4396}, which he claims to have prepared for a patient whose diagnostic is described) ≡ *Taṣrīf* XVI.III.13 (S I 575_{18–22}, unascribed and with a description of the same ailments unrelated to any particular patient); *Nat* 1.7 ≡ *Zād* V.8.9 (T 439_{7–12}, allegedly by IṢḤĀQ) ≡ *Taṣrīf* XVI.III.2 (S I 574_{1–4}, with the same ascription); *Nat* 1.8 ≡ *Zād* V.8.10 (T 439_{13–18}) ≡ *Taṣrīf* XVI.III.3 (S I 574_{5–8}, where the same statement in the first person about having tested and found it commendable is transmitted); *Nat* 1.9 ≡ *Zād* V.8.11 (T 439_{18–4406}, prepared also by IBN ṢIMRĀN) ≡ *Taṣrīf* XVI.III.15 (S I 575_{24–30}, with the same attribution).

² Some invaluable information about the ancient catalogue of aloe-based ἱεράι can be gathered from the formulas copied by GALEN in *Sec. loc.* VII.II, which include stomachic preparations by ANDROMACHUS, ANTIPATER, and THEMISON (K XIII 126_{16–1278}, 136_{11–14}, 158_{14–16215}). Regarding the ἱερά πικρά, GALEN deals with the details of its preparation and reports the synonymous names of «τὸ δι’ ἀλόης φάρμακον» and «ἡ διὰ τῆς ἀλόης ἱερά», as well as simply «πικρά», in *Sec. loc.* II.I (K XII 539_{8–54015}), but it eventually came to be identified as “Galen’s hiera” (ἱερά Γαληνοῦ) already in Byzantine times (see *Apoth* 1.4).

³ A remark on the Islamicate fortunes of this name is to be found in the appendix.

⁴ It may be contended that at least for AL-ZILBĪRĪ (but probably also for many other authors) such drugs as “Archigenes’ hiera” and “Rufus’ hiera” must have been a sort of inherited *Namen ohne Sache* that were copied rather mechanically and merely because he found them in his source text, as they feature exclusively in the non-original epigraph *On the shelf-life of drugs*. In the case of the (*iyārağ*) *lūğādiyā* its presence in *Nat* II.1–2 must be also interpreted as a reflection of the source texts used to compile those sections.

It is quite telling, on the other hand, that the closely related text of IBN ʿAB-DIRABBIH's *Dukkān* shows a similar paucity of materials and transmits only one additional recipe for the bitter hiera in addition to the same single duplicated recipe recorded in *Pharm* 2.1–2.¹

Pharm 3 — On pills and compound drugs

This combined epigraph comprises eight different recipes, of which only five are explicitly classified as pills (*ḥubūb*).

The Persian pill in *Pharm* 3.1 is a good example of how necessary close inspection is if any hypotheses on genetic affiliation are to be proposed for the materials collected in *Natāʾiğ*. ALʿILBĪRĪ's recipe is literally identical to IBN ʿAB-DIRABBIH's Persian pill but only contentually similar to AZZAHRĀWĪ's homonymous drug. While an ultimate common origin must be supposed for all three formulas, only two of them are immediately related to each other either by close cognacy or by dependence.²

The anacardium (*balāduri*) is named after its main ingredient (that is *balādur* 'marking nut', the fruit of *Semecarpus anacardium* L.f.)³ but it is not explicitly assigned to any particular drug category in *Natāʾiğ*, whereas elsewhere in the

¹ Cf. *Dukkān* IV.18|43 (D 36v 3–10, 42r 15–21 | L 28r 16–25, 33v 24 – 34r 2) for the duplicate formula, while the additional recipe in *Dukkān* IV.42 is said to have been improved and successfully tried by IBN MĀSAWAYH (D 42r 6–14 | L 33v 12–23). It must be noted that *Dukkān* does transmit a recipe for the *lūğādiyā* under the name «معجون اللوغاديا» in IV.37 (D 41r 12 – 41v 12 | L 32v 18 – 33r 16), which is allegedly borrowed from IBN ʿIMRĀN's *Book on melancholy*. The latter recipe is recorded by AZZAHRĀWĪ in *Taṣrīf* V.1 with an extremely interesting quote from IBN ʿIMRĀN according to which this was the old recipe (*annuṣḥatu lqadimah*) handed down by the ancients, the one fixed in GALEN's book and transmitted by the authors of medical compendia (*aṣḥābu lkunnāṣāt*) from PAUL down to AHRUN. The long excerpt from the Qayrawānī physician ends with a criticism of copyists and manuscript handlers (S I 393²⁶–395⁵). The recipe for this hiera is not to be found in the extant fragments of the IBN ʿIMRĀN, *Māliḥūliyyā*, in which nonetheless two formulas for hieras are preserved, cf. recipes XVII–XVIII (G 172₁–173₆), the latter being precisely a ἱερά πικρά considered by the author to be actually better than the *lūğādiyā*, Archigenes' hiera, and the *tīyādrītūs*.

² Cf. *Dukkān* V.3 (D 43v 23 – 44r 8) on the one hand and AZZAHRĀWĪ, *Taṣrīf* VI.47 (S I 411^{21–26}) on the other. Despite the overall coincidence of the two versions, differences are substantial and involve all the segments of the recipe: the ingredients, the preparation, and the ailments against which it is recommended.

³ In the edition of the Arabic text I have retained the spelling *balādur* and *balāduri* of the manuscript (although it need not be authorial). The canonical form *balādur* was, however, prevalent also in Andalus, cf. CORRIENTE, *DAA* 62a *{BLĀR} and particularly «بلادر» in the two copies of *Dukkān*. The name *balādur* is, as the fruit that it designates, of Indian origin and derives from some cognate of Sanskrit भल्लतक *bhallātaka* (also *bhallāta*, cf. MONIER-WILLIAMS, *SED* 748c), most probably through Persian, cf. VULLERS, *DPLE* I 256 s.v. بلادر (whence Syriac ܒܠܕܪ and ܒܠܕܪ, cf. PAYNE SMITH, *Thesaurus* 541; and BROCKELMANN–SOKOLOFF, *Lexicon* 154a, 161a; Arabic /-d-/ might in fact reflect a Syriac mediation).

corpus it is usually labelled as an electuary (*maṣḡūn*) or a digestive (*ḡūwārišn* as below in *Pharm* 4.23) but apparently never as a pill (*ḥabb*).¹ In PHARMACOPOEIA this remedy receives especial attention: two different versions are recorded here (to which the digestive of anacardium in *Pharm* 4.23 should still be added). First in 3.2 ARRĀZĪ's abridged recipe is noted down,² then in 3.3 the "little anacardium" reflects a further simplified version of the drug.³ The two recipes are complemented by the inclusion of the instructions for extracting the nut meg "honey" (*ṣasalu lbalādur*) required for their preparation.⁴

The name "golden pill", of which *Natāʔiḡ* transmits the "great" one in *Pharm* 3.4 is probably based on the outer appearance of the drug, which must have been yellow judging from such ingredients as Socotrine aloe, yellow myrobalans, and the resins of the mastic tree and the giant fennel, as well as opoponax—but no gold at all.⁵

The all-healing *muḡīt* in 3.5 is related, at least nominally, to the ancient tradition of the *πανάκεια*, and the lengthy and meticulous catalogue of different ailments, each of which requires a specific way of administration, would seem to justify this boastful name that contrasts strongly with the simplicity of the composition.⁶ A lexical item deserving of note in this recipe is *tākawt*, of Amazighic

¹ See the *Complementary notes*.

² Cf. *Dukkān* III.32 (D 30v 10–14 | L 22r 24–29). A very similar recipe is transmitted under the name «*ḡūwārišnu lbalādur*» in ALMAĠŪSĪ, *Kāmil* II.v.16,20 (S II.2 370_{17–22}).

³ Cf. *Dukkān* III.34 (D 30v 14–17 | L 22v 5–8). The recipe is indeed a basic triphala to which some marking nut oil has been added.

⁴ Cf. *Dukkān* III.23 (D 30v 7–10 | L 21r 15–27), with a further specification in the rubric that the honey is to be used for the preparation of the digestive («*ṣifatu stihrāḡi ṣasali lbalāduri lilḡūwāriš*»). It is worth noting that the same procedure is recorded in *Hāriniyyah* II.1.1 (G 291_{1–2}), where one should read «*ṣasaluḥū*» with the majority of manuscripts (rather than «*duh-nuhū*» as edited after T) and where «*aqmāṣuhū*» is glossed as «*qišruhū*». Cf. also the synonymy registered by IBN ĠANĀḤ in *Talḥiṣ* [716] «*ṣasalu lʔanqardiyā huwa ṣasalu lbalādur*», based on SĀBŪR's *Aqrābādīn* (< *Ṣaḡīr* 52₂₄). Cf. also BOS, KĀS, LŪBKE, and MENSCHING 2020: 865, where alternative instructions to extract this honey are cited from IBN ALĠAZZĀR's *Samāʔim*. An oil extracted from the marking nut is already mentioned in the Ayurvedic tradition, cf. *bhallā-takataila* in MONIER-WILLIAMS, *SED* 748c.

⁵ The formula is identical to the homonymous pill in *Dukkān* IV.35 (D 40v 16 – 41r 4 | L 32r 26 – 32v 7), but it is not the same great golden pill that AZZAHRĀWĪ affirms to have "corrected" («*ṣalā mā aṣlahtuhū*») in *Taṣrif* VI.17 (S I 407_{28–408}). A "golden electuary" that did include gold (and also silver and several other minerals) as an ingredient is the *maṣḡūnun dahabī* = *šiltā*, cf. AZZAHRĀWĪ, *Taṣrif* IX.39 (S I 457_{17–29}).

⁶ It is identical to *Dukkān* IV.3 (A 102r 18 – 102v 22 | D 34r 7 – 34v 22 | L 25v 4–27) but has nothing in common with the homonymous electuary («*maṣḡūnun yuṣrafu bilmuḡīt*») in AZZAHRĀWĪ, *Taṣrif* III (S I 371_{1–13}). An early example of *πανάκεια* is the one prepared by HERAS, that some called *ύγεια* and which just like ALZILBĪRĪ's *muḡīt* was advertised to avail «*πρός πάσαν νομῆν καὶ κακοῦθειας*», cf. GALEN, *Sec. loc.* V.II (K XIII 766_{14–678}₁₆). The resemblance, however, is only superficial, for neither the ingredients nor the ailments coincide in the two recipes. For the

origin, which in the Andalusi tradition translates DIOSCORIDES' εὐφόρβιον (ie spurge, *Euphorbia sp.*) and which appears also in *Ther* 1.4.9 in a more independent context.¹

Contrary to what might be supposed (and very much like the preceding golden pill) the “coral pill” in 3.6 does not contain any coral—and one wonders whether the two drachms of red roses that enter the recipe are enough to prevail over the rest of the ingredients (which are mostly yellow) and to confer a coral-red hue to the preparation that might have justified such an appellation.²

The self-explanatory denomination “fetid pill” in 3.7, in turn, may be easier to account for given the combination of strong-smelling resins on which it is based.³ The formula seems to be ultimately related to SĀBŪR B. SAHL.⁴

Finally, no specific name is provided for the hypoglottic pills with which the epigraph closes at 3.8. They are simply described by their effect, namely availing against coarseness of the voice and cleansing the throat by dissolving the phlegm. The recipe is of diachronic interest for it is allegedly drawn from AHRUN'S book.⁵

tradition of drugs called *muǧīl*, see the notes appended at the end of this chapter.

¹ On this geolectal marker, see Chapter 9.

² An identical recipe in *Dukkān* V.10 (D 44v 16 – 45r 2 | L 35v 7–15) corroborates the absence of coral in this version of the recipe, which is fairly similar to the recipe for a homonymous and likewise coral-less pill in AZZAHRAWĪ, *Taṣrif* VI.42 (S I 411_{6–10}). The recipe that precedes the coral pill in *Taṣrif* may actually confirm the suspicion that the name is metaphorical: the “pill of pearls” (*ḥabbu dduṛr*) allegedly by GALEN does not require any pearls, cf. *Taṣrif* VI.41 (S I 411_{4–6}). For a genuine “pastille of coral” that actually contains this marine invertebrate and is attributed a totally different (mainly haemostatic) effect, cf. the formula in SĀBŪR B. SAHL, *Ṣaḍudī* [18] صفة قرص البتند (K 29_{17–21}).

³ The same recipe is transmitted in *Dukkān* V.14 (D 45r 22 – 45v 6 | L 36r 12–19), but not by AZZAHRAWĪ, who yet records three different fetid pills in *Taṣrif* VI. (S I 417_{10–25}), of which the first one is very similar to PHARM 3.7.

⁴ Cf. SĀBŪR B. SAHL, *Ṣaǧīr* VIII [114] (K 99_{7–18}). From there it was borrowed by IBN ALĠAZZĀR, *Zād* I.23 (B–K 202_{3–9} | T 125_{16–126,4}); also IBN ĠAZLAH, *Minhāj* 51 حبّ المنتن (L 67r 3–7); AŠŠĪRĀZĪ, *Alḥāwī* V.VIII.9 (G 47_{11–17}).

⁵ Cf. *Dukkān* IV.41 (D 42r 2–6 | L 33v 7–12), with the same ascription. The name of the Alexandrian physician is slightly distorted in all three manuscripts («اهون» in P; «اهرون», perhaps a *plene* spelling, in *Dukkān* D; «هرون» in L), which may betray a certain unfamiliarity with this authority at least on the part of the copyists (see above a similar reinterpretation of the same name as هارون in *Supplement*^A in the Damascus manuscript of *Natāʾiǧ*).

Pharm 4 — On electuaries, lohocs, digestives, and preserves

A much more disparate collocation of drug categories obtains in what is, with thirty-six different formulas, the richest chapter of the whole dispensatory. The arrangement of the recipes does not actually correspond to the order established in the rubric (in fact it runs mostly counter to it) and the preparations are furthermore written down in a rather intermingled fashion, with occasional clusters of three or four co-categorical remedies and a maximal series of six consecutive lohocs at 4.16–21.

A preliminary word on terminology. Since *lohoc* (= Arabic *laṣūq*) has gained some currency at least as far as Islamicate studies are concerned, its use here may not need further justification.¹ For Perso-Arabic *ḡuwāriṣh* on the other hand I cannot adhere to the common practice of translating it as ‘stomachic’ because this term is reserved in this research for Graeco-Arabic *uṣṭumāḥiqūn* (≡ *στομαχικόν*), and I have therefore opted for the univocal denomination ‘digestive’.² I do agree, however, in rendering the preparations styled as *murabbā* (at variance with *murabbab*) by ‘preserves’, eg “preserve of ginger”.³

In the following remarks the original order of the items has not been retained but they are clustered according to a typological criterion.

مرتب / مرتبی — This subsection opens with a continuous series of five formulas for preserves, all of which are typically named after their main ingredient and share some basic instructions for preparation.⁴ With the sole exception of the

¹ For the attestation of the word already in Middle English, cf. NORRI, *DMVE* 608b–609a s.v. *loc*; for its use by contemporary Arabists cf. already LEVEY 1966: 10–11, and more recently KAHL 2009: 19 (but not yet in KAHL 1994: 234, where rather *confection* and *medicinal bonbon* are used). Alternative denominations are also in circulation, however, and it is worth recalling COLBORNE’s observation that the terms *linctus*, *lambative*, *lohoc*, and *eclegma* were “used pretty much alike” in modern medical literature (COLBORNE 1753: 211–212).

² With no claim to originality, of course, cf. LANE’s translation of *ḡawāriṣh* as ‘A digestive stomachic; a thing that causes food to digest’ in *AEL* 410a, as well as STEINGASS’ definition ‘Any electuary for assisting digestion’ in *CPE* 1100 s.vv. گوارش *guwāriṣh* and گوارشت *guwāriṣht*. A remark on the etymology and Arabic reinterpretation of this word is to be found in the Appendix to this chapter.

³ For the widespread spelling مرتب that is retained in the edition of the Arabic text, see the editorial criteria in Part II of this dissertation. Given that the preparation of a *murabbā* involves chopping, rather than crushing, the fruits, ‘preserve’ is perhaps a better translation than ‘jam’ (by which it has sometimes been rendered into English, cf. CHIPMAN 2010: 13–14, 281).

⁴ For the seemingly free alternation of *murabbā* and *murabbab* (which are nonetheless categorically distinguished from the robs that are dealt with below in *Pharm 5* alongside syrups), see the partially parallel chapter of IBN ʿABDIRABBIH, *Dukkān* II مرتبات (A 96r 15 – 99v 22 | D 18v 22 – 27r 15 | L 12r 1 – 18v 26), in which the fifty-three different recipes are diversely registered as *murabbab* (the most frequent denomination), *tarbib*, and *murabbā*. As far as its five formulas are concerned *Natāʾiq* mirrors only in part the nomenclature transmitted in *Dukkān*: the two

preserve of pumpkin, the selection made by ALʿILBĪRĪ includes only those preserves that in AZZAHRĀWĪ's classification are described as "hot".¹

The close relationship that links *Natāʿiğ* and *Dukkān* is best reflected in tabular form:²

<i>Natāʿiğ</i>	<i>Dukkān</i>
4.1 garden garlic	≡ II.50 «مرتب الثوم البستاني»
4.2 marjoram	≡ II.51 «مرتب الصعتر»
4.3 pumpkin	≡ II.29 «مرتب القرع»
4.4 radish	≡ II.44 «مرتب الفجل»
4.5 ginger	≡ II.35 «مرتب الزنجبيل»

The two sets of recipes are literally identical except for the preserve of radish in 4.4. The parallel text in *Dukkān* shows that the version copied in *Natāʿiğ* is the result of either a remarkable eyeskip or of deliberate authorial conflation. In *Dukkān* two alternative procedures are recorded, whereas *Natāʿiğ* seems to combine a slightly modified version of the opening of the first segment with a word-by-word reproduction of the second segment (and the order of these segments is also different in the two texts). On the other hand *Natāʿiğ* is much less closely related to *Taṣrīf XV On preserves*, as only two of the five recipes show a literal correspondence, one of them being precisely the preserve of radish, for which AZZAHRĀWĪ registers the more complete version found in *Dukkān*.³

texts share *murabbab* for 4.1–2 and *murabbā* for 4.3, whereas they differ as to the exact name of 4.4–5. On the other hand, the importance of honey in the preparation of preserves is clearly reflected in the rubric «*fī ṣifati lʿanbağāti walmurabbayāti bilʿasal*» in ALMAĞŪSĪ, *Kāmil* II.V.21 (S II.2 396₃–399₁₃); cf. also the definition provided by ALḤWARĪZMĪ in *Mafātīḥ* II.III.6: «*wahīya llatī rubbat bilʿasali mina lʿutruğği walʿihlilağği wanaḥwi dālika*» (V 177₂₋₆). A synonymous denomination for some of these drugs involves the syntactic pattern SUBSTANTIVE+ADJECTIVE, which is actually the one consistently used by AṬṬABARĪ in his section on preserves in *Firdaws* VI.I.10, for example «*alhalilağū lmurabbā*» and «*alḥawḥu lmurabbā*» (§ 393₂₋₁₃). An alternative name for preserves in Arabic is *anbağ* (also transmitted as *anbiğ* and even *inbiğ*), which is recorded already in ALḤALĪL B. AḤMAD, *Ṣayn* VI 153₂₋₄ (thence IBN ĠANĀḤ, *Talḥiṣ* [88]). That word is a borrowing from Persian, cf. VULLERS, *LPLE* I 125b s.v. *آبِه* 'fructus mangiferae indicae', where he points towards Sanskrit *अम्र* / *आम्र* *amra* / *āmra* (cf. MONIER-WILLIAMS, *SED* 147c s.v.), although the word must have entered Persian through some Prakritic form (cf. for instance Marathi *आंबा āmbā*).

¹ Cf. *Taṣrīf XV* عمل المربيات في (S I 558₇₋₁₀). Incidentally, AZZAHRĀWĪ makes an interesting observation on the technique of preserve-making, which according to him is rarely learnt from books but rather necessitates witnessing the procedure (cf. S I 558₅₋₇). The detailed instructions provided by IBN ĠUMAYʿ in *Iršād* IV.V (L 161v 10–15) are likewise worth consulting in order to gain better insight into this operation.

² The full references for these loci in *Dukkān* are: II.29 = A 99v 18–100r 3 | D 23r 22–23v 7 | L 15v 11–20; II.35 = D 24v 8–15 | L 16v 10–17; II.44 = D 25v 21–26r 14 | L 17v 10–29; II.51 = D 26v 20–27r 4 | L 18v 1–10; II.52 = D 27r 4–8 | L 18v 11–16.

جوارشن — Digestives are a remarkably polygenetic category and by the 9th c. *ǧuwārišn* had already become very much of a high-sounding designation under which traditions from the far east and the near west converged.¹

A total of nine different formulas for digestives are gathered by ALZILBĪRĪ, which makes for a figure quite in accordance with other categories in *Pharm* 4 and in the section in general. If the majority of names of these remedies reflect the ingredient considered most characteristic of their composition, there is nevertheless one case of ascriptional denomination (“Galen’s digestive” in 4.4) and another one of epithetic appellation (*Alǧāmiʿ* “the Comprehensive” in 4.27). With regard to the ingredients required for the preparation of these digestives, formulas range from relatively simple (for instance 4.6|7 and 4.24) to extravagantly complex in the case of “the Comprehensive”, which well deserves its name as its preparation involves no less than thirty-seven different simple drugs.

The three elements of the first sequence 4.6–8 are quite representative of the great diversity of digestives both as to their composition and as to their origin. Thus the digestive of sumach in 4.6 is a simple one requiring sumach,² myr-

³ As to the other preserves, an identical recipe for the preserve of garlic is found, with a different name, in *Taṣrīf* XV.II.18 صفة تربية الثوم (S I 565₁₁₋₁₆); the fuller version of the preserve of radish, in *Taṣrīf* XV.II.17 صفة تربية الفجل (S I 565₅₋₁₀). For the preserve of pumpkin, a very similar formula is recorded in *Taṣrīf* XV.I.20 صفة تربية القرع (S I 562₂₄₋₂₈), whereas *Taṣrīf* XV.II.29 صفة مرثا القرع (S I 567₈₋₁₀) is quite abridged and reflects a different tradition.

¹ Some references to Roman (ie Graeco-Byzantine) *ǧuwārišn* recipes are provided below. For far eastern digestives in the Islamicate corpus, cf. a *ǧuwārišn* prescribed by the Indian ŚARAK (ie CARAKA) in ARRĀZĪ, *Alḥāwī* III.9 (H III 211₄₋₇), as well as a category of digestives explicitly classified as *hindīyah* by ALMAĠŪSĪ in *Kāmil* II.v.16, where he tries to introduce some order and distinguishes between Roman, Persian, and Indian digestives (S II.2 366_{5-373,17}). The name of the drug itself makes the Persian connection clear enough, but cf. particularly a drug styled “Ḥosrow’s digestive” (*ǧuwārišnu Kisrā*), which was also known as “the digestive of ambergris” (*ǧuwārišnu lʿanbar*), in ALKINDĪ, *Bāh* V (C 23_{18-24,4}), whose formula is identical to that of the digestive of ambergris “used by kings and nobles” in AṬṬĀBARĪ, *Firdaws* VI.VI.4 (Ṣ 480₇₋₂₂), where it is further affirmed that ḤOSROW used to drink it in his old age. In a passage excerpted by ARRĀZĪ, however, ĠURĠĪS seems to mention Ḥosrow’s digestive *alongside* the digestive of ambergris (“and” > **wahuwa*) and other compound drugs of Persian origin, cf. *Alḥāwī* VII.2 (H VII 41₁₀) ≡ *Continens* VII.3 (P51va 36–38, where the locus has been actually emended and a conjunction «7» added between the two names | V 176rb 46–48). In Andalus, cf. AZZAHRĀWĪ, *Taṣrīf* XI.1.5 «*ǧuwārišnun malakīyyun yusammā “alkisrāwī”*» (S I 475₂₋₁₀).

² Arabic *summāq* usually refers to either tanner’s sumach (*Rhus coriaria* L.) or to the smoke tree (*Cotinus coggygria* Scop.), as well as to their respective fruits (cf. DIETRICH 1988: II 168–169). The specific denomination *summāq dḍibāḡah* for the fruit mirrors Greek ῥόδς βυρσοδεψικῆ (βυρσοδεψέω = *dabaḡa*) already in DIOSCORIDES, *Ḥašāʿiṣ* 1:111 ستماق (P 25v 11–13 | T 104₁₈₋₂₁) ≡ *Materia medica* 1:108 ῥόδς ὀ ἐπι τὰ ὀψα (W I 101₅₋₈), and Arabic *summāq* itself corresponds, through Syriac ܣܡܩܩܐ, to the alternative Greek name for the fruit: ἔρυθρός ‘red’. In Andalus the *Sumdah* distinguishes between Syrian and Andalusī sumach and equates the latter with tanner’s

tle seeds, fried seeds of sour pomegranate, Nabataean carob,¹ Arabic gum, and pomegranate blossoms. No instructions for the preparation are provided in the text beyond the need to sift the ingredients.²

Then in the digestive of cumin in 4.7 either a copyist, the author, or even the author's source text, has substituted saltwort for the original pepper (فلفل and فلفل respectively in unpointed script), a mistake all the more evident given that saltwort is never mentioned as an ingredient in the whole PHARMACOPOEIA.³ Even if not as easily identifiable as "Galen's digestive" or the diaciminum ascribed to HIPPOCRATES below, the Roman origin of the recipe is occasionally acknowledged in the Islamicate tradition.⁴

The name of the drug registered in 4.8 is extremely illustrative of the problems specific to the transmission of some words in alifatic script and deserves some comment. The multiple witnesses to this recipe transmit the *nisbah* either as 'خوزي' 'Hūzi' or as 'جوزي' 'related to the nut'—when they do not simply re-

sumach (*summāqu ddibāḡah*), cf. *ḡumdah* [4521] شَمَاق (B–C–T 510₃₀–511₁₅). The "Syrian sumach" (*summāqun Ṣāmī*) is attested already in first-century Latin sources such as PLINY, COLUMELLA, and CELSUS, cf. for instance «*rhus, quem Syriacum uocant*» in the latter's *De medicina* VI.11.5 (M 286₂₅); whereas the original Greek form ῥόδος Συριακός is attested remarkably later, cf. PAUL, *Pragmateia* III.27.2 (H I 198₂₈) and also *Geoponica* XVI.8.2 (B 460₃). Forms for both "tanner's sumach" and "Syrian sumach" are recorded also in the Syriac tradition, cf. «*ḡumdah ḡumdah*» (a Graeco-Syriac hybrid) and «*ḡumdah ḡumdah*», respectively, in BAR BAHLŪL, *Lexicon* 1313₅₋₇; also PAYNE SMITH, *Thesaurus* 2665–2666; BROCKELMANN–SOKOLOFF, *Lexicon* 981–982.

¹ This was identified as "a round carob known as *yanbūt*" by IBN ĠULĠUL according to IBN SAMAGŪN, *Ġāmīf* بنوت 4-ي (S II 11₁₂₋₁₃) and IBN ĠANĀḤ, *Talḥiṣ* [1038]; cf. also a probable silent quote in *ḡumdah* [1808] خُزُوب نَبِيحِي (B–C–T 190₁₂₋₁₆). For ABŪ HANĪFAH, in turn, the Nabataean carob was rather one of the two varieties of *yanbūt*, cf. IBN SAMAGŪN, *Ġāmīf* II 10₁₂₋₁₁₅ and IBN ĠANĀḤ, *Talḥiṣ* [427].

² There is no mention of the sumach digestive in *Dukkān*, nor does it seem to be recorded in AZZAHRĀWĪ's *Taṣrīf*. However, the recipe handed down by ALṬILBĪRĪ's is found in an identical form in SĀBŪR B. SAHL, *Ṣaġīr* XI [246] (K 150₁₆₋₂₀); and also in IBN ĠAZLAH, *Minḥāġ* 7-88 (L 60r 20–22) except for the very last sentence.

³ For the identification of *qāqullā* (a ʿirāqī non-Arabic, probably Aramaic, word occasionally qualified as "Nabataean" in the corpus) as DIOSCORIDES' ἀνδροσάκες apparently already in IBN ĠULĠUL, cf. DIETRICH 1988: II 488 n. 5, where a likely Akkadian origin is suggested for this phytonym (cf. CAD XIII 125 s.v. *qaqqullu*). The word is likewise documented in Syriac, cf. «*ḡumdah*» in BAR BAHLŪL, *Lexicon* 1830₄.

⁴ See *Dukkān* III.9 «جوارشن کون آخر» (D 28v 3–7 | L 20r 19–25), after a recipe for a version of the digestive of Kirmānī cumin; and AZZAHRĀWĪ, *Taṣrīf* XVI.1.36 (S I 482₈₋₁₁). It is also essentially identical, with minor rewording, to «*ġuwāriṣnu lkammūnī*» in AṬṬABARĪ *Firdaws* VI.vi.4.1 (S 474₃₋₁₁) and to formulas handed down by IBN SARĀBIYŪN, SĀBŪR B. SAHL, and ARRĀZĪ (for which see the references in the critical apparatus *ad loc.*). That this remedy stemmed from the Greek tradition is stated by IBN ĠAZLAH, who considers it «*mina lmaʿjūnāti rrumīyyah*» in *Minḥāġ* 7-74 (L 58r 15–22). The received text is indeed essentially an echo of the Διοσκολιτικὸν φάρμακον as fixed for the written tradition by GALEN in *San. tu.* IV.5 (K VI 265₁₁–267₁ | Ko 117₆–119₃₃). See also below the remarks on *Pharm* 4.22 for a Hippocratic connection.

produce an uncompromising spelling حوزى (or even حورى) that transfers to the readers the responsibility of interpreting the word, relying, one may surmise, on their previous knowledge on the subject. Now, from a synchronical perspective both interpretations are possible, although perhaps not equally plausible. A Hūzī origin would be hardly surprising, perhaps rather even expected, for such a sophisticated preparation containing so many aromatic ingredients, and this hypothesis might find some support in the reading «وحب الاس حيد ساورى» of manuscript P if it is indeed to be read as “Sābūr”.¹ The presence of nutmeg in the recipe, on the other hand, might equally justify reading الجوارشن الجوزي ‘the electuary of nut’.² As external evidence in favour of the latter interpretation GALEN’s διὰ καρύων *stomatic* might be adduced, but neither the composition nor the medical indication (it is not a *stomachic*) match the details of this recipe.³ In any case, as far as the actual knowledge of the professionals involved in the Islamicate tradition (apothecaries and physicians alike) is concerned, it is far from warranted that all of them were in a position to correctly identify the name of a given drug, especially in the case of the more exotic ones like this—which, all in all, condemns any edition to be necessarily speculative.

Contrariwise to what is advertised by its name, “Galen’s digestive” in 4.14 cannot possibly be an invention of the physician from Pergamon, but then if the “triphala according to Galen” based on the three myrobalans was a fashionable name, the conspicuous presence of galangal (*Alpinia galanga* (L.) Willd.) and

¹ IBN ĠAZLAH, who unambiguously affirms the Persian origin of the drug (*wahuwa Fārisī*) transmits a certainly cognate reading «حب الآس الحيد النيسابوري» in *Minhāj* 75–جوارشن الجوزي (L 58v 1–10 | I 88v 6 – 89r 2), but the name in *Minhāj* P reads «جوارشن الجوزي» (cf. P 78r on the right margin, since it had been skipped by the copyist). Further examples of the reading «الجوزي» include a very different recipe for that does not contain any nuts (nor nutmeg) in ARRĀZĪ, *Taġārib* XVI.IV.4 جوارشن الحوزي (R 46r 9–12), or a variant reading in one of the manuscripts transmitting IBN ALĠAZZĀR’s *Zād* (for which see the footnote below).

² With all due caution regarding edited texts that I have not checked against any manuscripts, the main witnesses for this second denomination are AṬṬABARĪ, *Firdaws* VI.VI.4.3 «جوارشن الجوزي» (§ 474₂₄–475₁₅), where, incidentally, no qualification is provided for the myrtle seed; ARRĀZĪ, *Tibb* 83r 22 – 83v 4, where the word is partially vocalised as «الجوارشن الجوزي» but no nutmeg is mentioned amongst the ingredients; ALMAĠŪSĪ, *Kāmil* II.V.16.5 «جوارشن الجوزي» (S II.2 367_{11–13}). In IBN ALĠAZZĀR, *Zād* I.14 both editions favour a reading “walnut”: «الجوارش الجوزي»: in B–K 138₉ (which they accordingly translate as “the walnut stomachic”) and «جوارش الجوز» in T 100₁₃; the manuscript readings, in turn, show some variation and «الجوارش الحوزي» is transmitted by at least one witness (cf. manuscript I in the critical apparatus in the BOS–KĀS edition). That the interpretation of the Qayrawānī physician was indeed ‘the electuary of nut’ seems confirmed by the recipe reported from his uncle as «الجوارشن الجوزي الأكبر» and which includes nutmeg, in *Maṣīdah* 122₁₉–123₁₄, thence AZZAHRĀWĪ, *Taṣrif* XI.I.6|22 (S I 475_{10–23}, 479_{18–30}).

³ Cf. GALEN, *Sec. loc.* VI.2 Περὶ τοῦ διὰ καρύων στοματικῶν (K XII 90₅₇–910₃), and also PAUL OF AEGINA VII.XIV.5–6, who transmits from him the recipes for both the simple («τὸ διὰ καρύων ἀπλοῦν») and the compound («διὰ καρύων σύνθετον») versions of the remedy (H II 329_{13–20}).

clove in the formula should not have been a deterrent for a similar attribution here. To be fair, such exotic simple drugs were indeed documented in pseudo-Galenic texts of Byzantine age and it is quite probable that the Islamicate tradition simply inherited the recipes and their ascriptions from that corpus.¹

The remedy noted down as *kammūniyyah* in 4.22 does not actually bear the name of *ḡuwārišn* but it may be classed in these category by analogy to the digestive of cumin in 4.7. Suspicion of pseudepigraphy may have been higher here than in the preceding recipe (this seems to be made explicit in the inscription of the remedy itself: “a cumin drug *that is ascribed* to Hippocrates”) and may have been raised by the presence not only of clove but also, and perhaps principally, of tabarzed or crystalline sugar (*sukkarun ṭabarzad*).²

The mention in 4.23 of the digestive of anacardium (*ḡuwārišnu lbalādur*), on the other hand, is quite telling of the inconsistency of nominal categories with regarding some of the most exotic (although not necessarily uncommon) compound drugs. The preparation based on the marking nut has been previously registered twice as simply “the dianacardium” (*albalādurī*) in *Pharm* 3.2|3 and nothing in the composition of this new recipe justifies a new denomination. If anything, such apparent discrepancy reflects a diversity of ultimate sources for the different formulas and the lack of active editing on the part of the compiler, who for the most part (with very rare exceptions) has limited himself to picking and noting down the recipes as he found them. Yet again 4.23 is not completely devoid of interest, as it transmits a well-known observation by ḤUNAYN B. ISHĀQ on the correct use of this remedy (when, how much, and in which dietetic context).³

¹ The recipe is found in identical form in *Dukkān* III.1 (D 27r 17 – 27v 2 | L 18v 28 – 19r 8).

² Cf. *Dukkān* III.29 (D 29r 8–23 | L 21v 18 – 22r 6), which records also two additional recipes with the same name: «*alkammūniyyatu ṣṣuḡrā*» and «*kammūniyyatun muḥtaṣarah*» in *Dukkān* III.30–31 (D 29r 23 – 29v 11 | L 22r 7–23). The lesser cumin drug is borrowed from AHRUN’s book by AZZAHRAWĪ in *Taṣrif* XVI.1.33 (S I 481_{28–31}) but not origin is mentioned for the formula of the abridged one in *Taṣrif* XVI.1.34 (S I 481_{31–4821}). The *diyāsqūlītūs* (**diyāsfulītūs* ≡ Διοσπολίτης) features twice in a long quotation from HIPPOCRATES in AṬṬABARĪ, *Firdaws* II.IV.3 (§ 101₁₇), for which the parallel locus in *Ḥifḍ* §15 has rather «*alḡuwārišnu lkammūnī*» (K 50₅); and a recipe including a mention of this synonymy is provided by the author in *Firdaws* VI.VI.4 (§ 474_{3–11}). As seen above, the formula of the Διοσπολιτικὸν φάρμακον goes back to GALEN, *San. tu*. Tangentially, for Arabic *ṭabarzad* applied to other substances such as salt, cf. KĀS 2010: 1040–1041; also STEINGASS, *CPED* 279 s.v. *ṭabar-zad*. The oldest extant mention of tabarzed sugar in Arabic seems to be a passage from IBN MĀSAWAYH’s no longer extant *Aṭṣimah* (cf. IBN ĠANĀḤ, *Talḥiṣ* [634]). A Persian etymology from *tabar* ‘hatchet, axe’ is traditionally repeated and goes back to native lexicographers, but in view of Persian *tabarza* VULLERS prefers a derivation from an Indian word akin to Sanskrit तवराज *tavarāja*, cf. *LPLE* I 420b; for the Sanskrit word interpreted as a ‘sort of sugar prepared from a species of Hedysarum’, cf. WILSON, *DSE* 370a.

³ ḤUNAYN’s remark is likewise included in the identical recipe in *Dukkān* III.23 (D 30r 21 – 30v 7

The digestive of asafoetida in 4.24 shows that a *ḡuwārišn* must not necessarily be a complex and extravagant preparation. In addition to fine asafoetida only black pepper, mustard, and garden cress¹ are required for this remedy, the detailed instructions for use being in fact more than twice as long as the recipe itself.² At the other extreme of the spectrum, “the digestive known as the Comprehensive” in 4.27 represents polypharmacy in his highest expression and involves an interesting problem of authorship.³

Finally, the recipe in 4.30 for the digestive of aloeswood (*ḡuwārišnu lšūd*), which is made exclusively of aromatics (including nutmeg, clove, mace, and sandal) and is not so well documented in the Andalusī corpus, may be of some relevance as an indicator of a still unidentified source or of a more active task of compilation on the side of the author than what might have been suspected.⁴

معجون — The Arabic name to which corresponds the traditional denomination of ‘electuary’ is quite unspecific and at the same time somewhat misleading (kneading is by no means exclusive to these preparations), yet it dates back to the earliest Graeco-Arabic translations and Syro-Arabic *kanānīš*.⁵ Moreover, in the Islamicate corpus this category usually includes such drugs as theriacs in general and many of the remedies bearing a Graeco-Arabic or Syro-Arabic name.⁶

| L 21r 15–27) and in AZZAHRAWĪ, *Taṣrif* XVI.65 (S I 487_{27–33}).

¹ Arabic unqualified *ḥurf* translates DIOSCORIDES’ *κάρδαμον* (traditionally identified as garden cress, *Lepidium sativum* L.) in *Ḥašāʔiš* 2:144 (P 49v 7–12 | T 212_{11–23}) ≡ *Materia medica* 2:155 (WI 221_{12–222}₁₁) but, as pointed out by DIETRICH 1988: II 301, watercress or yellowcress (*Nasturtium officinale* W.T.Aiton) was also occasionally referred to by this name.

² Cf. *Dukkān* III.11 (D 28v 11–18 | L 20r 31–20v 9). In view of the resemblance of this recipe to the formula for *dawāʔu lḥilitit* in AṬṬABARĪ, *Firdaws* (460_{4–6}), this electuary may be the same drug referred to as *mašḡūnu lḥilitit* in *Ther* 4.6.1—yet even the pastilles of asafoetida (*qurṣu lḥilitit*) in ALMAĠŪSĪ, *Kāmil* II.v.15,37 (S II.2 365_{20–22}) are also very similar in their preparation.

³ Cf. the same anonymous formula in *Dukkān* III.38 (D 31v 22–32r 2 | L 23r 27–23v 21). In AZZAHRAWĪ, *Taṣrif* VIII.2 (S I 431_{14–33}) the exact same recipe is reported from IBN ALĠAZZĀR’s *Maʿīdah* 129_{9–130}₁₅, where the author claims for himself the composition and the name of the drug.

⁴ The recipe is not included in the extant copies of *Dukkān*, nor apparently in *Taṣrif*, but it is found in an identical form in IBN WĀFID’s *Tadkirah* (G 20r 21–25). A far more complex formula (requiring, nevertheless, mostly aromatic ingredients) is recorded as «*ḡuwārišnu lšūdi*» by AṬṬABARĪ in *Firdaws* VI.vl.4 (§ 479_{19–480}₆). Nor does the recipe match the equally convoluted preparation registered with the same name and under IBN ALĠAZZĀR’s authority in AZZAHRAWĪ, *Taṣrif* XI.I.15 «*ḡuwārišnu lšūd*» (S I 477_{27–478}₁).

⁵ The picture is actually more complex than what could be summarised here. For the time being, cf. IŞṬIFĀN’s use of «*alʿadwiyatu mašḡūnah*» and «*almašḡūnāt*» in order to render «*ἀντιδοτοί*», and of «*fī aḥlāṭi ššināṣāt*» as a translation of «*ἔν τε ἐκλεικτοίς*» in *Ḥašāʔiš* 2:153 فلفل (P 50r 9–10, 50r 17 | T 214_{18–20}, 215₁₁) ≡ *Mat. med.* 2:159 πέρπερι (WI 224_{18–20}, 225₁₂). A few electuaries are also attested in the partially collateral tradition of the Prophet’s medicine as well as in the Sunnah.

⁶ Cf. for instance AZZAHRAWĪ, *Taṣrif* II (S I 54_{23–24}).

The drugs classified as electuaries in PHARMACOPOEIA are six in number and are all named after their most distinctive ingredient, except for the first item of this category. The electuary introduced at 4.9 is described by its medical benefits, which relate to a diversity of complaints (especially those caused by cold and moistness).¹

In 4.15 the electuary of clove is made exclusively of aromatic ingredients of plant origin (except for the honey with which the mixture must be kneaded, of course).² Then, the name of the remedy in 4.25 is amusingly deceptive: the plural *ḥarārīb* does not refer here to the carob (*ḥarrūb*) or to its fruit (*ḥarrūbah*),³ but rather to the homonymous (actually derivative) measure *ḥarrūb* that is, at least etymologically, the equivalent of the carat.⁴ This is self-evident when the text of the recipe is considered, since carob beans do not feature here as an ingredient and the word *ḥarārīb* indicates twice the amount of scammony required for the preparation.⁵ The distinctive use of *ḥarrūbah* as a measure and the presence of the phytonym *tākawt* may suggest a local origin for the recipe at least in this version.⁶

¹ I have not found any parallel recipe yet in the corpus under survey. Although the task of source criticism becomes particularly complex (and often also frustrating) in the case of “nameless” drugs, the quite peculiar description of the claimed benefits should be of great help to identify possible cognates and precedents.

² Cf. *Dukkān* IV.51 (D 3r 4–10 | L 34v 19–28). Exceptionally, a late Andalusī echo of the same recipe can be located in IBN WĀFID, *Wisād* X.67 معجون القرظ (A 1418–12), which shows only minimal simplification with regard to the tenth-century text.

³ For Arabic *ḥarrūb* / *ḥarrūb*, see above the remarks on the Nabataean carob.

⁴ Already in Greek κεράτια was the name of the fruit of the carob tree in, for instance, *Materia medica* 1.114 (W I 1071–4), and at the same time the name of a measure of weight for solids (approximately 0.189 g). This polysemy was then mirrored by the Arabicised Islamic tradition in two parallel ways: through borrowing (κεράτιον > *qirāt*) and through loan-translation (κεράτιον ≡ *ḥarrūbah*). Incidentally, the plural *ḥarārīb* is not recorded in CORRIENTE either s.r. *{XRB} or s.r. *{XRNb} (cf. *DAA* 152, 155), but it is documented in its numismatic meaning in DOZY, *SPA* I 357 s.r. √حرب (with further references and specific values for the coin). In the Syriac corpus ܚܪܘܒ was habilitated for both meanings, but ܚܪܘܒܐ is well documented as the name of the tree and the fruit (cf. PAYNE SMITH, *Thesaurus* 3741 and 1365, respectively).

⁵ Scammony is here referred to by the synonym *maḥmūdah*, which in PHARMACOPOEIA is only found here, in 4.27 (where all parallel witnesses have rather *saqmūniyā*), and in 6.13. Even if it is well documented in Andalus down to the last phase of the local dialects (cf. PEDRO DE ALCALÁ's «escamonea medicina *ixcamonia mahmūda*» in *Vocabulista arávigo* 239b 14–15), this synonym is by no means Andalusī or even western: Antiochian scammony is repeatedly referred to as *maḥmūdātun Anṭāki* by IBN ATTILMĪD, cf. *Aqrābādīn* I [33], II [61|62] (K 58₁₇, 65_{19–20}, 66₅). For the Amazighic synonym *tākawt*, see Chapter 9.

⁶ Cf. the same formula in *Dukkān* IV.44 (D 42r 21 – 42v 1 | L 34r 3–8), both being different from *dawāʿu ḥarārīb* in AZZAHRĀWĪ, *Taṣrīf* VI.43 (S I 411_{10–12}), for which nonetheless the measures are also expressed in carobs; and also from the *maʿḡūnu ḥarārīb* that AZZAHRĀWĪ transmits from IBN ṢĀRĪB ALʿANDALUSĪ's book, cf. *Taṣrīf* VIII.91 (S I 445_{30–33}). A homonymous pill (ie

The remaining three recipes are put together in a brief series 4.34–36 that closes the section. First in 4.34 the electuary of the two sandalwoods (red and yellow), which is unparalleled in *Dukkān*.¹ Then the electuary of seeds (*maḡǧūnu lbuzūr*) in 4.35, which is actually made of a variety of seeds with the addition of a few aromatic ingredients.² Finally 4.36, which transmits the recipe for the reputed electuary of iron dross, also not included in *Dukkān* but abundantly documented since the earliest Syro-Arabic tradition, occasionally under the Persian name of فنجنوش (probably *panǧ-nūš*), that seems to have originally reflected its mixture of five elements (namely the three myrobalans, tamarisk galls, and iron dross).³

ḥabbu lḥarārib) was prepared by ΑΤΤΑΥΜΙ for a man affected by *malkūniyah* (that is μελαγχολία, interpreted here as *ihṭirāq* and manifesting itself as huge ulcers on the bottom and thighs accompanied by white blisters, see the notes on nosonymy appended to Chapter 6) according to ALHĀŠIMĪ, to which the Escorial copy of his treatise adds a full recipe that shows only partial overlap with ours but shares most significantly the absence of carob beans as an ingredient and the exclusive use of *ḥarrūbah* as a measure, cf. *Maǧālis* I.1.40 (K 986_{10–15}). Let it be noted that there are several compound drugs in the corpus that do include carob beans as their main ingredient, cf. a medicinal catapasm (*saḡūfu lḥarnūb*) ascribed to SĀBŪR B. SAHL in AZZAHRĀWĪ, *Taṣrif* XVI.IV.5 (A 36 | S I 577_{23–26}), which is not included however in any of the published versions of his *Aqrābādīn*. This powder circulated also by the name of “digestive of carob”, cf. the same recipe in IBN ĠAZLAH, *Minḥāǧ* جوارشن الحزوب 101 (L 62r 8).

¹ Incidentally, despite the fact that there were *three* universally accepted chromatic varieties of sandal, only two of them formed part of the medical stock.

² Cf. *Dukkān* IV.53 (D 43r 14–18).

³ Cf. VULLERS, *LPLE* I 376 s.v. پنج نوش and *LPLE* II 693 s.v. فنجنوش; FELLMANN 1986: 163; KAHL 2007: 222 n. 108. A recipe essentially identical to *Pharm* 4.36 is transmitted by ARRĀZĪ, *Ṭibb* 79v 9–14 under the same name (ie «*ǧuwwārišnu ḥabṭi lḥadīd*»), the iron dross being required there to be of Baṣri origin) and later by IBN ĠAZLAH, *Minḥāǧ* جوارشن الحبت 80 (L 59r 8–14). Arabic reflections of Persian *fanǧnūš* in the corpus include «*dawāʔu lḥabṭi lmusammā fanǧūš*» (sic), transmitted from RAĠĀʔ ALʔAŠFAHĀNĪ by IBN ATTILMĪD in *Aqrābādīn* V [138] (K 902–20). Yet another synonym for this drug is recorded by IBN HINDŪ in *Miftāḥu ṭṭibb* VIII s.v.: «*alfanǧanūš: ismun Fārisiyyun liḥabṭi lḥadīd, wahuwa maḡǧūnunun summiya “ṣaṭiyyata llāh”*» (Q 82_{19–20}).

لعوق — Nine recipes for lohocs cluster in two series 4.10–12 and 4.16–21 that are broken by only three intervening recipes. These remedies are almost invariably named after their main ingredient: tragacanth, linseed (twice), penide or candy sugar (*fānīd*),¹ squill, poppy, pine-nuts, and fenugreek. The only exception is 4.18, which is registered simply as “a lohoc for children”. For the formulas of most items within this epigraph there is no shortage of parallels and precedents and in this introductory survey I signal only the closest (mostly identical) precedents and possible cognates.²

The lohoc of tragacanth in 4.10 is quite representative of the category in three regards: its basic ingredients include tragacanth, of course, but also Arabic gum, pine-nuts, penide or candy sugar, and liquorice juice, which are mostly shared by other recipes of lohocs. Then, the mixture must be kneaded with honey, and finally its medical benefits are mostly related to the respiratory system (cough, a coarse voice). As for most lohocs in the corpus, similar preparations can be identified in the Graeco-Byzantine tradition.³

The two different recipes for the lohoc of linseed in 4.11 and 4.16 differ essentially in the presence or absence of pepper, and a basic form of the remedy was already known to DIOSCORIDES.⁴ The combination of liquorice juice, Arabic gum, and candy sugar does not really justify the denomination “lohoc of penide”

¹ In the Islamicate tradition, and particularly in the *Aqrābādīn* genre, two varieties of candy sugar are often distinguished by their *nisbah*: Siġzī or Siġistānī candy and *ḥazāʾinī* candy, cf. IBN ĠANĀḤ, *Talḥiṣ* [674|768] (and further references in the commentary to those two entries). In *Natāʾiġ*, however, all instances of this ingredient are unqualified and once it is even explicitly specified as “simple” (*sādiġ*) in *Pharm* 5.10, which suggests that candy or clarified sugar is actually intended rather than any sweetmeat, which is another of the possible meanings of *fānīd* in Arabic. The word was borrowed with its different interpretations from Persian *pānīd* / *pānīd* (cf. VULLERS, *LPLE* I 324b) and entered Mediaeval Latin, in turn, in the form *penidium*, whence Middle French *pénide* (and Middle English *penide*, cf. NORRI, *DMVE* 808b s.v.) and High German *Benet*[*zucker*]), cf. VON WARTBURG, *FEW* XIX 142a s.v. *pānīd*.

² In fact, lambatives, which have been wrongly considered an Islamicate innovation (cf. DE VOS 2013: 695–696) have Graeco-Byzantine roots and are well represented from the earliest Syro-Arabic pharmacopoeias. As many as fifteen different recipes are recorded by IBN SARĀBIYŪN in *Kunnāš* VII.XXI في اللعوقات (L 146v 1 – 149v 4) ≡ *Breviarium* VII.XXI *De allohocath* (V 73ra 16 – 73va 59); and no less than twelve by SĀBŪR B. SAHL in *Šaġīr* IX (K 115₉–119₁₄).

³ An identical recipe is found in *Dukkān* IV.45 (D 42v 2–6 | L 34r 9–16). This formula is probably related to an ἀρτηριακή likewise based on tragacanth and with a very similar medical effect handed down by APOLLONIUS and ALCMAEON, transmitted by ANDROMACHUS, and finally copied by GALEN in *Sec. loc.* VII.II.15 (K XIII 318–322).

⁴ For the first recipe, cf. *Dukkān* IV.46 لعوق الكتان (D 42v 6–8 | L 34r 17–20); also AZZAHRĀWĪ, *Tašrif* XXII.II.5 (S II 122_{13–14}). For the second one, which is not included in *Dukkān*, cf. SĀBŪR B. SAHL, *Šaġīr* IX [170] لعوق بز الكتان (K 119_{12–14}); also IBN SARĀBIYŪN, *Kunnāš* VII.XXI.13 لعوق بز الكتان (L 149r 10–11) ≡ *Breviarium* VII.XXI.13 (V 73va 49–50). The basic skeleton of the remedy was described as «σὺν μέλιτι ἀντὶ ἐκλεικτοῦ» ≡ «*idā ḥuliṭa bilʿasali waluʿiqa*» in DIOSCORIDES, *Mat. med.* 2.103 λινόσπερμον (W I 177_{11–11}) ≡ *Ḥašāʾiṣ* 2:97 بز الكتان (P 42v 17–18 | T 182_{8–10}).

of 4.12, since it is shared by several other lambatives in the series.¹

Like the second recipe for the lohoc of linseed, the lohoc of squill in 4.17 comes close to being the minimal possible expression of a medical formula: take some juice of squill and clarified honey, knead them together, and let it be taken into the mouth before and after each meal.² The paediatric lohoc in 4.18, in turn, can be considered a variation of the lohoc of candy sugar with the addition of a few ingredients.³

The lohoc of poppy in 4.19 shows the characteristic transference of the properties usually attributed to the main ingredient to the whole preparation.⁴ The lohoc of pine-nuts in 4.20, in turn, has some interest from the point of view of diachrony and intertextuality: on the one hand it includes an ingredient the name of which has oftentimes been subjected to distortion or reinterpretation, namely تمر هيرون («تمر ميدون» in P); on the other hand, the core of the recipe can be dated back to the Hippocratic collection.⁵

¹ Cf. *Dukkān* IV.48 لعوق الفانيد لسعال الصبيان (D 42v 15–18 | L 34r 30 – 34v 4, which reads «الفانيد»). Judging from its ingredients, it must certainly be related to the lohoc for children below.

² Not selected for *Dukkān*, cf. AZZAHRAWĪ, *Taṣrif* XXII.II.6 (S II 122_{4–16}). Its eastern precedents include SĀBŪR B. SAHL, *Ṣaġīr* IX [162] لعوق العنصلان (K 116_{12–16}); and IBN SARĀBIYŪN, *Kunnāš* VII.XXI.14 لعوق بصل العنصل (L 149r 12–14) ≡ *Breviarium* VII.XXI.14 (V 73va 51–54). It is also attested in germinal form by DIOSCORIDES: «σὺν μέλιτι ἐκλειχθεῖσα» ≡ «*maḥlūṭun biṣasalin yulṣaq*») in *Mat. med.* 2:171 σκίλλα (W I 239_{1–4}) ≡ *Ḥašāʾiṣ* 2:165 إشقيل (P 52v 1–3 | T 224_{20–2253}).

³ It is not recorded in *Dukkān*, but cf. AZZAHRAWĪ, *Taṣrif* XXII.I.14 (S II 114_{27–31}). Earlier documentation goes back to SĀBŪR B. SAHL, *Ṣaġīr* IX [164] (K 117_{2–10}); and IBN SARĀBIYŪN, *Kunnāš* VII.XXI.4 للعوق للصبيان (وهو لعوق) مطحنا (L 147r 1–4) ≡ *Breviarium* VII.XXI.4 «*methamen (est est lohoc) ad tussim infantium*» (V 73ra 38–42). IBN SARĀBIYŪN's مطحنا is, of course, a raw transcription of Syriac مڤحند ≡ ἔκλειγμα (cf. KAHL 2007: 228; PAYNE SMITH, *Thesaurus* 2076). This Syriac word is quite well transmitted in a number of sources, amongst which: IBN ATTILMĪD, *Aqrābādīn* VI [154] مطحنا اللوز (K 95_{12–16}); IBN HINDŪ, *Miftāhu ṭṭibb* VIII s.v.: «*almaṭaḥtā: allaṣūq*» (Q 83₄); and even IBN ĠAZLAH, *Minḥāġ* ل-60 لعوق المطحنا (هو لعوق اللوز) (L 198r 14–17) and لعوق المطحنا (L 216r 9).

⁴ This recipe is different from the homonymous one in *Dukkān* IV.47 (D 42v 8–15 | L 34r 20–29), but identical to AZZAHRAWĪ, *Taṣrif* XXII.I.12 صفة لعوق خشخاش آخر شريف (S II 114_{19–23}). Cf. also SĀBŪR B. SAHL, *Ṣaġīr* IX [167] (K 118_{5–12}).

⁵ The formula is not to be found in *Dukkān*, but AZZAHRAWĪ transmits it in *Taṣrif* XXII.III.3 (S II 128_{31–129}), where the problematic ingredient is trivialised as «تمر هندی». The same recipe is found already in SĀBŪR B. SAHL, *Ṣaġīr* IX [159] (K 115_{18–12}) and in IBN SARĀBIYŪN, *Kunnāš* VII.XXI.1 (L 146v 2–5) ≡ *Breviarium* (V 73ra 17–23), both of which transmit a correct reading of the ingredient in question (and this *tamarun hayrūn* is translated by GERARD OF CREMONA as «*dactylorum keiron*» in *Breviarium*). The same kind of date enters the formula of a digestive of dates (*alġuwāriṣnu ttamarī*) in IBN ATTILMĪD, *Aqrābādīn* V [145] (K 92₂₂). Like most of the vocabulary related to palms and dates *hayrūn* / *hūrūn* must have been well-known to Bedouins but the fact that later pharmacognostic sources are unable to provide any information on it must be interpreted as a sign that it had become very much of a bookish item with no material reality. Thus, IBN ĠANĀḤ, *Talḥiṣ* [285] simply reports from ABŪ ḤANĪFAH that it is «*darbun mafrūfun mina ttamar*», whereas IBN ALḤAŠŠĀʿ glossing on *Abnansūrī* admits quite honestly that it

Finally the lohoc of fenugreek in 4.21 can illustrate the way in which the aggregation of elements from disparate origins works, as it is one of the only two recipes in the whole of PHARMACOPOEIA to feature the measure *istār* (the other one being *Pharm* 4.8), which can evidently be traced back to the source text.¹

ذبيد — A special category of electuary-like drugs not reflected in the rubric of the section is *dabīd*, with five recipes presented in an almost unbroken sequence 4.28–29|31–33. All five show a typically ingredient-based denomination and nothing in their composition or in the way in which they must be prepared seems to account for their name, which deserves indeed some explanation.²

The recipe in *Pharm* 4.28 describes a “wondrous” hepatic of roses that is affirmed to benefit also the stomach and to avail against yellow bile, fevers, and indigestion. Its ingredients are quite representative of the category: Indian spike-nard, saffron, asarabacca or hazelwort (*Asarum europaeum* L.), bark of cassia (*Cinnamomum cassia* (L.)J.Presl), sweet costus, blossoms of camel’s hay or squinanth, cinnamon, white tabasheer, and mastic, one part of each one. To this a quantity of leaves of red roses equal to the total sum of the other ingredients must be added. The mixture is to be beaten up and then kneaded with clarified honey. An inherited remark stemming from an alternative recipe informs the reader that a number of aromatics may be also incorporated into the mixture.³ A little further 4.33 is a word-by-word duplicate of the same recipe, with the qualification “perfected” (*muḥkam*) added to the header in this second instance (or, otherwise, omitted from the first). This is not the only case in PHARMACOPOEIA of a textual duplicate and such a feature is quite telling about the compilation strategies implemented by some authors especially in this genre.

Then a hepatic δεικαφάρμακον made of rhubarb (*dabīdu rrāwandi lṣuṣārī*) is

is unknown in the west, cf. *Mufīd* [1194] هيرون (C–R 129₁₂). According to KAHL 2007: 225–226 n. 115 “[p]honetically it seems obvious” that “Hairūn dates” should refer to HERON OF ALEXANDRIA, although an association with HERAS OF CAPPADOCIA seems “much more tempting” to him. However, a Syriac connection may also be plausible, cf. «ܕܒܝܕܐ ܕܗܝܪܘܢ» and «ܕܒܝܕܐ ܕܗܝܪܘܢ» (translated by BUDGE as “dates of Hiron” and “Hiron”, respectively) in the context of lohocs and remedies for the chest in the Syriac *Book of medicines* XIII (B 236₁₈, 247₁₉), which in MARGOLIOUTH, *Supplement* 100a s.v. ܕܒܝܕܐ is related to a place-name tentatively identified with Ḥīrrān.

¹ No parallel recipe is recorded in *Dukkān*, but cf. AZZAHRAWĪ, *Taṣrīf* XXII.11.4 (S II 122_{10–12}). The same formula, with the same measure (*istārayn*) mentioned only for the amount of linseed, is transmitted by SĀBŪR B. SAHL, *Ṣaḡīr* IX [160] (K 115_{20–116₄}).

² I have retained the spelling *dabīd* used throughout in manuscript P despite the apparently overwhelming prevalence of *dabīd* (only sporadically *dabīd*) in the Andalusī corpus. See the Appendix to this chapter for an etymological proposal related to this word.

³ An identical recipe is transmitted in *Dukkān* IV.13 ذبيد ورد محكم (D 35v 18 – 36r 4 | L 27v 2–13); also IBN ALĠAZZĀR, *Zād* V.6.4 (T 425_{5–13}); and *Hārūniyyah* LVII.3 (G 165_{6–10}).

given in 4.29, in which the distinctive ingredient is indeed Chinese rhubarb (*Rheum palmatum* L.).¹ Finally, two very different recipes for the hepatic of lacquer are selected as 4.31|32. The first one is certainly truncated, since it breaks after the third set of ingredients without providing any instructions for its preparation, nor does it mention any benefits for the drug.² Then 4.32 transmits a recipe for the same drug according to ISḤĀQ B. ʿIMRĀN and it involves the richest list of ingredients of the set (twenty-five in our text, excluding honey) and also claims to heal the widest spectrum of ailments, being unequalled by any other medical remedy.³

¹ That the adjective relates to the drug rather than to the rhubarb is evident from the parallel appellation *dabīdu abwardi lʿušārī* attested elsewhere, cf. an extraneous recipe for this remedy copied in *Dukkān* A 108v 4–11; also IBN WĀFID, *Wisād* XL.19 (A 152₅₋₈). Following a practice that goes back to pre-Galenic times, in the Islamicate corpus compound drugs may include in their name a reference (in the form of a qualifier of the pattern *fuṣāli*) to the quantity of ingredients that enter their preparation. In the case of the *ʿušārī* hepatics of roses and of rhubarb, that number is ten. For the recipe, cf. an identical text in *Dukkān* IV.10 (D 35r 20 – 35v 2 | L 27r 2–10); also AZZAHRAWĪ, *Taṣrīf* III.7 (S I 366_{30-367₂}), where the header specifies that the drug contains Chinese rhubarb. For Qayrawān, cf. IBN ALĠAZZĀR, *Zād* V.6.1 (T 423_{15-424₂}).

² It has no parallel in *Dukkān*. Only the mention of *fiwwah* ‘dyers’ madder’ (*Rubia tinctorum* L.) might prove to be useful in the search of a likely source. Let it be remarked that the two recipes appear to have been copied in an inverted order in P, as indicated by two notes «مؤخر» / «مقدم» added by the copyist on the margin.

³ The text is identical to *Dukkān* IV.12 (A 104r 4–19 | D 35v 6–17 | L 27r 17 – 27v 1), for the header of which the manuscripts show some variation: «ذبيد اللك» D / «ذبيد لكا» L / «ذبيد لكا» A. The same formula is copied also by AZZAHRAWĪ in *Taṣrīf* III.3 (S I 366_{2-3|24-30}). In Qayrawān the recipe for the hepatic of lacquer is reported from IBN ʿIMRĀN’s own autograph (it makes better sense to follow here the reading «في كتابه» of manuscript Ġ than «كتبه» as edited) by IBN ALĠAZZĀR in *Zād* V.6.3 «صفة ذبيد لك على ما وصفه إسحاق في كتابه بخطه» (T 423_{10-425₄}). A remarkably simpler version is recorded as “the lesser [more probable than “the yellow”] hepatic of lacquer” in AṬṬABARĪ, *Firdaws* VI.vi.1 (Ṣ 459_{24-460₃}).

There are two additional drugs that do not fit in the above classification. First, the abridged formula for a drug of mint of unspecified typology («*šifatu fūdanġ*»)¹ in 4.13, which requires the mixture of herbs to be kneaded with honey and is ascribed to ARRĀZĪ.² Then the pill of mastic (*ħabbu lkīyyah*) in 4.26, which should belong with the other pills in *Pharm* 3 and which is actually different from the homonymous recipe recorded below in *Pharm* 6.9.³

Pharm 5 — On syrups and robs

With thirty-one different recipes this chapter is only marginally less rich than the preceding one and it is much more homogeneous too. In fact, in the Islamicate tradition syrups (*šarāb*, plural *ašribah*) and robs (*rub*, plural *rubūb*)⁴ are

¹ Unqualified *fūdanġ* (elsewhere also *fūtanġ*) translates DIOSCORIDES' καλαμίνθη in *Hašāʾiṣ* 3:33 (P 62r17–62v 7 | T 255₂₃–256₁₆) ≡ *Mat. med.* 3:35 (W II 46₁₃–48₁₀), and IBN ĠULĠUL distinguishes three different species: river mint (*fūdanġun nahrī*), mountain mint (*fūdanġun ġabalī*), and wild mint (*fūdanġun barrī*), cf. *Tafsīr* 3:34 (G 49₃₋₅ | D 83₄₋₅). For a brief overview and further references on the identification of Arabic *fūdanġ*, cf. DIETRICH 1988: II 382–383; for the Persian etymology of the word, cf. also VULLERS, *LPLE* I 380a s.v. *يودنة* 'mentha'.

² The same unspecific denomination is transmitted in *Dukkān* III.33 (D 29v 11–15 | L 22r 30–22v 4) and also in AZZAHRAWĪ, *Tašrīf* XI.38 (S I 482₁₇₋₂₀). The source for the formula may well be **alfūtanġī* in ARRĀZĪ, *Manšūrī* IX.74 الخلفة في (B 434₁₇₋₁₉)—the text edited by AL-BAKRY actually reads «معجون الخبث والفوتنجي», which makes no sense at all (the drug does not contain any iron dross) and betrays a misreading (<*معجون الخبث والفوتنجي>), cf. «*id quod fit de scorica, et diaolibanum, et trocisci calefacientes epar quos nominauimus, et electuarium diacalamentum*», immediately followed by the recipe, in *Almansorem* IX.72 (V 48va 8–12). The recipe for the mint drug is indeed an abridgement of GALEN'S τὸ διὰ τῆς καλαμίνθης φάρμακον as described in *San. tu.* IV.7 (K VI 281₈–283₁ | Ko 124₂₁–125₄).

³ For *Pharm* 4.26, cf. a parallel recipe in *Dukkān* V.2 (D 43v 18–22) that is indeed classified amongst pills. A formula by the same name *ħabbu lkīyyah* is handed down by IBN WĀFID in *Wisād* XXIII.5 (A 297₁₁₋₁₃), but while being essentially the same (a combination of aloe and mastic made into pills) it shows a quite different wording. For the synonymy *kīyyah* (< *كيا* < *Χία*) = *maštikā* (= *مصطقي* < *μαστίχη*), see below the note to *Pharm* 6.9.

⁴ Both *syrup* and *rob* are traditional terminology (cf. NORRI, *DMVE* 1068–1076 and 929–930, respectively) and in this case I cannot agree with the use of *beverage* for Arabic *šarāb*, which, while being correct in general, may be to vague in a specifically pharmacopoeical context (*pace* KAHL 2009: 18, 124, 135–145). As far as the *šarāb* category is concerned, there is an undeniable “semantic inflation” of the word as a result of the incorporation of a plethora of herbal wines (invariably translated as *šarāb*) into the Islamicate tradition, not only through the strictly medical corpus but also via *Filāḥah* literature, and due also to the quick proliferation of sugar-based beverages most of which became subsumed into one single nominal category. The details of this polysemy and the interaction with the Islamic legislation and moral codes across time and space cannot be analysed here, but let it be noted that the Christian Syriac tradition, in which the consumption of wine under any denomination was unproblematic, makes use of *ܫܪܒܐ* (cognate to Arabic *ħamr*) in the same context: *ܫܪܒܐ ܕܥܫܪܐ* and *ܫܪܒܐ ܕܪܘܫܐ* ‘wine of honey’ being usually glossed as *šarābu Ḥasal* and corresponding to οινόμελι, *ܫܪܒܐ ܕܪܘܫܐ* ‘wine of roses’ being *šarābu ḥward* and reflecting ῥοδίτης (cf. PAYNE SMITH, *Thesaurus* 1308–1309, and also several examples

often dealt with together since they share the use of sugar (alternatively, and primitively, of honey) for their preparation and differ basically in their consistence.¹ Incidentally, *ḥisbah* manuals usually devote a separate epigraph to adulterations introduced by the *šarābī* (that is the syrup-maker), which shows that the supervision of their activity was a great concern to the *muḥtasib*.²

The recipes collected in *Pharm 5* do not show any systematic arrangement, yet more or less consistent sequences can be distinguished for syrups (with an almost uninterrupted series in 5.1–5|7–8|10 and also 17–22|24–31), whereas robs are not only less numerous but also less clustered (first 5.6 and 5.9, then a single series in 5.11–16, and finally 5.23). The total number of thirty-one recipes is quite low, again, when compared to *Dukkān*, in which at least eighty-seven different syrups and fifteen robs are recorded, in addition to eleven versions of oxymel, seven of julep, and four infusions.³

All syrups and robs in *Pharm 5* are named after the main ingredient of the preparation (which can itself be a compound preparation, as in the case of the sugar oxymel in 5.4), with the sole exception of the syrup in 5.25, which is rather described by its medical benefit. In three instances an explicit—but evidently not immediate—source is mentioned: GALEN for the syrup of fruit in 5.3 and for the rob of mulberries in 5.6, then DIOSCORIDES for the myrtle syrup in 5.20.

شراب — Two recipes are provided for the syrup of fruit first in 5.1 then in 5.3, the latter with an explicit Galenic ascription. The name reflects quite well the diversity of fruits (actually their juice, even if not explicitly stated) that is required for the preparation of the two syrups. According to the first anonymous recipe, one must take quince, apple, citron, pear, pomegranate, and unripe grapes if available; then sumach, medlar (*zuḥrūr/zaḥrūr*), jujube (*nabīq*), myrtle seeds, and service tree (*ḡubayrā?*, *Sorbus domestica* L.) must be thrown into it and left to macerate for one or two days. After squeezing and sifting, the mixture must be

of this nomenclature in the notes to the syrups and robs below).

¹ A detailed and clarifying explanation of the different procedures involved in the preparation of syrups and robs is provided by IBN ĠUMAYŪ in *Iršād* IV.v (L 156v 1–14). On robs, which can be more or less thick, cf. the definition provided by IBN HINDŪ, *Miftāḥu ṭṭibb* VIII s.v. «*arrubbu: mā yuḡlabu mina ššayʿi wayuḥṣar, tumma yuḡbaḥu ḥattā yaḡluḍ*» (Q 846); also AZZAHRĀWĪ, *Taṣrīf* XIII.iv (S I 537³¹–537¹). Incidentally, this use of $\sqrt{ḡlb}$ (or is it $\sqrt{ḥlb}$?) might be relevant for the interpretation of the header of the triphala recorded in *Pharm 1.2*.

² Cf. IBN ALṬUḤUWWAH, *Maʿālim* XXIV في الحسبة على الشرايين (L 115⁵–16), and further remarks also in the next chapter on apothecaries and wax-makers in *Maʿālim* XXV (L 121¹⁴–122⁸); essentially the same text is reproduced by AŠŠAYZARĪ too in *Nihāyah* XIX (A 56¹–57¹⁴).

³ The exact figure in the primitive text of *Dukkān* is hard to assess, since the original order of the folios has been altered by the rebinding of manuscript D and the ending of the chapter is missing from L. As always AZZAHRĀWĪ's *Taṣrīf* stands on a different level of comprehensiveness with some one-hundred and thirty syrups and thirty robs, cf. *Taṣrīf* XIII (S I 509¹²–542²⁷).

patiently boiled until it acquires some consistence—let it be noted that no sugar or honey is added to the preparation.¹ As for 5.3, the original formula copied by GALEN is more complete and also more clearly structured, with indication of specific amounts of each set of ingredients (which otherwise are for the most part the same, although actually less in number) and more detailed instructions for each step of the preparation. In this second recipe a good three ratls of honey are explicitly prescribed in order to give to the mixture the desired thickness.²

The recipe for the syrup of mint in 5.2 is likewise of Greek descentance.³

The recipe for a sugar oxymel in 5.4 would appear to be an Islamicate adaptation, by addition of some sugar, of a Byzantine development of the classical basic ὄξύμελι.⁴

¹ The text of this recipe matches exactly the one in *Dukkān* I.59 (D 10r 20 – 10v 7 | L 9v 18–22), but it is very different from the two syrups of fruit selected by AZZAHRAWĪ for *Taṣrif* XIII.II.7 (S I 519_{17–26}) and XIII.III.8 (S I 534_{11–18}). A very similar yet abridged version of the same drug is recorded in some copies of IBN ALĠAZZĀR' *Zād* I.25 (T 138_{1–3}), where specific mention is made of Kūfi pomegranates and Ṣamgāni apples. That series of recipes is considered, however, a later addition by the BOS and KĀS given that some Arabic witnesses as well as the Hebrew and Latin translations do not include them (cf. B–K 229 n. 382). Our recipe can be compared in its simplicity to IBN ĠAZLAH, *Minhāj* ش-47 شراب الفاكهة (L 134v 17–21) and still to IBN WĀFID, *Wisād* X.54 (A 138_{9–13}), and to IBN ĠUMAYF, *Iršād* IV.V.18 (L 159v 16 – 160r 2). In all these parallel recipes the water, extract, or juice (*māʾ*) of the fruits is explicitly mentioned.

² The same recipe is found in *Dukkān* I.58 too, where it is rubricated as «رب الفاكهة لجالينوس» (D 10v 8–15 | L 9v 11–18), and AZZAHRAWĪ agrees with its classification as a rob in *Taṣrif* XIII.IV.28 (S I 540_{32–5414}). The preparation of «ἡ δὲ τῶν ὀπωρῶν» had been borrowed by GALEN from ASCLEPIADES, *Morb. intern.* I, cf. *Sec. loc.* VIII.III.3 (K XIII 142_{14–1434}).

³ Identical to *Dukkān* I.52 (A 88r 4–10 | D 9v 12–17 | L 9r 4–8), the recipe is essentially an unaltered echo of GALEN, *Sec. loc.* VIII.III.1 (K XIII 142_{4–9}), who copies it word by word from ASCLEPIADES' book. A parallel transmission is documented for the remedy via HUNAYN'S *Maʿīdah* 54r 16–20, where the drug does not however receive any particular name («*ṣifatu dawāʾin yaṣluhu lilḡaty*», which mirrors the Greek «Πρὸς στομάχου ἀνατροπᾶς»), cf. also ARRĀZĪ, *Tag̃ārib* XVI.I.6 (R 47v 23–26). On the other hand, the form *naʿīnāʿ* that features in the header (but not in the body) of the recipe in *Natāʾiḡ* and *Dukkān* is found also in other parallel witnesses, as for instance in IBN ĠUMAYF, *Iršād* IV.V.6 (L 158r 1–4); but not in all of them, cf. IBN ĠAZLAH, *Minhāj* ش-48 شراب النعنع (L 135r 1–3). The formula for this syrup is remarkably similar to that of the rob of mint (*rubbu nnaʿīnāʿ*) in SĀBŪR B. SAHL, *Ṣaḡūr* IV [332] (K 183_{11–17}).

⁴ The recipe does not coincide with *Dukkān* I.13 شراب سکنجین سکرّی (D 1r | L 2v 7–15), but it is very similar to *Dukkān* I.18 سکنجین سکرّی أو عسلّی (D 3r 13 – 3v 2 | L 3r 13–25), also to *Dukkān* I.19 سکنجین عسلّی (D 3v 2–13 | L 3r 26 – 3v 7), and even to *Dukkān* I.22 سکنجین سکرّی (D 4r 6–16 | L 3v 28 – 4r 12). Essential identity obtains, in turn, with IBN ALĠAZZĀR, *Zād* V.9.5 صفة سکنجین سکرّی (T 443_{13–44414}). Amongst the Graeco-Byzantine precedents of the recipe, it can be compared, especially with regard to the herbs involved, to the «ὄξύμελι πικρόν» in AETIUS, *Iatrica* LXXX (O I 292_{5–12}), which is admittedly bitter but it only required some sugar to be turned into a sweet beverage. For the Persian origin of the Arabic word (namely *sikanḡabīn/sikanḡubīn* ≡ ὄξύμελι 'vinegar honey'), cf. VULLERS, *LPLE* II 312b s.v. سکنجین; STEINGASS, *CPED* 689. Syriac صحنجیم seems to be documented rather late (cf. PAYNE SMITH, *Thesaurus* 2634) and probably derives

The syrup made of iron dross described in 5.5 is labelled in other texts an electuary, a digestive, a decoction, etc. In fact, a similar recipe has been previously recorded in *Natāʾiḡ* itself as an electuary in 4.36.¹

Two alternative recipes for the syrup of unripe grapes are given in 5.7–8, the second of which is qualified as “simple” (*sadiḡ*), the difference being explicitly described as absence of honey from the simple version of the drug.² The honeyed preparation goes back ultimately to DIOSCORIDES’ ὀμφακόμελι.³

The protean cluster formed by syrups and robs of poppy in the Islamicate tradition is represented here by one syrup in 5.10 and one rob of in 5.16. Both kinds of preparations are documented in a great variety of more or less similar versions most of which are, however, only distantly related to our text. This seems somehow to mirror a diversity already present in the Greek tradition, since already by the 2nd century CE a number of preparations were available for the drug known as δία κωδύων. Most if not all of them became superseded, of course, by GALEN’s own version of the remedy.⁴

The second series of syrups begins at 5.17 with a syrup of *šāhtarāḡ*,⁵ for which

from Arabic rather than directly from Persian. On a tangential note, the same name was retained for this category of preparations even after sugar had substituted for honey, and the rob of quince or the likes of it for vinegar, cf. ALḤWARIZMĪ, *Maḡātīḡ* II.III.6 (V 176₉–177₁).

¹ For an identical recipe, cf. *Dukkān* I.110 الحديد معمول بمغث الحديدي (D 18r 10–19). Nominal fluidity is shown in the fact that ALMAḠŪSĪ transmits an identical formula under the name of *ṭabīḡu lḡabṭ* in *Kāmil* II.V.16.13 (S II.2 368_{18–23}), certainly inspired by (if not borrowed from) SĀBŪR B. SAHL, *Ṣaḡūr* IV [241] صنعة خبث الحديد المطبوخ (K 147₁₇–148₁₀). An essentially identical recipe is recorded without any specific name in ARRĀZĪ, *Tibb* 79v 14–19, where it is immediately followed by an alternative version in which clarified milk (*rāʾib*) is used instead of wine, cf. *Tibb* 79v 20 – 80r 3. In the *Hārūniyyah* it is even styled a triphala («*itṭīḡalu lḡadid*») and ascribed to GALEN, cf. *Hārūniyyah* II.II.1 (G 331₆–333₃).

² The same minimal sequence is transmitted also in *Dukkān* I.87–88 (A 90r 13 – 90v 4 | D 14v 1–10). The formula for the simple version of the syrup is also identical to *Taṣṭīḡ* XIII.IV.3 (S I 537_{23–26}), which is however registered there as a rob («*ṣīḡatu rubbi lḡiṣṣim*»), which aligns in fact with SĀBŪR B. SAHL, *Ṣaḡūr* IV [326] صنعة رب الحصرم الساذج (K 181_{10–16}). The version transmitted by AṬṬABARĪ for the rob of unripe grapes is also basically the same but for the addition there of some saffron and some cardamom to the decoction, cf. *Firdaws* VI.VI.5.6 (S 483_{10–14}).

³ Cf. *Materia medica* 5:23 (W III 20_{17–21}) ≡ *Ḥaṣāʾiṣ* 5:20 شراب الحصرم (P 112v 4–6 | T 386_{20–25}). Cf. also حصرم حلو translated as حصرم حلو by BAR SAROŠWAY and identified as «*rubbu lḡiṣṣim*» in BAR BAHLŪL, *Lexicon* 191_{1–2}.

⁴ The only identical formula identified so far is found in *Dukkān* I.53 (A 88r 10–17 | D 9v 17–23 | L 9r 9–14). None of the multiple recipes transmitted by IBN ALĠAZZĀR in his different treatises coincides with this one, cf. for instance *Zād* III.6 (T 236_{10–237₂}); *Suṣāl* IV (M 47r 10–19). As for the pre-Galenic tradition, each author seems to have held his own opinion on the exact proportions of poppies and water to be mixed, and GALEN tries to overcome this prevalent διαφώνια by establishing what he thinks to be the most correct version of the recipe, cf. *Sec. loc.* VII.II (K XIII 37₉–45₉), where the versions of ANDROMACHUS, CRITO, HERAS, DAMOCRATES (who mentions THEMISON as the first inventor of this drug), and SORANUS are noted down.

a second different recipe is provided later in 5.26.¹

The syrup of myrtle is recorded in two different versions and it is referred to by the synonym *rayḥān* in both instances: first a minimal formula is given in 5.18 which requires simply boiling down the myrtle after beating it up;² then a version that follows DIOSCORIDES' practice (*madḥab*) is copied in 5.20.³

The case of the syrup of citron in 5.19 is illustrative of the occasional incoherence of pharmacopoeical compilations in general and of the dispensatory included in *Natāʾiḡ* in particular. There is virtually no difference between what here in 5.19 is labelled as “the *syrup* of citrons” and what a few recipes before in 5.15 has been inscribed as “the *rob* of citrons”. The ingredients, the way of preparation, the medical indications for their use—the two formulas are identical in all regards but for a few minimal differences in the exact wording (the instructions for use come after the header in 5.15, at the end of the recipe in 5.19). The relatively high frequency with which such duplicities and even redundant recipes are included in PHARMACOPOEIA may well be reflective of the way in

⁵ Arabic *šāhtaraḡ* is traditionally identified as fumitory (\equiv $\kappa\alpha\pi\nu\acute{o}\varsigma$, *Fumaria officinalis* L.), but this identification may need further scrutiny. In Andalus IBN ĠULĠUL equates *šāhtaraḡ* with DIOSCORIDES' $\gamma\upsilon\tau\gamma\iota\delta\iota\omicron\nu$ in *Tafsīr* 2:119 (G 39₂ | D 56₂₁), whereas IBN ALBAYṬĀR in his own *Tafsīr* 2:121 (B 189₅₋₈) reproaches IṢṬIFĀN for this identification. Now, if DUBLER'S and TERÉS' edition of *Hašāʾiṣ* 2:138 (T 204₁) reads indeed «شاهترج» in the rubric, manuscript P 53r 3 has rather «الشيطرح» and enters the plant as «لبيدون» (ie $\lambda\epsilon\pi\iota\delta\iota\omicron\nu$), which confirms the long-held suspicion of a misidentification and further mistransmission of the original lemma in *Materia medica* 2:137 $\gamma\upsilon\tau\gamma\iota\delta\iota\omicron\nu$ (W I 208₁₇₋₂₀₉₃), cf. DIETRICH 1988: II 285–286 (with references to earlier proposals in this direction, particularly Löw 1881: 37–38). For VULLERS, on the other hand, Persian *šāh tarra* (also *šāhtarah* / *šāhtaraḡ*) is the etymon of Arabic *šīṭaraḡ* and refers to a bitter herb, and he further registers a native identification with Arabic بقلة الملك (cf. *LPLE* II 394a s.vv. شاهترج and شاه تره). A similar interpretation as “master of the vegetables” (*raʿīsu lbuqūl*) was known to IBN ĠANĀḤ, *Talḥiṣ* [986], where the Persian phytonym is actually spelled «شاه ترج» probably following data provided to him by his informant ABULFUTŪḤ ALĠURĠĀNĪ as suggested in BOS, KĀS, LÜBKE, and MENSCHING 2020: 1103. In any case, unless an origin is identified for the recipes of the *šāhtaraḡ* syrup there can be no certainty as to the quiddity of the plant involved—and even then the original drug must have been reinterpreted through time and space according to each author's understanding.

¹ The first recipe is identical to *Dukkān* I.113 (A 93v 20–94r 5 | D 18v 5–10) and the same formula was transmitted still in the 11th c. by IBN WĀFID in *Wisād* XXI.61 and XXIII.31 (A 242₁₋₇, 308₃₋₉). The second version in *Pharm* 5.26, in turn, overlaps largely with AZZAHRĀWĪ, *Taṣrīf* XIV.IV.3 (S I 551₂₂₋₃₀) and with IBN ALĠAZZĀR, *Zād* V.9.8 (T 447₄₋₁₆).

² Cf. *Dukkān* I.97 شراب ريحان ثاني (D 15v 3–5), actually preceded by another recipe for a syrup of myrtle seeds in *Dukkān* I.96 (A 91r | D 15r–15v).

³ Cf. *Dukkān* I.100 (A 91v 7–15 | D 15v 13–19), for which manuscript D reads «رب الريحان» against «شراب الريحان» in A. The same recipe bears the rubric «رب الآس آخر على مذهب دياسقوريدس» in AZZAHRĀWĪ, *Taṣrīf* XIII.IV.19 (S I 539₂₅₋₃₀). The origin of the formula (except for the medical indications, which are certainly a later addition) is found indeed in DIOSCORIDES, *Hašāʾiṣ* 5:25 شراب الآس (P 113r 4–7 | T 388₆₋₉) \equiv *Mat. med.* 5:29 $\mu\upsilon\rho\sigma\iota\nu\acute{\iota}\tau\eta\varsigma$ (W III 22₁₈₋₂₃₂).

which it was compiled.¹

On the other hand, the syrup of the two pomegranates in 5.21 is very different from the simple pomegranate rob in 5.12. Not only does it require, as its name clearly indicates, both sweet and sour pomegranates but its preparation is also somewhat more complex and is explicitly compared to the procedure to make myrtle syrup. No medical indications are provided, nor any benefits mentioned, for this syrup.²

As practically all the remedies that include roses as an ingredient, the syrup of dry roses in 5.22 has a great many parallels in the Islamicate corpus—identical cognates are far fewer, however. The recipe has its origin not in the wine flavoured with roses of the Greek tradition (ρόδιτης) but rather in the analogous ροδόμυελι, that involved honey instead of wine and which was available through DIOSCORIDES and also the *Geoponica*.³

Two different recipes are provided also for apple syrup: a simple and straightforward one in 5.24, according to which the preparation must be left to the sun for forty days prior to storage; a more complex one in 5.27 which, despite the manifest difference in its wording, represents very much the same process of preparation. Neither recipe includes any indications for use, nor do they mention any ailments against which it should be beneficial.⁴

The only instance of a name not based on ingredients is the syrup in 5.25, the benefits of which include cooling the complexion, keeping in check yellow bile, quenching the thirst, stopping biliary vomit, and availing against heart palpitations. As with other similar “nameless” remedies, I have been unable to find any

¹ The same formula for the syrup of citron is transmitted under the same name in *Dukkān* I.91 (A 90v 17–20 | D 14v 19–22) and also in *Hārūnīyyah* II.I.5 شراب الأترج (G 3078–9), but in AZZAHRAWĪ, *Taṣrīf* XIII.IV.13 it is classified as «رب الأترج» (S I 5391–4).

² Nor are they included in the identical recipe in *Dukkān* I.83 (A 89r 22 – 89v 10 | D 13v 16–23 | L 11v 20–27).

³ Cf. AZZAHRAWĪ, *Taṣrīf* XIII.I.9 (S I 5112–4). The text in *Dukkān* I.107 (D 71r 17–20) is highly dubious, as it is copied at the end of the manuscript and has no parallel in the other two witnesses. The specification “dry” for the roses becomes meaningful when compared, for instance, to ALṢAṬṬĀR ALHĀRŪNĪ, *Mīnhāǧ* II.4 صنعة عمل شراب الورد الطري (A 1812–15). In IṢṬIFĀN’S translation of DIOSCORIDES’ text «ὁ καλεῖται ροδόμυελι» is rendered as «wayuqālu lihādā ššarābi “rūdūmālī”», cf. *Ḥašāʾiṣ* 5:23 شراب الورد (P 112v 20–21 | T 38721–23) ≡ *Materia medica* 5:27 ροδιτης (W III 226–8). In the anthology of the *Geoponica* the recipe is found in VIII.29 Ροδομέλιτος σκευασία (B 2256–11), which was translated as «šarābun yusammā birrūmīyyati “روذاهله” wabīlfārisīyyati “جلائحين”» in *Rūmīyyah* IV.103 (M 17314–1744). BAR BAHLŪL, in turn, seems to distinguish clearly between شراب الورد = شراب الورد / šarābu hward and شراب الورد = ḡullāb in *Lexicon* 18819–103.

⁴ *Pharm* 5.24 is identical to *Dukkān* I.80 (A 89r 13–17 | D 13v 7–10 | L 11v 11–14), yet IBN ʿABDIRABBĪH’S version does mention the benefits of the syrup, which happen to be included word by word in *Pharm* 5.14 within the recipe for the apple rob! No parallel is transmitted in *Dukkān* for *Pharm* 5.27, since it does not match *Dukkān* I.81 شراب تفاح آخر (D 13v | L 11v 14–18).

close cognates for this recipe.¹

The recipe for quince syrup of in 5.28 is relatively complex and involves a number of items not devoid of interest for the study of drug-making. Most related versions of the quince syrup, which is also often referred to by its Perso-Arabic name of *maybah* especially in the east, developed from the core tradition inherited from the Greek *κιδωνίτης*.²

The syrup of plums in 5.29 may be a paradigmatic example of linguistic adaptation, which reflects the fact that at some point in the process of transmission and reworking of the recipes a compiler (whether he was an apothecary, a physician, or both) must have taken some active part beyond mere copying and collecting. In this case the local synonym *ḡayn baqar* substituted for the original name of the fruit, namely *iğğās* (also *inğās*).³

The last syrup of the collection is the one made of jujube (*ḡunnāb*, the stone fruit of *Ziziphus jujuba* Mill.) and sebesten plum (*muḡīṭā*, the drupe of *Cordia myxa* L.) in 5.31. The recipe is quite likely of Qayrawānī origin but its actual authorship implies, once again, a problem of interpretation.⁴

مرتب — The recipes for robs share very much the features described for the syrups as far as genetic affiliation is concerned and some of them have actually been incidentally dealt with in the preceding paragraphs.

No trap lies beneath GALEN's rob of mulberries in 5.6, for it does have its ori-

¹ It is reasonably similar, however, to IBN ALĠAZZĀR, *Maḡidah* 194₁₀₋₁₇.

² For the specific recipe in *Natāʔiğ*, cf. the identical version in *Dukkān* I.75 (A 88v 5-18 | D 12v 22-13r 6 | L 11r 15-22). A syrup of quince according to DIOSCORIDES is transmitted in *Dukkān* I.79 (D 13r 22-13v | L 11v 5-11) and the origin of some of the recipes can be located indeed in *Materia medica* 5:20 *κιδωνίτης* (W III 19₂₂₋₂₀) ≡ *Ḥaṣāʔiṣ* 5:17 *الشراب السفرجالي* (P 112r 18-21 | T 386₄₋₁₁).

³ An identical recipe with the same rubric is found in *Dukkān* I.38 *شراب العيون بقر* (L 6v 8-10), which further includes four different recipes for *ṣarābu iğğās* in *Dukkān* I.69-72 (D 12r-12v | L 10v 13-11r 6), and a *ṣarābu lkummaṭrā* in *Dukkān* I.73 (D 12v | L 11r 6-9); to which *Dukkān* II.37 should also be added as further corroboration: «*murabbabu iğğās (wahuwa ḡayūnu lbaqar)*» (D 24v-25r | L 16v 25-17r 6), where the local synonym has been added as a gloss to, rather than as a substitute for, the original name. Amongst eastern sources, ARRĀZĪ's recipe for the syrup of plums (*iğğās*) in *Qūlanğ* IX (H 86₃₋₁₆) probably reflects the same tradition of ALḠILBĪRĪ's abridged version. The geolectal rearrangement of the names for the 'pear' and the 'plum' is not, however, an exclusively Andalusī phenomenon.

⁴ Identical to *Dukkān* I.39 (A 81r 18-81v 12 | D 7r 2-14 | L 6v 10-22) and also to AZZAHRĀWĪ, *Taṣrif* XXII.I.47 (S II 119₂₈₋₁₂₀), neither of which ascribes the recipe to any authority. In Qayrawān IBN ALĠAZZĀR claims the exact same recipe as his own invention («*allaftuhū waṣaḡlaḡtuhū... waqad ġarrabtuhū*») in *Zād* III.6 *صفة شراب العتاب والسبستان* (T 228₁₁₋₂₂₉), and this formula is also transmitted by AZZAHRĀWĪ for a nameless syrup («*ṣifatu ṣarābin allafahū bnu lğazzār*») in *Taṣrif* XIII.136 (S I 51₃₂₋₅₁₆) and again, duplicated, in *Taṣrif* XXII.I.41 (S II 118₃₀₋₁₁₉). Despite all appearances, however, the transmission of the recipe may be more complex than a simple borrowing-with-cancellation.

gin, although certainly through a number of mediating sources, in the *διά μόρων* recorded by the Pergamene physician.¹

The rob of figs in 5.9 combines the simplest composition (just figs are required) with extremely detailed instructions for the selection of the ingredient (which must be as white, ripe, thick, and sweet as possible) and for its decoction.² Likewise, the “simple quince rob” in 5.11 is quite simple indeed and it requires much less industry than the analogous syrup of quince in 5.28, while the core recipe is essentially the same.³

The same parallelism between a simple rob and an unqualified syrup can be seen in the case of pomegranates: in 5.12 a simple rob of pomegranate is recorded and little further a syrup of the same fruit in 5.21. The recipe for the rob is inherited from the Graeco-Byzantine tradition with virtually no alteration, which explains why it can be found with an identical wording also in eastern Islamic sources.⁴

¹ An identical recipe equally ascribed to GALEN is included in *Dukkān* I.104 (A 92r 3–10 | D 15v 10–13), in AZZAHRAWĪ, *Taṣrīf* XIII.IV.29 (S I 541.4–6), and also in *Hārūnīyyah* II.1.5 (G 305.18–307.1). In IBN ʿABDIRABBIH’s dispensatory this recipe is preceded by another three syrups of mulberries and *Dukkān* I.106 transmits an additional recipe for the same rob by SĀBŪR (≡ *Taṣrīf* XIII.IV.27), ultimately from SĀBŪR B. SAHL, *Ṣaḡīr* IV [330] (K 182.6–183.2). Amongst the earliest attestations of the mulberry rob in the Arabic tradition, cf. AṬṬABARĪ, *Firdaws* VI.VI.5.1 (§ 482.1–8), where رُب التوت is equated with *diyāmūrūn* (cf. رُب التوت in PAYNE SMITH, *Thesaurus* 870). A glimpse into the realia associated with drug-making can be gained from the anecdotal details provided by ALKAŠKARĪ about his having prepared a large quantity of rob of Syrian mulberries at his master’s house, cf. *Kunnāš* XIX (S 1837–15). The preparation and uses of the *διά μόρων φάρμακον* (also referred to as «τὸ διά τοῦ χυλοῦ τῶν συκαμίνων φάρμακον») is discussed by GALEN at some length in *Sec. loc.* VI.1 (K XII 899.7–905.6), and he further reports earlier recipes from HERAS and ANDROMACHUS in *Sec. loc.* VI.5 (K XII 929.3–931.8). On a side note, *Natāʾiḡ* P reads clearly «توت» in this locus, at variance with the form توت that is prevalent throughout the compilation, which is a good indicator of the degree of source-dependence that obtains in the transmission of pharmacopoeical formulas.

² Cf. the same formula in *Dukkān* I.110 (D 16v 15–22) ≡ *Taṣrīf* XIII.IV.2 (S I 537.15–23).

³ There is no rob of quince in the extant text of *Dukkān*, nor does *Pharm* 5.11 match any of the several recipes for quince *syrup* that are registered there. An identical recipe with the same header is found, however, already in SĀBŪR B. SAHL, *Ṣaḡīr* IV [323] صنعة رُب السفرجل الساذج (K 180.7–15). This rob is an expansion of DIOSCORIDES’ *μηλόμελι/κυδωνόμελι* in *Materia medica* 5:21 (W III 207–10) ≡ *Ḥaṣāʾiṣ* 5:18 ميلومالي الذي يُقال له فيقال له (P 112r 23 – 112v 1 | T 386.12–15); cf. also the explanation «صنعة رُب السفرجل والعسل» in BAR BAHLŪL, *Lexicon* 10737–8.

⁴ This version of the rob of pomegranates is certainly a cognate of the one transmitted under the same name by IBN ʿABDIRABBIH, but half way through the recipe both texts diverge: *Natāʾiḡ* stops after boiling the juice down to a fourth, whereas in *Dukkān* the recipe goes on for a little while only to end with the same medical benefits, cf. *Dukkān* I.84 (A 89v 10–16 | D 89r 22–89v 10 | L 11v 27–32). An identical recipe is provided by ALMAĠŪSĪ, *Kāmil* II.V.20.24 (S II.2 394.2–5), and also by IBN ĠAZLAH, *Minhāḡ* شرب الرمان 49–ش (L 135r 4–6), this not being the only case in which an author’s syrup corresponds to another one’s rob or vice versa. Amongst the earliest attestations of the pomegranate rob in the Islamic corpus there is SĀBŪR B. SAHL, *Ṣaḡīr* IV [324]

The parallelism syrup/rob extends to the remainder of the recipes for robs: the myrtle rob in 5.13 is practically identical to the myrtle syrup that is recorded in 5.18—and both are different from DIOSCORIDES' myrtle syrup in *Pharm* 5.20 in that they do not include any grape juice.¹

The first recipe for an apple rob in 5.14 apparently includes a double ending: after the usually closing indication “and let it be used” the instructions to reduce it to a fourth then letting it cool prior to use are evidently redundant and must be the result of some conflation. Either the author or a copyist inadvertently merged two different recipes. Identification of the “missing recipe” has been impossible so far.²

As for the rob of citron in 5.15, let it be recalled that it is actually a duplicate of the syrup of citron in 5.19 (or the latter is a duplicate of the former).³

As it has been explained above, the recipe for a poppy rob in 5.16 must be studied within the context of the rich Islamicate tradition that developed around the inherited δὲ τῶν κωδεῖων. The research for parallels has been rather frustrating so far,⁴ as there seem to be almost as many variations as instances of this drug in the corpus, most of them being just slightly different from each other and none identical to ALḤILBĪRĪ'S. The task is further complicated by the apparently

صنعة ربت الرمان الساذج (K 180₂₂–181₂). The explicit reference to the rob being “simple” is justified by the circulation of more elaborate recipes, as for example the one to which mint was added, cf. IBN ALĠAZZĀR, *Zād* IV.10 ربت الرمان المتخذ بالنعنع (T 323₅₋₁₀). Several formulas for the δὲ τῶν ῥοιῶν στοματικόν (also στοματικὴ ἢ δὲ ῥοιῶν) are recorded by GALEN: his own choice preparation is found in *Sec. loc.* VI.4|6 (K XII 919₆–920₇, 949₉–951₇), and ANDROMACHUS' and CRITO'S recipes in *Sec. loc.* VI.6 (K XII 931₉–932₁₃, 933₁₃–934₁₅ respectively).

¹ The formula copied in *Pharm* 5.13 does not correspond to any of the recipes for the rob/syrup of myrtle in *Dukkān*, but it is identical to SĀBŪR B. SAHL, *Ṣaġīr* IV [325] صنعة ربت الآس (K 181₄₋₇). A somewhat expanded version showing partial overlapping is transmitted in AZZAHRAWĪ, *Taṣrīf* XIII.IV.18 (S I 539₂₀₋₂₄). The preparation is essentially the same as DIOSCORIDES' μυρτίτης in *Materia medica* 5:28 (W III 22₉₋₁₇) ≡ Ḥašāʾiṣ 5:24 شراب حب الآس (P 112v 21 – 113r 3 | T 387₂₄–388₅); cf. Syriac ܩܘܪܒܐ ܕܪܘܡܐܢܐ (for IṢṬĪFĀN rather «مرطيطس») rendered as رومان ربت in BAR BAHLŪL, *Lexicon* 104₁₆₋₁₇.

² The medical benefits attributed here to the apple rob are identical, in fact, to the ones transmitted for the apple syrup in *Dukkān* I.80 (see the remarks to *Pharm* 5.24). The formula, in turn, is found in SĀBŪR B. SAHL, *Ṣaġīr* IV [327] صنعة ربت التفاح (K 181₈₋₂₃).

³ It is however significant that AZZAHRAWĪ does include an identical recipe under the exact same header in *Taṣrīf* XIII.IV.13 (S I 539₁₋₄). The text of the recipe goes back, without any noticeable modification, to SĀBŪR B. SAHL, *Ṣaġīr* IV [331] صنعة ربت الأترج (K 183₄₋₉). An alternative formula for a citron rob was available in *Dukkān* I.92 (A 90v 21 – 91r 5 | D 14v 22 – 15r), which transmits a preparation ascribed to IBN MĀSAWAYH (≡ *Taṣrīf* XIII.IV.14 (S I 539₄₋₈)).

⁴ Not so the identification of the origin of the formula, since the same text is recorded by SĀBŪR B. SAHL, *Ṣaġīr* IV [337] صنعة ربت خشخاش الساذج (K 186₄₋₁₁). This recipe for the “simple rob of poppies” is there followed by a more complex formula that requires not only sugar but also saffron, pomegranate blossoms, and juice of hypocist, cf. *Ṣaġīr* IV [338] (K 186₁₃–187₃), which is an echo of GALEN'S favourite version of this drug.

random alternation of *rob* and *syrup* for what often are actually just two attestations of the exact same recipe—and even the lohoc of poppies ought to be added to this equation.¹

Finally the rob of sour apples in 5.23 is identical to the recipes registered by both IBN ʿABDIRABBIH and AZZAHRĀWĪ and includes a reference to the preparation of a similar rob of sweet apples.²

جلاب — A solitary recipe for a sugar julep is also included almost at the end of the section at 5.30, with the combined denomination *šarābu ǧullāb sukkarī*. Comparison to the cognate recipe in *Dukkān* reveals a parablepsis in *Natāʾiǧ*.³

Pharm 6 — On pastilles and confitures

These two categories of compound drugs represent two very different challenges from the point of view of source criticism. While the main difficulty in dealing with formulas for pastilles is having to navigate through the wealth of recipes accumulated generation after generation in the Islamicate tradition, the preparations that are here labelled as “confitures” require elucidating first the nature itself of the drug and the origin of its name. In the text of *Natāʾiǧ* once again the order of the elements in the title is not reflected in the arrangement of the recipes, since the subsection opens indeed with a *buḥtaǧ* and there are even a few drugs that are neither pastilles nor a *buḥtaǧ* but rather pills. In the survey that follows, however, the formulas are distributed in three sets for ease of presentation.

مخج — Only two confitures are included as 6.1|6, both of which are simply qualified as subtle (*laṭīf*) and complemented by a description of their medical effect.

As indicated above, the quiddity of the drug is uncertain. The label *buḥtaǧ* if far from standard in the Islamicate corpus and the word is not even registered

¹ All these three categories of drugs are represented, indeed, in the glosses of Syro-Arabic lexicographers as equivalents to the دِيَاقُودَا (> *dīyāqūda*), cf. PAYNE SMITH, *Thesaurus* 872. For GALEN’s extensive coverage of the diversity of recipes for the drug of poppies, cf. the references to *Sec. loc.* provided above for *Pharm* 5.10.

² Cf. *Dukkān* I.82 رَبِّ النَّفَّاحِ الحامض (D 13v | L 11v 18–20) ≡ *Taṣrīf* XIII.IV.6 (S I 538_{1–4}).

³ IBN ʿABDIRABBIH collects four different recipes for sugar juleps in *Dukkān* I.10–13 (D 4r 21–5r 1 | L 4r 21–4v 23), of which this is the last one: *Dukkān* I.13 صفة شراب جلاب سكرى (D 4v 18–5r 1 | L 4v 15–23). An also identical text is transmitted in *Hārūnīyyah* II.I.7 صناعة شراب الجلاب (G 315_{13–16}), whereas a noticeably more complex but at the same time largely overlapping recipe is registered by AZZAHRĀWĪ as «صفة شراب الجلاب العائى» in *Taṣrīf* XIII.I.1 (S I 509_{19–31}). Earlier precedents include AṬṬABARĪ, *Firdaws* VI.VI.5 عمل الجلاب (S 486_{3–7}), which does not require sugar but rather honey. For the Persian etymon of Arabic *ǧullāb*, cf. VULLERS, *LPLE* II 1017b s.v. كُولاب ‘aqua rosacea’. The equivalence to Arabic *māʾu lward* was well known even to non-Iranian physicians and apothecaries, cf. IBN ABILBAYĀN, *Dustūr* V.I.1 صفة شراب الجلاب (S 45_{1–5}).

in the usual non-native dictionaries.¹ On the purely lexicological side, the most evident suggestion is to link it to *maybuḥtağ* ‘boiled grape juice’, which is abundantly documented, east and west, since the early Syro-Arabic phase and which has a transparent Persian etymology.² This is in fact the meaning with which the word *buḥtuğ* (this is the vocalisation apparently recorded by IBN MANḌŪR) is known in the Islamic tradition through ḥadīṭ, as shown in the following anecdote from ANNAḤŪĪ (d. ca 717 CE):³

IBN MANḌŪR, *Lisān* II 211a 21–24 s.r. بَحْتَجُ

بَحْتَجُ — فِي حَدِيثِ النَّخَعِيِّ: «أَهْدَيْتَنِي إِلَيْهِ بَحْتَجُ، فَكَانَ يَشْرِبُهُ مَعَ الْعَكْرِ (الْبَحْتَجُ: الْعَصِيرُ الْمَطْبُوحُ، وَأَصْلُهُ بِالْفَارْسِيَّةِ «مَيْبُحْتَه» أَيْ «عَصِيرُ مَطْبُوحٍ»)، وَإِنَّمَا شَرِبَهُ مَعَ الْعَكْرِ خَيْفَةً أَنْ يَصْفِيهِ فَيَسْتَنْدَ وَيُسْكِرُ».

Now, neither of the recipes in *Natāʾiğ* contains any grapes (raisins enter, admittedly, the preparation of 6.6 but they are dry, literally juiceless, grapes), let alone any wine. But then, in the aforementioned entry in *SDA DOZY* provides a helpful reference to a passage from the sixteenth-century traveller Leonhard RAUWOLF in which two different ways of preparing *Pachmatz* in Syria are described. The final product obtained from the second one was used as a preserve since it is “wie Honig so dick”.¹ Whether RAUWOLF’s *Pachmatz* reflects *mibaḥtağ* as DOZY affirms or perhaps rather a form akin to *buḥtağ* remains unclear, but

¹ It is significantly missing from both DOZY, *SDA* I 54 and CORRIENTE, *DAA* 38; nor is it found in LANE, *AEL* 158.

² The origin of the word in Persian *may puḥtah* ‘cooked wine’ (cf. MACKENZIE, *CPD* 55 *may* ‘wine’, and *CPD* 69 *poxtan*, *pax-* ‘to cook’, ‘to bake’) is already signalled by DOZY, *SDA* II 626b s.v. مَيْبُحْتَجُ and more recently CORRIENTE suggests reading the Arabic word rather as *maybuḥtağ* precisely on account of its origin (cf. *DAA* 5161b *{MYBXTJ}, where the word is attested exclusively from DOZY’s dictionary); cf. also ULLMANN 1971: 288. By a curious coincidence *maybuḥtağ* is actually absent from the extant text of *Natāʾiğ*, but attestations of this word in Andalus are almost as abundant as in the east (from where they were in fact inherited), cf. *maybuḥtağ* in ALHĀŠIMĪ, *Mağālis* II (K 148). Physicians used to call *rubbu lʿinab* ‘rob of grapes’ *maybuḥtağ* according to ARRUNDĪ, *Ağdiyāh* V.4 (W 102v 16).

³ The questions raised about its lawfulness since the very beginnings of the Islamic tradition attest to its prevalence in the region, especially in pre-Islamic Syria. The abundance of documentation on a variety of fruit juices, both fermented and unfermented, provided by Islamic legal literature does not seem to have been fully exploited by historians of Islamicate medicine and the conceptual distinctions transmitted in Sunnah compilations and punctiliously glossed by jurists are often overlooked when dealing with the presence or absence of “wine” in the texts of Muslim physicians. The matter cannot be pursued here but suffice it to note that while not one single mention of *ḥamr* can be found in the whole collection of *Natāʾiğ* (except for *ḥallu ḥamr* ‘wine vinegar’), such derivatives of the grape as *šarāb*, *ṭilāʾ*, and *nabīd* are pervasive and were presumably unproblematic for its Muslim readership.

¹ Cf. RAUWOLF 1582: 105^{19–21}.

the interesting fact here is there is some external (that is non-strictly medico-pharmacognostic) support for the interpretation of Arabic بختج as a kind of preserve or confiture, the latter word being preferred here so that a distinction can be made with *murabbā* ‘preserve’.

If the *buḥtaǧ* attested in the medical tradition is then assumed to be some kind of fruit confiture, ALʿILBĪRĪ’S two recipes match perfectly the definition, especially the second one, which is specifically recommended for patients who are not used to taking medicines—which seems to imply a particularly palatable preparation.

With regard to the possible origin of these two formulas, the search for parallels and precedents has not yielded yet any positive results beyond the rather unsurprising fact that they are both shared with IBN ʿABDIRABBIH.² This category of drugs is relatively well documented in the Islamicate west, however: confitures are mentioned by this name in Qayrawān by IBN ALĠAZZĀR and also in Andalus by AZZAHRĀWĪ. In the 11th c. IBN WĀFID notes down a few different recipes and still in the next century ZUHR apparently intended to devote a separate chapter to them in his *Nuǧh*.³

² Cf. *Dukkān* VI.8 (D 47r 10–22 | L 37v 26 – 38r 8) for *Pharm* 6.1 and *Dukkān* VI.5 (D 46v 9–13 | L 37r 26–31) for *Pharm* 6.6.

³ From IBN ALĠAZZĀR’S testimony we know that an internal (otherwise broken) plural *baḥātiǧ* was also available, cf. *Zād* VII.19 (T 660₂). For AZZAHRĀWĪ, see for instance a *buḥtaǧ* being mentioned alongside the stomachic pill against headache in *Taṣrīf* II (S I 63₂₇). The recipe transmitted by IBN WĀFID in *Wisād* XXI.63 (A 243₁₋₇) must actually belong to the same tradition of *Pharm* 6.1 (the ingredients are characteristically similar), whereas there is no resemblance with either *Wisād* XXIII.8 بختج المحرورين (A 298₇₋₁₄) or XXIII.30 صفة بختج مأمون (A 307_{11-308₂}). Two additional recipes for *baḥātiǧ* are included by IBN WĀFID in the second part of his *Tadkirah*, cf. G 13v 5–13 and particularly G 15v 24 – 16r 1. As for ZUHR, the index of contents announces a Chapter III في البخاخ (cf. A 102₁₁₋₁₂) but the projected structure of the book was perhaps never implemented. The extant text transmits, nonetheless, a recipe for a بختج that avails against itch, mange, and ulcers (A 144₁₈₋₂₃).

قرص — Pastilles, on the other hand, are far less enigmatic but lend themselves to a much more complex task of source research.¹ The thirteen recipes selected by ALḤILBĪRĪ are distributed in two series: 6.2–5 and 6.10–15, the continuity of the sequence being broken by three recipes for pills (*ḥabb*) that would taxonomically belong above in *Pharm* 3.² The general nomenclature convention applies also here and in all cases the names of the drugs reflect their more characteristic ingredient.

Two different tabasheer³ pastilles are recorded as 6.2|10 (despite the different header «قرص الطباشير», 6.10 is actually a duplicate) and 6.3. The first of them has a parallel in *Dukkān*, both have a possible precedent in the Qayrawānī corpus, and only the second one, which is to be taken with some Persian manna,⁴ can

¹ In translating *qurṣ* (plural *aqrāṣ* and rarely also *aqrīṣah*) as ‘pastille’ I follow previous practice (cf. once again KAHL 2009: 18, 120–129) since none of the other possible synonyms (lozenge, tablet, pellet, troche) brings any significant improvement. The historically corresponding term in the English tradition would be *trocis* / *trochisk*, from Latin *trochiscus* and this in turn from Greek τροχίσκος, but the word is obsolete (which would not be however a deterrent according to the criteria observed in this dissertation) and the same meaning is conveyed by *pastille* with no perceptible semantic loss.

² The total figure (from which one item must be subtracted since it is a mere duplicate) is quite low. In the earliest Syro-Arabic tradition IBN SARĀBIYŪN records no less than seventy-one different recipes for pastilles, cf. *Kunnāṣ* VII.XVIII عة الأقراص النافعة لكل في (L 108r 4 – 123v 7) ≡ *Breviarium* VII.XVIII *De trocisci conferentibus ad omnem egritudinem* (V 68va 32 – 70va 15), and SĀBŪR B. SAHL gathers as many as forty-four in *Ṣaḡīr* X [171–214] (K 119₁₅–136₂₀), plus an additional two mentioned in the chapter on electuaries, although this number is remarkably lower in the Ṣaḡudī recension, which contains twenty-seven recipes, cf. *Ṣaḡudī* I.1–27 (K 24₁–31₂₄). In the Andalusī context, IBN ʿABDIRABBIH’s selection is only marginally richer than *Natāʾiḡ* with seventeen recipes in *Dukkān* VII في الأقراص (D 47r 22 – 49v 10 | L 38r 9 – 40r 11), whereas AZZAHRAWĪ sets a record at least for the western Islamicate tradition with over one hundred pastilles, which are further subclassified as purgative, non-purgative, and neutral, in the homonymous chapter of *Taṣrīf* XVII (S II 2₁–16₈).

³ The ultimate origin of Arabic *ṭabāṣīr* can be safely affirmed to be some Indian form akin to Sanskrit त्वक्क्षीरा *tvakṣīrā* ‘bark-milk’, ‘bamboo manna’ (cf. MONIER-WILLIAMS, *SED* 463c), which was most probably mediated by Persian (echoed perhaps by لاجص in BAR BAHLŪL, *Lexicon* 786). The identification of the element referred to by this word, however, is far less straightforward. A meaning not dissimilar to the original one of bamboo milk seems to be warranted for most if not all recipes stemming from the Irano-Arabic tradition, but already by the early 10th c. the word had become a sort of blanket term for a variety of whitish ash-like substances. Thus in Andalus IBN IṢḤĀQ equated it with “snake ashes” (*ramādu ḥayyah*) according to IBN ĠANĀḤ, *Talḥīṣ* [904], while in the explanatory appendix of the *Hārūnīyyah* snake ashes are defined as *ṭabāṣīr* and also as ivory (*Ṣaḡmu lfil*), cf. *Hārūnīyyah* II.IV [223] (G 40₁₀), which may echo the Qayrawānī tradition attested in IBN ALĠAZZĀR, *Iṣtimād* III.22 (S 103_{19–20}). For a comprehensive concordance on *ṭabāṣīr* in the Islamicate tradition and some invaluable remarks on the history of the word, cf. KĀS 2010: 765–769, and also BOS, KĀS, LÜBKE, and MENSCHING 2020: 1035–1036.

⁴ For *ṭaraṅḡabin*/*ṭaraṅḡubin* as a borrowing from Persian *tarangubin* (occasionally also *talangubin*) ‘fresh [or ‘moist’] honey’, cf. VULLERS, *LPLE* I 440b. In the pharmacognostic tradition

be positively linked to eastern sources.¹

Two slightly different formulas are likewise copied for the pastilles of camphor. If 6.4 were really unparalleled in the western tradition as it seems to be, it might provide some insight into the sources of ALʿILBĪRĪ's collection.² The camphor pastilles according to SĀBŪR's recipe in 6.12, in turn, are somewhat of a commonplace in the genre.³

The fact that barberry pastilles in 6.5 are unasccribed whereas in *Dukkān* the authority of IBN ʿIMRĀN is invoked may serve as a cautionary example of how any conclusions on the sources of PHARMACOPOEIA cannot be hastily drawn from a shallow overview of the collection but must, on the contrary, await for the careful and exhaustive analysis of each recipe and also of the compiling and quoting strategies deployed by the different authors involved in the Qayrawānī–Andalusī tradition. Until then, there is as much (or as little) justification for reproaching ALʿILBĪRĪ for deliberately cancelling his sources as there would be for making him an ORIBASIUS who skipped all intermediaries and cited only the original texts.⁴

tarangabeen is often identified as the “manna” (actually the product of an insect) found on alhagi or camelthorn (*Alhagi maurorum* Medik. = *Hedysarum alhagi* L.). Although it has sometimes been translated as “alhagi” (cf. KAHL 2007: 178, 179, and *passim*), it seems preferable to preserve the distinction between the plant and the manna itself.

¹ For *Pharm* 6.2|10, cf. *Dukkān* VII.5 (D 47v 18–21 | L 38v 4–9) ≡ IBN ALĠAZZĀR, *Zād* V.7.7 (T 432_{10–16}). For *Pharm* 6.3, in turn, cf. AZZAHRĀWĪ, *Taṣrīf* XVII.1.4 (S II 2_{26–30}) ≡ IBN ALĠAZZĀR, *Zād* V.7.8 (T 432_{17–433₂}). Both affirm that these pastilles were invented by IBN MĀSAWAYH but only IBN ALĠAZZĀR specifies that he did so in *Kitābu nnuġh* (the same treatise that was reproduced in *Nat* II.2, which may be of some significance). A very similar formula is noted down in SĀBŪR B. SAHL, *Ṣaġūr* X [177] صفة أقراص الطباشير بالتنجيين (K 122_{9–16}) ≡ *Ṣaḍudī* I.1 (K 24_{5–10}).

² Unlike the recipe for camphor pastilles according to SĀBŪR in *Pharm* 6.12, this one is not included in *Dukkān*, nor in *Taṣrīf*, which is all the more striking because AZZAHRĀWĪ records as many as four different recipes for camphor pills in addition to the ones by SĀBŪR, cf. *Taṣrīf* XVII.III.3|5–7 (A 40_{19–42₁₂} | S II 8_{1–24}). A recipe literally identical to *Pharm* 6.4 is found, however, in IBN SARĀBIYŪN, *Kunnāṣ* VII.XVIII.29 (L 114r 12 – 114v 7) ≡ *Breviarium* VII.XVIII.29 (V 69rb 50–58), which certainly opens the question of a possible direct access to eastern sources without the mediation of Qayrawānī compilations—IBN MĀSAWAYH's *Nuġh* being a possible candidate for such a mediation.

³ Cf. *Dukkān* VII.6 (D 47v 21 – 48r 4 | L 38v 9–16) ≡ *Taṣrīf* XVII.III.4 (A 41_{3–9} | S II 8_{1–5}) ≡ IBN ALĠAZZĀR, *Zād* V.7.9 (T 433_{3–9}); to which one should add also the interesting testimony of *Hārūniyyah* I.VII.3 جوازاد بن جوازاد باب عمل أقراص الكافور على نسخة سابور بن جوازاد (G 163_{17–165₅}). It is worth noting that IBN ALĠAZZĀR ascribes the composition (*taʿlīf*) of these pastilles (with the exact same name «*aqrāṣu lkāfir ṣalā nushati Sābūr*») to IBN ʿIMRĀN. The universal attribution of the recipe to SĀBŪR B. SAHL is verified by *Ṣaġūr* X [214] (K 136_{13–20}).

⁴ The identical recipe for barberry pastilles ascribed to IBN ʿIMRĀN is found in *Dukkān* VII.7 (D 48r 5–11 | L 38v 17–24) ≡ IBN ALĠAZZĀR, *Zād* V.7.11 (T 433_{17–434₃}). The parallelism (and most probably dependence) goes beyond that, since the two texts record also another recipe for barberry pills (now named «*aqrāṣu lʿamīrbārīs*») according to SĀBŪR, which is related (but

The most remarkable thing to note about the recipe for the pastilles of roses in 6.11 is that while they are shared with *Dukkān* and with the Qayrawānī tradition, they do not appear to have been included by AZZAHRĀWĪ in his comprehensive collection.¹

No match could be found for the pastilles of violets in 6.13,² but the pastilles of rhubarb in 6.14 are quite well documented,³ and so are the pastilles of worm-wood registered in 6.15.⁴

حَب — The intervening sequence 6.7–9 transmits the recipes for three pills. For the first one, the apparently straightforward interpretation of its name as “Al-maʾmūn’s pill” («حَبّ المأمون» in both *Natāʾiḡ* and *Dukkān*) is negated by the unambiguous testimony of AZZAHRĀWĪ as to the pill *being called* “the trustworthy”.⁵ The same observation applies to 6.8: if interpreted in a literal way its name is as promising (a drug by the author himself) as problematic (the same name features also in *Dukkān*). If, on the other hand, it is taken to reflect the aforementioned syntactic feature, it should be understood accordingly as “the compound (?) pill”.⁶

not identical) to SĀBŪR B. SAHL, *Ṣaḡīr* X [204] صنعة أقراص الأمبرباريس (K 132₂₀–133₅) ≡ *Ṣaḡudī* I.4 قرص الأميرباريس الكبير (K 25₂–9).

¹ Cf. *Dukkān* VII.4 (D 47v 14–18 | L 38r 30 – 38v 3) ≡ IBN ALĠAZZĀR, *Zād* V.7.6 (T 432₄–9). The recipe is found also *Hārūniyyah* I.VII.3 الوارد باب عمل أقراص الورد (G 165₁₁–15). At least six different recipes for pastilles of roses (and an additional one for pastilles of roses and tabasheer) are collected amongst neutral pills in *Taṣrīf* XVII.III.1|11|21–24 (A 40₂–47₃ | S II 7₂₃–10₂₅) and, while some of them bear a significant resemblance to *Pharm* 6.11, none of them can be considered a strict cognate; nor can the purgative pastilles of roses in *Taṣrīf* XVII.II.2 (A 32₆–11 | S II 4₁₃–17).

² Their recipe is not the same that IBN ʿABDIRABBIH records in *Dukkān* VII.10 أقراص البنفسج (D 48v 1–8 | L 39r 12–20), nor the one in *Taṣrīf* XVII.1.5 (A 29₃–11 | S II 4₃₀–54).

³ Both *Dukkān* VII.3 (D 47v 9–14 | L 38r 22–29) and IBN ALĠAZZĀR, *Zād* V.7.2 (T 430₁₀–17) attribute the same recipe to IBN ʿIMRĀN, but it is transmitted in unascrbed form by IBN ALĠAZZĀR himself in *Tuhāl* 75r 4–11. The recipe was already fixed by the time of SĀBŪR B. SAHL’s *Ṣaḡīr* X [181] (K 124₆–13) ≡ *Ṣaḡudī* I.20 (K 30₂–6), and even earlier in IBN SARĀBIYŪN, *Kunnāš* VII.XVIII.20 (L 112v 6–11) ≡ *Breviarium* VII.XVIII.20 (V 69ra 57–63).

⁴ Cf. *Dukkān* VII.1 (D 47v 1–3 | L 38r 30 – 38v 3). In the east, the recipe was available to IBN ĠAZLAH, *Mūhāḡ* (L 173v 10–13). A probable Greek precedent can be found in ASCLEPIADES’ recipe in *Morb. intern.* III as reported by GALEN, *Sec. loc.* VIII.VIII.4 under the name «Τροχίσκος ἡπατικὸς ὁ πικρὸς» (K XIII 209₁₅–210₃).

⁵ It is, therefore, yet another example of the common non-normative noun phrase pattern in which only the adjective bears the definite article. The recipe is found with the exact same wording in *Dukkān* V.13 (D 45r 16–22 | L 36r 3–11), whereas the version recorded by AZZAHRĀWĪ must reflect a different parallel tradition, cf. *Taṣrīf* VI.72 “صفة حبّ يُسْتَعَى” المأمون (S I 414₂₈–30).

⁶ The same «حَبّ المؤلف» is found in *Dukkān* V.5 (D 44r 12–16 | L 35r 6–10). It bears some resemblance in its composition to AṬṬABARĪ’s *habbu lbūnārīstānī* in *Firdaws* VI.VI.2 (Ṣ 467₂₁–468₃). Of course, “the compound pill” would need some justification as a valid name given that *all* pills are compound, and it is indeed probable that some other meaning of *allaf* (perhaps even

Finally *habbu lkīyyah* in 6.9 is a more standard designation after the most characteristic ingredient of the recipe (namely mastic, ie the resin of *Pistacia lentiscus* L.) but it is also an inherited synonym for the *šabyār* pill—although the author may have been unaware of this synonymy.¹

Pharm 7 — On alcofols, siefs, and drugs for the eyes

After the interpolated text of *Nat IV* DIETETICS there follows, with no solution of continuity in manuscript P, a chapter on collyria. With just eight recipes the subsection is admittedly poor when compared to the impressive fund of remedies that was already available in Andalus by the end of the 10th c.

From a typological perspective the brief catalogue of compound drugs registered in *Pharm 7* comprises five alcofols, two siefs, and a basilicon, apparently to the exclusion of other well-established categories.² A simple look at the actual instructions for the use of each item shows nevertheless that there is no univocal relationship between nomenclature and mode of application. Thus, with regard to the drugs that are here specifically named alcofols (that is *kuḥl*), only

of *ālaḥa*) is intended here; cf., in fact, the recipe for «*alʿiṣyāfu lmaʿrūfu balmuʿallāfi ssādīḡ liḡālinūs*» in ALḤAṬṬĀR ALḤĀRŪNĪ, *Minhāḡ* XIII.16 (A 146₅₋₁₀), where *assādīḡ* ‘simple’ necessitates an alternative interpretation for *muʿallāf*.

¹ The formula is identical to *Dukkān* V.2 (D 43v 18–22), where an alternative recipe is recorded also a little further in *Dukkān* V.7 حَبِّ الكَيْتَةِ عَلَى خِلاَفِ الْأَوَّلِ (D 44v 4–7 | L 35r 22 – 35v 1). Neither of the two recipes collected by AZZAHRĀWĪ coincides with *Pharm* 6.9, cf. *Taṣrif* VI.70–71 حَبِّ الكَيْتَةِ (S I 414₂₄₋₂₈), but a noteworthy synonymy is transmitted there according to which *habbu lkīyyah* is another name for *habbu ššabyār* (see the complementary notes appended to this chapter). For *kīyyah* (also *kīyyā*) as a synonym for *maṣṭikā*, see «*kīyyah (wahuwa lmaṣṭikā rrrūmī)*» in ARRĀZĪ, *Ṭibb* 80v 17–18 (the manuscript reads «كَيْه»); and also IBN ĠANĀḤ, *Talḥiṣ* [476] «*kīyyā huwa lmaṣṭikā*» and the commentary thereon in BOS, KĀS, LÜBKE, and MENSCHING 2020: 650, where its Syriac etymology is found in حَم (itself from Greek Χία, cf. PAYNE SMITH, *Thesaurus* 1721–1722). The substantivisation of the feminine ἡ Χία as a synonymous denomination for μα-στῖχη (through [μαστῖχη] Χία) goes back to later Greek sources.

² The most usual translation of *kuḥl* as a compound medicine is, of course, ‘collyrium’, and there may be little semantic conflict (or none at all) when rendering generic *akḥāl* by an unspecific plural ‘collyria’, since it often serves as a hyperonym for eye remedies in the Islamic tradition, cf. for instance SĀBŪR B. SAHL, *Ṣaḡīr* XVI (K 195₁₂₋₂₀₃₂₀). Now, in the context of a finer distinction between several different kinds of “collyria” it may not be overtly pedantic to try to reflect this original diversity, even in its blurriness, by resorting to categories inherited from the Arabo-Latin tradition whenever this is possible (eg *alcofol*, *sief*, or *burud*). In the case of Latin *alcofol* (for which cf. Catalan *alcofol* and older Castilian *alcofol*), the word had some marginal circulation in Middle English referring precisely to a fine powder (cf. NORRI, *DMVE* 37 s.v.). For my choice of ‘sief’ and its Arabic etymon, see the Appendix to this chapter. Those eye remedies traditionally labelled as *darūr* and *barūd* are mentioned elsewhere in *Nat I* (see *On stones* and *On the shelf-life of drugs*) and it is probable that the lost chapter on the ailments of the eyes in *Nat II.2* may have contained not only further references to the diverse kinds of compound ophthalmological remedies but also actual recipes for at least some of them.

once does an etymological correspondence *kuḥl*—*yuktaḥal* obtain (in 7.4), and while the use of a probe twice (in 7.1|6) may be understood as practically synonymous to collyrising,¹ it is worth noting that three of the five recipes for an alcofol involve rather the verb *darra* ‘to sprinkle’ (in 7.1|4|6) and in fact in one case (namely in 7.6, which is inscribed as «*kuḥlun libayāḍ*») the preparation is explicitly required to be made into a *darūr* or ophthalmological powder prior to use.² Amongst those labelled as siefs, in turn, one must be applied as a collyrium («*yuktaḥalu biḥī*» in 7.2) and the other one is to be poured into the eye («*wayuṣabbu fi lʿayn ṣabbā*» in 7.3), while the “royal” remedy that closes the series must also be applied as a collyrium («*yuktaḥalu biḥī*» in 7.8).

On the other hand, the usual practice of naming the remedy after its main or more distinctive ingredient is only marginally represented by the alcofol of the two pomegranates in 7.1,³ while *Natāʾiḡ* inherits a nomenclature that characterises especially ophthalmological remedies since Hellenistic times and is based either on their colour (as in the case of the yellow sief in 7.3)⁴ or on the

¹ The Greek etymon (namely μήλη) of Arabic *mīl* ‘probe’ was recognised already by MEYERHOF 1933: 162, 175; and some interesting observations on this word (and also on the object that it refers to) as documented in the Andalusī *ʿumdaḥ* are to be found in BUSTAMANTE 2007. In the Islamicate corpus it is mostly (but not exclusively) mentioned as an ophthalmologic instrument and as a synonym of *mirwad*, cf. IBN ĠANAḤ, *Talḥiṣ* [592] «*almīlu huwa lmirwad*»—where, incidentally, ABŪ ʿĀLĪ’s disagreement is also recorded: a probe would be *malmīl* in Arabic, not *mīl*, which means rather ‘an extension of earth’ («*qīṭʿatun mina lʿarḍ*»). In this latter sense, however, *mīlu* (like Syriac ܡܝܠܐ) reflects Greek μίλια (= Latin *milia*) as pointed out by PAYNE SMITH, *Thesaurus* 2088–2089 s.v. ܡܝܠܐ. The benefit of using a probe made of gold is reported, in the context of inherited quotes on the specific properties of things, in *Nat* IV ḤAWĀṢṢ III.1.8.

² No way of application is mentioned for the alcofol made of spikenard and burnt dates. Tangentially, *darra* admits in these recipes (and, of course, also elsewhere in the corpus) two different syntactical constructions: «*wayuḍarru fi lʿayn*» in 7.4 and «*watuḍarru bihi lʿayn*» in 7.6.

³ This is also the case in the Graeco-Byzantine tradition, in which ingredient-based names are a clear minority, cf. «*dia libanu*» and «*dia tu ceratos*» in CELSUS, *De medicina* VI.6.13|16 (M 266₂₀₋₂₃, 268₂₋₅), as well as several διαρόδια in GALEN, *Sec. loc.* IV.8 (K XII 765–768), whence Arabic *šiyāfūn wardī*, as in IBN ALĠAZZĀR, *Zād* II.1 (B–K 250₁₀–252₆ | T 148₁₉–149₂). Typical examples from the Islamicate corpus are the alcofol of saffron (*kuḥlu zzaʿfarān*) in SĀBŪR B. SAHL, *Šaġīr* XVI [364] (K 197₁₃₋₁₈) or the often-copied sief of lead (*šiyāfu alʿabār*), for which cf. AṬṬABARĪ, *Firdaws* IV.III.4 (§ 174₂₃–175₄), where «*الابار*» must be accordingly emended.

⁴ The colour gamut represented by GALEN’s sources in *Sec. loc.* IV.8 includes white (κολλύριον ὀ λευκόν in K XII 757₆₋₁₀); saffron-yellow (κροκώδες in K XII 770₁₅–771₁, 773₈₋₁₅, 785₅₋₁₄); and greenish-yellow (χλωρόν in K XII 763₁₀–764₃, 764₁₈–765₄); as well as darker collyria such as a κολλύριον κίρρόν (K XII 783₁₆–784₄) and a φαιόν (K XII 748₁₀₋₁₇, XII 753₃₋₁₂). Cf. also EUELPIDES’ *pyximum* (= πύξιμον) ‘of the colour of box-wood’ (ie yellowish) in CELSUS, *De medicina* VI.6.25 (M 270₃₋₇). Chromatic association occasionally inspired metaphorical denominations, like in the case of “swans” (κύκνοι) for white collyria, as explained by GALEN in *Sec. loc.* IV.1 (K XII 707₁₇–708₄); also «*id, quod quidam cynnon, quidam a cinereo colore tephron appellant*» in CELSUS, *De medicina* VI.6.7 (M 263₃₋₅). The Islamicate tradition mirrors this practice even with re-

benefits attributed to them. The latter is actually the prevalent one in *Pharm* 7: a sief for cataracts (7.2), an alcolfol for ophthalmia (7.4) and another two for leucoma (7.5–6), and finally a sight-sharpening alcolfol (7.7).

The only witnesses for the alcolfol of the two pomegranates in 7.1 that are close enough to be stemmatically significant are both Andalusī.¹ In this regard, it is worth noting that the tenth-century calendrical tradition transmits a remarkable echo of a practice related to this drug. According to the *Qurtubah Calendar*, during the month of August the juice of the two pomegranates was prepared with an extract of fennel so that it could be used for a sief against white of the eye and other ailments.² A much simpler recipe was quite frequently borrowed from ḤUNAYN's book, and the several formulas that circulated under this and similar labels appear to be somehow related also to the sight-sharpening remedy known as "the engravers' burud" (*barūdu nnaqqāšīn*) in IBN ʿĪSĀ's *Tadkirah*.³ A plausible precedent may be a collyrium described by AETIUS OF AMIDA, who transmits the recipe for an oxydercic liquid collyrium based on just the juice of pomegranates and honey that he recommends for painters, ring-engravers, goldsmiths, and elderly people.⁴

gard to the possibility, given a sufficiently unambiguous context, of naming the drugs by the sole epithet, which is especially true of the yellow sief oftentimes referred to simply as *alʿasfar* (cf. ARRĀZĪ, *Ṭibb* 72r 1–3); cf. also *ramādī* (= τεφρόν). Incidentally, AŠŠAYZARĪ provides precious insight into every-day *realia* when he condemns the practice of untrustworthy highway oculists (*kaḥḥālū ṭṭuruqāt*) who used to dye a basic colourless sief made of starch and gum so that they could boast to offer their unwary clients a red, green, black, or yellow remedy, cf. *Nihāyah* XXXVII (A 100₉–101₄).

¹ A word-by-word identical formula is recorded in *Dukkān* XVI.70 (L 64r 24–30) and quite a close parallel is further provided in the late and fragmentary Andalusī treatise known as *Alcoatī* after the Latin transcription of its author's *nisbah* (probably ALQŪṬĪ) and completed in Iṣbilyah in 1260. The ingredients are basically the same in the two recipes, cf. ALCOATĪ, *Ḥāmīṣah* III [109] كحل الرمانين (V 96₁₂–98₄), which corresponds to [98] *collyrium de malis granatis acerbis et dulcibus* in the Latin translation. For a brief summary of the ecdotic history of the Latin text and a first attempt to correctly identify the author and the context of the work, cf. MILLÁS VALLICROSA 1960: 214–217. The extant Arabic text of Book V (which for ease of reference is named here *Ḥāmīṣah*) is edited alongside a reproduction of the Latin text by VÁZQUEZ DE BENITO 1973: 161–42 on the basis of the unicum at the Escorial Library (RBME MS Árabe 894, fols. 44r–76r).

² Cf. *Qurtubah Calendar* 83₅–6, also IBN ʿĪSĀ, *Šuhūr* 53₈–9 (but this passage is not to be found ʿARĪB B. SAʿĪD, *Anwāʾ* 230₅–6, nor in *Tafṣīl*).

³ A *kuḥlun rummānī* is mentioned twice in ALHĀŠĪMĪ, *Mağālis* I.1.15 (K 31₆, 32₁₅), and two different recipes (the second one in reference to a honey-like collyrium that used to be sold) are further provided in *Mağālis* I.1.18 (K 41₂₀–42₁₃). A minimal version of *kuḥlu rrummānāyyn* is recorded as two virtually identical recipes in IBN WĀFĪD, *Wisād* III.33|80 (A 43₄, 58₉–13). The formula transmitted "from ḤUNAYN's book" is represented in Andalus by ALCOATĪ, *Ḥāmīṣah* III [110] (V 98₅–8); and also IBN ḤALŠŪN, *Ağdiyah* II.2 (G 32₁₁–16). Finally, the similar recipe of the engravers' burud is found in IBN ʿĪSĀ, *Tadkirah* III.23 (Š 323₆–324₄).

⁴ Cf. *Iatrica* VII.C1 (O II 350₂₂–351₂). With regard to the hapax δακτυλόγλυφος (the usual form is

The documentation for the polyvalent sief in 7.2 is rather meagre, although the inclusion of copper flakes (*tūbālu nnuḥās*), gum ammoniac (spelled *wuššaq* here), and opium should provide sufficient basis for future identification.¹ Likewise the yellow sief in 7.3 does not match any of the homonymous formulas for yellow siefs.²

The mention of a specific benefit for children in 7.4, on the contrary, has deep roots in the Graeco-Byzantine corpus,³ and the epithet *annuḡḥ* (which might perhaps be a misreading of **almunḡih*) is also reminiscent of Greek *νίκη*, but the presence of camphor as an ingredient speaks strongly against a Byzantine (let alone earlier) origin.⁴

Then 7.5 is probably the most interesting item in the series with regard to diachrony, since its origin, which is explicitly stated, involves a tradition that stems from the pseudo-Galenic *Naṣāʾiḥu rruhbān* via PAUL THE MONK. This secretive remedy, which is attributed the power to heal unhealable ailments in thirty days, requires some highly characteristic ingredients like sea-foam, lizard droppings, and *mashaqūniyā*,⁵ and it is moreover the only one in the whole se-

rather *δακτυλιογλύφος*), cf. ADRADOS, *DGE* V 870.

¹ The formula is transmitted in identical form in *Dukkān* XVI.34 (L 61r 1–8). There is only a vague resemblance to AṬṬĀBARĪ's green sief (*šiyāfun aḥḍar*) in *Firdaws* IV.III.4 (§ 175_{10–18}).

² With the only exception of *Dukkān* XVI.32 شياف أصفر (L 60v 24–29). Quite different formulas are handed down by ALMAĠŪSĪ, *Kāmil* II.v.23,8 (S II.2 404_{4–7}) and IBN ĠAZLAH, *Minhāġ* 1–71 «شياف» «أَطْرَحْمَاطِيَّانَ», which is equated with «الاشياف الأصفر» (L 20v 4–7). No yellow sief at all is recorded by IBN SARĀBIYŪN in *Kunnāš* VII.XXXIII.6 شيافات (L 231v 11 – 235v 5), where nonetheless red, green, black, and white siefs are mentioned. At least five different recipes for *darūrun aṣfar* (also أصفر قراماطيقون) are collected there in *Kunnāš* VII.XXXIII.1 ذرورات (L 220r 5 – 222v 14), which shows how comparative research cannot rely exclusively on onomastic identity and perhaps explains why there seems no to be any Andalusī documentation for yellow siefs, as they may have all been classed rather as *darūrāt*.

³ Cf. for instance a *κροκώδες παιδικόν* in GALEN, *Sec. loc.* IV.8 (K XII 770₁₅–771₁) and also, with an even closer phraseology, a *καλλιβλέφαρον* that is said to be «μάλιστα νηπίοις χρήσιμον» in *Sec. loc.* IV.7 (K XII 734₁₂–735₁). In the 5th c. AETIUS OF AMIDA gathers these remedies under a common denomination *παιδικά κολλύρια* and adds further details drawing, perhaps directly, from SEVERUS' *On the therapy of children*, cf. *Iatrica* VII.XLIV (O II 296₁₆–297₁₂) and also VII.CXIV for the recipe of THEOPHILUS' wondrous *παιδικόν* (O II 382_{9–12}).

⁴ The same header and formula are copied in *Dukkān* XVI.22 (L 59v 25 – 60r 1).

⁵ This word of Syriac origin (cf. *ܡܫܩܘܢܝܐ* in BAR BAHLŪL, *Lexicon* 1167_{7–9}; PAYNE SMITH, *The-saurus* 2240) is explained very diversely in the east and in the west. While AHRUN (ie his translator into Arabic) and ARRĀZĪ define it either as a vitreous glaze («*māʾu zzuḡāġ*») or as the glaze of green jugs («*māʾu lḡirāri lḥuḍr*»), which corresponds quite well to how the Syriac lexicographers gloss it in Arabic), in Andalus IBN ĠULĠUL equates it with one of the varieties of vitriol, namely *šahīrah*. Such is the synthesis made by IBN ĠANĀḤ in the corresponding lemma in his *Talḥiṣ* [532]. For further references, cf. particularly KĀS 2010: 1003–1006, and also BOS, KĀS, LŪBKE, and MENSCHING 2020: 705–706; to which one may add ALḤWARIZMĪ, *Mafātiḥ* II.IX.2 s.v.: «*šayʾun yasīlu mina zzuḡāġ, wahuwa milḥun abyadū ṣulbun dāʾibun qawwī*» (V 262_{4–6}).

ries for which an exact ultimate origin can be identified.¹

With regard to the second alcolfol for white of the eye in 7.6, the combination of sea-foam, sarcocolla, and sugar is distinctive enough to allow for a straightforward affiliation, and a word-by-word identical recipe is transmitted indeed by ARRĀZĪ.²

The eye-sharpening alcolfol recommended in 7.7 also for dropping eyelids reflects a tradition closer to the original basic version of the remedy than to later elaborations that typically included tutty and lazuli.³

The basilicon recorded in 7.8 is an excellent example of the extent to which the Graeco-Byzantine medical legacy was reworked and expanded in the early Islamicate period and never actually ceased to be in later centuries. If the name of the drug and its basic composition go back at least to Roman imperial times, the presence of such ingredients as yellow myrobalans, lesser cardamom,⁴ clove,

Two different proposals have been made to explain the origin of this Syriac word. A Graeco-Syriac hybrid etymon ܡܫܚܘܢܐ + ڪوάνεος is quite assertively postulated by KAHL 2007: 259–260 n. 191, with further mention of Persian کف آبگینه as registered by VULLERS, *LPLE* II 825. The same etymology is suggested independently by KĀS 2010: 1006 (he appears to have been unaware of KAHL's edition as he accesses IBN ATTILMĪD's dispensatory in manuscript form) and an alternative possibility is further explored there following a clue provided by LITTMANN: a different Greco-Syriac compound name ܡܫܚܘܢܐ + ܡܫܚܘܢܐ (= ڪονία 'ash'), for which a lexicographic passage «الدهن الذي يدهن به الغضار» in PAYNE SMITH, *Thesaurus* 3547 s.v. ܡܫܚܘܢܐ is certainly a more compelling testimony than KĀS' reference to BROCKELMANN's entry.

¹ The same recipe is transmitted in *Dukkān* XVI.26 (L 60r 16–24) and in a very similar wording also by AZZAHRĀWĪ, *Taṣrīf* XX.I.21 (S II 83₃₁–84₃), where it is immediately followed by a second preparation for an alcolfol borrowed from the same pseudo-Galenic text, cf. *Taṣrīf* XX.I.22 (S II 84₃–7). The text of *Pharm* 7.5 echoes verbatim the Arabic Vorlage of PSEUDO-GALEN, *Secr. ad Mont.*: «Ad albuginem oculi. Alcohol autem quo usus est Ebinus monachus ad albuginem quae erat in oculis suis, et omnes medici conuenerunt quod non sanaretur et posui ipsum ei, et conualuit usque ad triginta dies» (B 364₃₇–365).

² The formula, which is identical to *Dukkān* XVI.27 آخر للبياض في العين (L 60r 24–28), is found in ARRĀZĪ, *Ṭibb* 73r 4–6, where it is labelled as «*darūrun libayād*», which adds to the preceding observation on the terminological fluidity of the diverse categories of eye remedies in the Islamicate tradition. Given that ARRĀZĪ's *Ṭibb* seems to have had a very limited circulation, some alternative path of transmission must be identified for this recipe. More sophisticated versions were also developed, as for instance IBN WĀFĪD's tested «*kuḥlun libayādi fi lʿayn*» (which includes also mouse and sparrow droppings, tutty, and verdigris) in *Wisād* III.105 (A 66_{13–17}).

³ Identical to *Dukkān* XVI.64 (L 63v 22–24). The same combination of burnt date stones and spikenard is prescribed against μαδάρωσις in PSEUDO-GALEN, *Rem. parab.* II.IV.9 (K XIV 413_{5–8}), and also in PAUL OF AEGINA, *Pragmateia* III.XXII.16, where it is reckoned amongst καλλιβλέφαρα (H I 177_{16–17}). In the Islamicate corpus it is widely documented for the treatment of ptilosis, cf. AṬṬABARĪ, *Firdaws* IV.III.4 (§ 170_{1–2}). The characteristic ingredient 'date stones' facilitates the identification of the cluster of recipes that evolved from the primitive core, as for instance the recipe for a burud against deciduous eyelashes by ZAKARĪYYĀ? in IBN SARĀBIYŪN, *Kunnāš* 227r 2–4. For an example of later developments of the same recipe, cf. ARRĀZĪ, *Ṭibb* 75r 9–12.

⁴ The identification of *hil bū* as *qāqullatun ṣaḡīra* ('lesser cardamom') and *qāqullatun dakar* 'male

and ambergris betray a later elaboration. A recipe for a remedy for the eyes inscribed as a basilicon (= βασιλικόν 'royal') is attested already by CELSUS, and a homonymous collyrium is further qualified as Indian (Ἰνδικόν) by GALEN.¹ In the Islamicate corpus 7.8 appears to correspond to one of several versions of the "greater basilicon",² but since the earliest Syro-Arabic tradition several expanded versions of the drug are recorded under the common name *bāsiliqūn*, often alongside a synonym *rūṣanāʿī* of Persian origin.³

All in all, *Pharm 7* would appear to be, once again, a subset of IBN ʿABDIRAB-*BIH*'s dispensatory. In the particular case of 7.8, in fact, if the chronological priority of *Dukkān* could be proved, the difference between the rubrics in the two texts would betray authorial intervention on the part of ALʿILBĪRĪ.

Pharm 8 — On the usual oils and their beneficial treatments

The last chapter in the dispensatory contains the recipes for eight different oils extracted from mustard, agrimony, rue, radish, henbane, rose, bricks, and sesame.⁴

cardamom' is recorded from ARRĀZĪ's *Alḥāwī* by IBN ǦANĀḤ in *Talḥīs* [280]. Just like in the case of nutmeg (*ǧawz bū*), the realisation *hīl bū* may certainly be the etymological one as pointed out by BOS, KĀS, LÜBKE, and MENSCHING 2020: 468, but it is not impossible (not even unlikely) that this non-Arabic name may have been read also as *hayl buw(w)ā* by some Andalusis, as suggested by the form *heil* in Arabo-Latin translations. A Sanskrit origin in एला *elā* 'cardamom' (cf. MONIER-WILLIAMS, *SED* 232b) is indicated for Persian *hāl* / *hīl* in BOS, KĀS, LÜBKE, and MENSCHING 2020: 468. Cf. further the rich documentation gathered by ALAM 1990: 803–806 in the entry on cardamom in the *Encyclopaedia Iranica*.

¹ A basic formula by the reputed ophthalmologist EUELPIDES (for whom cf. WELLMANN 1907: 951) is reported in CELSUS, *De medicina* VI.6.31 (M 272₂₋₁₁). A much closer recipe is noted down by GALEN, *Sec. loc.* IV.8, where in addition to the basic ingredients documented also in the Islamicate tradition (cadmia, white lead, pepper) such exotic items as the whole gallbladder of a hyena and four partridge gallbladders are required (K XII 782₆₋₁₄). In GALEN the Indian connection may be an indirect one on account of the Indian black pigment (μελανός Ἰνδικός) that enters the preparation. This βασιλικόν should not be confused with a plaster that went by the same name and which was also known as τετραφάρμακον in the Greek tradition.

² Cf. the same formula in *Dukkān* XVI.55, where the rubric reads «*albāsiliqūnu lkabīru ʿalā ḥilāfi lmutaqaddīmi dikruhū*» (L 62v 21–29), the specification being justified, indeed, by the previous mention of the "great basilicon" («*albāsiliqūnu lʾakbar*») in *Dukkān* XVI.54 (L 62v 13–21). Although a mediating source is certainly to be assumed to account for some minor differences, our recipe corresponds essentially to SĀBŪR's and MASĪḤ's great basilicon (which are virtually identical to each other) and it is only marginally less similar to the first basilicon in IBN SARĀBIYŪN's series, cf. SĀBŪR B. SAHL, *Ṣaǧīr* XVI [261] صنعة باسليقون الأكبر (K 195₁₅₋₂₄); MASĪḤ, *Hārūniyyah* II.1.6 الباسليقون الأكبر (G 315₅₋₁₁); IBN SARĀBIYŪN, *Kunnāš* VII.33.1 (L 228r 1) ≡ *Breviarium* VII.33.1 (V 83vb 56–62).

³ See the complementary notes at the end of this chapter.

⁴ Arabic *duhn* corresponds not only to Greek ἔλαιον but also, especially when aromatic ingredients are involved, to μύρον, in which case it may be translated as 'unguent'. Quite often *zayt* is likewise used for oils other than olive oil (see above the note to *Ther* 3.15). In the Syriac tradi-

All of them are named after their main ingredient, which, with the only exception of bricks,¹ is of plant origin and can be represented by the seeds, the fresh leaves, the juice, or the entirety of the herb.²

The stock of ingredients required for the preparation of these oils is extremely limited. In most cases just two or three items are enough: the essential element from which the oil is to be extracted and either hot water or, more often, some oil (only occasionally a combination of both).³ Only once is an additional ingredient optionally incorporated into the recipe in order to improve its scent, namely camel's hay for the oil of roses.⁴

The catalogue of medical uses for each oil, on the other hand, ranges from one single ailment to true panaceas in the case of the oil of roses and the oil of bricks.

tion, in turn, all kinds of oils other than olive oil (which is mostly *زيتون*) are referred to as *زيت* (cf. PAYNE SMITH, *Thesaurus* 2238–2239, where a great many specific oils are listed) rather than by the cognate *سمن* (which normally means rather 'fat', as does in general Aramaic *šdhn*).

¹ The oil of bricks is exceptional in the medical tradition in its being derived from an inorganic source and it is no coincidence that it should feature also in the parallel alchemical corpus, as for example amongst distillations in the anonymous *Tamrah* 76v 4–14. Cf. in this respect MESUE's piece of advice in *Grabadin* LXII on oils: «*Et constat quod plurigena sunt in concreto occultata, et hoc maxime alchimistarum est. Et nos de his experiemur que possumus; tu autem ag-gredere alchimistas et agitare cum illis*» (V 82vb 10–12). In his own recipe for this oil in *Grabadin* LXII.67 the author calls it *oleum philosophorum*, indeed, and reports several other designations: «*Alii illud "oleum sapientie" dixerunt, et alii "oleum benedictum", et alii "diuinum", et alii uero "sanctum". Et a pluribus "oleum perfecti magisterii" uocatum est*» (V 89va 32 – 89vb 4). The oil of bricks seems to have gained some currency in thirteenth-century military treatises too (cf. AL-HASSAN 2009: 112).

² There are a few oils in the Helleno-Islamicate tradition that are obtained rather from animals, such as the oil of vipers (*duhnu lḥayyāt*) and the oil of scorpions (*duhnu lḥaqārib*), both of which are actually mentioned elsewhere in *Natāʾiḡ* (see particularly *zaytu lḥaqārib* above in *Ther* 1.4), or still the oil of ants (*دهن نمل*) in ARRĀZĪ, *Antidotarium*^B III.37 *Oleum formicarum uolantium* (V 101ra 13–14), whence IBN ʿABDIRABBIH, *Dukkān* XIV.46 (D 65r | L 54r 1–3); and the oil of eggs (*دهن البيض*) in IBN SARĀBIYŪN, *Kunnāš* VII.XXV.25 (L 188v 14), also ARRĀZĪ, *Antidotarium*^B III.30 *Oleum ouorum* (V 100vb 51–54), and thence *Dukkān* XIV.35 (D 63v | L 52r 10–13).

³ This basic oil can be olive oil, in which case it may be unqualified, or washed (the one known as *rikābī* oil, for the etymology of which cf. IBN ǦANĀḤ, *Talḥiṣ* [322] and BOS, KĀS, LÜBKE, and MENSCHING 2020: 503–504, as well as the explanation-cum-recipe in AZZAHRĀWĪ, *Taṣrīf* II 201₃₁–202₉), or made of unripe olives (*zaytun unḥāq* < ὀμφάκινον ἔλαιον). It can also be oil of roses, or even sesame oil. The latter is referred to in our text as *šīraǧ* oil (*duhnu ššīraǧ*) and elsewhere also simply as *šīraǧ*, cf. IBN ǦANĀḤ, *Talḥiṣ* [997] «*aššīraǧ, wahuwa duhnu ssimsim*»; also AZZAHRĀWĪ, *Taṣrīf* XXIX.1 (S II 440₂₂). This particular meaning 'oil of sesame' was already conveyed by Persian *šīra*, cf. VULLERS, *LPLE* II 498b s.v. شیره (= روغن کنجد); also STEINGASS, *CPED* 774 s.v. In the case of jasmine oil, jasmine itself is prescribed instead of olive oil. The use of hot water or oil depends on the exact method of extraction for each aromatic oil (distillation, expression, solvent extraction), which cannot be further explored here.

⁴ Camel's hay or squinanth (*idḥīr* = σχοῖνος, *Cymbopogon schoenanthus* Spreng.) was indeed an essential ingredient of DIOSCORIDES' recipe for the oil of roses, cf. *Materia medica* 1:43 ῥοδίνον (W I 42₇₋₈) ≡ *Ḥašāʾiṣ* 1:33 دهن الورد (P 10v 22–23 | T 43₂₀₋₂₁).

The most frequently mentioned way of use is, unsurprisingly, anointing the oil over some particular region of the body, but oils can also be poured into the ear and made into a cerate or wax-salve (*qīrūtī* < κηρωτή) to be poulticed over boils as in the case of rue oil, instilled into the nose (henbane oil), and even taken as a drink by itself or in combination with other substances (oil of roses).¹

Unlike in some of the precedent epigraphs, the provisional results of source criticism concerning *Pharm 8* are too complex to be tabularised and deserve some commentary. First all of, IBN ʿABDIRABBIH’s *Dukkān* is, once again, the closest text to *Natāʿiḡ* as all eight recipes are found there in a literally identical form. The fact that the relative order of the recipes in *Natāʿiḡ* does not coincide with the one in *Dukkān* (it rather inverts it) might perhaps suggest a relation of cognacy (the two texts sharing a common source) rather than immediate dependence.² A similar level of textual affinity (sometimes slightly lower and sporadically even higher) is shown by the recipes collected by AZZAHRĀWĪ in *Taṣrīf* XXV.1 on non-compound oils, the relative order of the sequence being again quite different, let alone the total number of items registered, which adds there to some seventy nine.³ A fourth text must still be added to the comparison, namely the series of oils scattered mostly throughout the second part of *Hārūniyyah*. There the recipes of the oil of mustard, rue, henbane, and sesame are found and the latter (which actually features in the first part of the treatise)

¹ The different ways of administration of the oil of roses are, in fact, almost as plural as the ailments against which it is affirmed to avail. They include, in addition to anointing and rubbing, pouring it over the head, poulticing, rinsing, instillation into the urethra, as well as making it into a salve or a cerate, or still entering the preparation of haemostatic pastilles. Jasmine oil is the only item in *Pharm 8* for which no medical benefits are mentioned, although they were available in the original recipe.

² To ALʿILBĪRĪ’s mustard oil corresponds *Dukkān* XIV.28 (D 63r 12–17 | L 52v 6–13), to agrimony oil XIV.45 (D 64v 19–22 | L 53v 27–31), to rue oil XIV.50 (D 65r 11–19 | L 54r 16–26), to oleander oil XIV.57 (D 66r 7–10 | L 55r 4–8), to henbane oil XIV.34 (D 63v 10–17 | L 53r 2–10), the three Galenic recipes for the oil of roses are found in XIV.2 (D 57r 19 – 58r 21 | L 47v 16 – 48v 3), the “blessed” oil of bricks in XIV.70 (D 67r 18 – 68r 6 | L 56r 12 – 56v 25), and finally jasmine oil in XIV.1 (D 56v 21 – 57r 19 | L 47r 22 – 47v 1). Any degree of dependence of *Dukkān* from *Natāʿiḡ* can be safely ruled out in view of the vast difference in comprehensiveness between the two texts: IBN ʿABDIRABBIH’s dispensatory includes recipes for no less than sixty-eight different oils.

³ The concordances are: mustard oil ≡ *Taṣrīf* XXV.1.13 (S II 203_{24–31}), rue oil ≡ XXV.1.52 (S II 212_{6–13}), oleander oil ≡ XXV.1.77 (S II 216_{4–8}), henbane oil ≡ XXV.1.25 (S II 205_{6–12}), which reveals a substantial parablepsis in *Natāʿiḡ* and, more significantly, is the only witness to share with it the reading «*alḥām*»), the three recipes for the oil of roses ≡ XXV.1.35 (S II 207_{28–209₂}), oil of bricks ≡ XXV.1.32 (S II 206_{31–207₂₀}); and finally jasmine oil ≡ XXV.1.38 (S II 209_{31–210₄}). As for the oil of agrimony, the medical benefits mentioned under the same rubric in *Taṣrīf* XXV.1.79 (S II 216_{11–12}) are identical to those in *Natāʿiḡ–Dukkān*, but AZZAHRĀWĪ does not copy the instructions for its preparation but simply refers to the previous recipe for the oil of usnea or tree moss (*duhni lʿuṣnah*).

includes even the appended remark on how to prepare other oils in the same way.¹

There is, therefore, once again a cluster of recipes that are shared by the three Andalusī texts (to which now a fourth partial witness is joined) with virtually no alteration of their wording and pointing to (1) dependence of *Natāʾiğ* either from *Dukkān* or from *Taṣrif* (which might, in turn, have silently drawn from *Dukkān*), or otherwise (2) independent use of a common source. Unlike in all preceding chapters, however, in this case a highly plausible origin can be found for almost all these recipes: ARRĀZĪ's lesser dispensatory (= *Antidotarium*^B). As a matter of fact, IBN ʿABDIRABBIH's chapter on oils in *Dukkān* reproduces mostly word by word and following the exact same order, with only minimal changes, the recipes contained in the third chapter of *Antidotarium*^B.² The catalogue of oils recorded by IBN ʿABDIRABBIH is remarkably larger and the Andalusī author (or his source) appears to have worked by intelligent intercalation, introducing additional recipes at pertinent points, rather than by merely expanding the collection at its end.³ With regard to this textual affiliation, on the other hand, it must be noted that jasmine/sesame oil occupies the first place amongst oils in both ARRĀZĪ's and IBN ʿABDIRABBIH's dispensatories, and that the closing position 8.8 in *Natāʾiğ* cannot be the original one given that in the recipe for the oil of roses in 8.6 an explicit mention is made to the *preceding* instructions for the preparation of jasmine oil.

¹ Cf. *Hārūniyyah* II.IX (G 453⁸⁻¹³) for mustard oil, II.II.1 (G 327¹⁶⁻²⁰) for rue oil, II.9 (G 451¹⁰⁻¹⁶, but only in manuscripts TM) for henbane oil, and finally I.VII.2 (G 159^{11-161,7}) for jasmine oil.

² The wording of the recipe for jasmine oil in *Dukkān* (which is identical to the one in *Natāʾiğ* except for the omission in the latter of its medical benefits) is exceptionally divergent from (but yet essentially identical to) ARRĀZĪ's sesame oil (*oleum iurulen*, featuring the western Arabic synonym *ğulğulān* for sesame). Then the texts run parallel in both books except for a different order of the oils corresponding to *Dukkān* XIV.16–20 and a new unclear divergence at *Dukkān* XIV.31–32.

³ There are over twenty recipes that are transmitted in *Dukkān* but cannot be found in *Antidotarium*^B (cf. *Dukkān* XIV.6|24|27|38–39|44–45|47–49|52–56|59–61|63|67–68). The motivation for inserting some of them is fairly evident, as in the case of the oils of chickpeas and of darnel (*šaylam*) at *Dukkān* XIV.38–39, which apparently expand on the recipe of wheat oil. Of these additions, only agrimony oil is shared by *Natāʾiğ*. Let it be noted, in any case, that this comparison is a provisional one and that it is based on only two manuscripts for the Arabic text of *Dukkān* and one single copy of *Natāʾiğ* and of the Latin *Antidotarium*^B.

	<i>Nat</i>	<i>Taş</i>	<i>Duk</i>	<i>Ant</i> ^B
mustard oil	1	13	28	25 <i>oleum sinapis</i> (V 100vb 17–23)
agrimony oil	2	79	44	—
rue oil	3	52	49	40 <i>oleum rute</i> (V 101ra 15–21)
oleander oil	4	77	56	42 <i>oleum oleandri</i> (V 101ra 26–28)
henbane oil	5	25	34	31 <i>oleum iusquiami</i> (V 100vb 43–50)
oil of roses	6	35	2	2 <i>oleum rosarum</i> (V 100ra 10–23 100ra 24–47)
oil of bricks	7	32	68	48 <i>oleum benedictum</i> (V 101ra 66 – 101rb 24)
jasmine oil	8	38	1	1 <i>oleum iuriulen</i> (V 99vb 53 – 100ra 9)

Beyond the highly plausible dependence of *Dukkān* from *Antidotarium*^B speculation on the exact relationship between the members of the constellation of texts including *Dukkān*, *Taşrīf*, *Hārūniyyah*, and *Natāʿiğ* cannot be possibly based on the partial scrutiny of one single chapter but must necessarily take into account the data garnered from a methodical analysis of the entire contents of PHARMACOPOEIA. Some brief and provisional observations in this regard shall be included in the general conclusions to this section.

As to the possible pre-Islamic sources for the chapter on oils, besides the oil of roses for which the authority of GALEN is explicitly invoked, the recipe of mustard oil reproduces without alteration DIOSCORIDES' σινάπινον (sc. ἔλαιον), and so does the recipe for henbane oil.¹ On the other hand, the recipes for the oils of agrimony, rue, and oleander do not seem to have a direct origin in the extant Graeco-Byzantine medical corpus, but they may have been inspired by the references of the ancient authors to them² and by the medical properties attributed to their main ingredient. It was then a logical—but nonetheless remarkable—step to try and fill this gap with the actual instructions for the preparation of the oil.

On a tangential note, a Persian origin may be suspected for jasmine oil. In the Greek tradition since at least HERODOTUS it is associated with eastern traditions,³ but while a recipe for the preparation of σησαμέλαιον had reportedly been written by CRITO in book II of his *On cosmetics*, no formula is available in

¹ For the former, cf. *Hašāʿiğ* 1:30 وهو دهن الخردل صنعته سينايبنون، (P 10r 17–18 | T 416–8) ≡ *Mat. med.* 1:38 σινάπινον (WI 39_{15–18}); for henbane oil, cf. *Hašāʿiğ* 1:29 وهو دهن البجع صنعته ايسقيامين، (P 10r 10–16 | T 40_{15–20}) ≡ *Mat. med.* 1:35 ὑοσκούμινον (WI 38_{16–39}). In the Syriac medical tradition the names of both oils had been transliterated (σινάπινον = ܣܝܢܐܝܒܢܘܢ and ὑοσκούμινον = ܘܝܘܫܩܘܡܝܢܘܢ) and translated by HUNAYN B. ISHĀQ. The former as ܣܝܢܐܝܒܢܘܢ, the latter as ܘܝܘܫܩܘܡܝܢܘܢ (cf. BAR BAHLŪL, *Lexicon* 1344–5 and 47_{24–25}, respectively).

² Passing-by mentions to πηγάνινον, for instance, are made by GALEN in *Meth. med.* XII.7 (K X 857₅, 858₁₈) and *Simpl. med.* II.12 (K XI 489₁₅), but a recipe is never provided, perhaps because he considered it to be too well-known.

³ According to him Assyrians «χρέωνται δὲ οὐδὲν ἑλαίω ἀλλ' ἢ ἐκ τῶν σησάμων ποιούντες», cf. *Historiae* I.193 (G I 244_{1–2}). An Iranian connection is made by STRABO, *Geographia* XVI.1.20, who

the Galenic collection.¹ One has to wait until AETIUS OF AMIDA for the earliest extant recipe for sesame oil, which he affirms that was called *ιασμὴ* amongst Persians. Afterwards a recipe quite close to the one documented in the Islamicate tradition is provided by PAUL OF AEGINA for *σησάμινον ἔλαιον*.²

reports the custom of Adiabeniensians to anoint themselves with sesame: «ἀλείφονται δ' ἐκ τοῦ σησάμου» (J VII 226₂₆). In DIOSCORIDES' experience, in turn, the use of the oil extracted from sesame (*σήσαμον* ≡ *simsim*) was common among Egyptians, cf. *Materia medica* 2:99 *σήσαμον* (WI 174₅₋₁₆) ≡ *Ḥašā'iš* 2:93 (P 42r 20 | T 180₈).

¹ For the reference to CRITO, cf. GALEN, *Sec. loc.* I.3 (K XII 448₂). Sesame oil (*σησάμινον*) is mentioned, indeed, in the entry for sesame in *Simpl. med.* VII.XVIII.10 (K XII 120₁₁₋₁₂) and also in *Simpl. med.* VI.V.4 (K XI 870₄), as well as in a therapeutic context in *Sec. loc.* V.5 «ἢ εἰς τὸ κατὰ τὸν ἀλγοῦντα οὖς σησαμέλαιον ἐναφεψημένων ἀντὶ γῆς ἐντέρων ἔγχει» (K XII 861₅₋₇), cf. also *Sec. loc.* I.2 (K XII 424₁₈) and *Per gen.* VII.11 (K XIII 1007₁₀). Yet another reference to sesame oil is reported from CLEOPATRA's *Cosmetica* in *Sec. loc.* I.2 «ἄλλο γεγραμμένον οὐ μετὰ πολλὰ τοῦ πρόσθεν ὧδέ πως κατὰ λέξιν πρὸς τριχοφυΐαν. λινόσπερμα ξηρὸν κατάκαυσον, σὺν τῇ λινοκαλάμῃ καὶ τρίψας σὺν ἐλαίῳ σησαμίνῳ κατάχρειε» (K XII 433₃₋₅), which would confirm DIOSCORIDES' reference to Egypt.

² Cf. AETIUS OF AMIDA, *Iatrica* I.120 (O I 61₂₁₋₂₇). According to OLIVIERI's critical apparatus *ad loc.* a significant part of the manuscript tradition reads «Ἐλαιον ἰασμέλαιον» instead of «ιασμὴ». For PAUL OF AEGINA, cf. *Pragmateia* VII.XX.11 (H II 384₇₋₁₁).

8.4 Concluding remarks on PHARMACOPOEIA

The above survey was primarily intended to offer a preview of the contents of the dispensatory included in *Natāʾiğ* (probably as its closing section) and to draw attention to the interest that this brief text certainly has for the history of the transmission of medical and medicine-related knowledge in the Islamicate west. A preliminary exploration has evinced a close affiliation of the materials collected by ALʿILBĪRĪ to the tenth-century tradition represented by IBN ALĠAZZĀR in Qayrawān and particularly by IBN ʿABDIRABBIH in Andalus. In this concluding remarks I shall try to highlight the main features of this affiliation and to offer a provisional sketch of the context to which *Nat V* probably belongs. My aim here is not, to be clear, to summarise the history of Islamicate dispensaries, but simply to provide some hints for further research. Any provisional conclusions reached here should help, moreover, to build a hypothesis about the chronology of the text, and the evidence gathered hereunder shall be referred to later in Chapter 9 when that particularly complex question is tackled. Due to limitations of time and space the discussion is overall abridged and the fact that some key texts could not be accessed makes it more speculative than could be wished for.

On the sources of Andalusī early recipe collections

As seen above, a few recipes in *Nat V* include in their header the explicit mention of the author to whom the invention (or the initial transmission) of the formula was credited. Needless to say, this feature can be invaluablely helpful in the case of achronous texts such as *Natāʾiğ* as long as two essential traits of this ascriptional system are taken into due consideration. First, just like in any other quotational context, explicit ascription in the header of recipes can provide a *terminus post quem* but tells nothing about how far removed the text actually is from that date. On the other hand and also like all quotes in general, this element can be (and most often is) inherited and a direct access to the mentioned source should not be inferred automatically.

With this caveat in mind, the corpus reflected explicitly in *Nat V* is quite informative. Its chronology spans well over a millennium from HIPPOCRATES, DIOSCORIDES, and GALEN down to SĀBŪR B. SAHL (d. 869), ḤUNAYN B. ISHĀQ (d. 873), IBN ʿIMRĀN (d. between 903 and 909), and ARRĀZĪ (d. 925). It includes also a late Byzantine physician from the Alexandrian school, namely AHRUN, who probably lived in the 7th century.

As far as the date of *Natāʾiğ* is concerned this evidence adds nothing to the *terminus post quem* that was already available from *Nat III*, in which ARRĀZĪ is

likewise the latest author mentioned. In both cases, moreover, ALṬILBĪRĪ's access to this eastern source has been mediated by a pre-existing compilation. If for *Nat* III IBN ALHAYṬĀM's *Iktifāʾ* proves that their common Vorlage was available at the latest towards the last third of the 10th c.; for *Nat* V, in turn, SAʿĪD B. ʿABDIRABBIH (d. either 943 or 966) attests to the Andalusī incorporation of materials from ARRĀZĪ's pharmacopoeia one generation earlier.

Mašriqī pharmacopoeia in tenth-century Andalus

It is certainly unfortunate (and also hard to explain) that such a fundamental text as IBN ʿABDIRABBIH's dispensatory should remain so far not only unedited but also virtually unexplored. Unlike poetic allusions to his own Galenic studies and some vague references scattered in his *Urġūzah*, that text is a direct witness to the reception and diffusion of Helleno-Islamic medicine in mid-tenth-century Andalus—and there are not so many available and probably none is so loquacious. For obvious reasons I cannot do justice to this text here and now, but a few clarifications may help, perhaps, anyone interested in filling this consequential gap in our knowledge.

There is not shortage of manuscript evidence for the text itself and the reconstruction of its primitive contents may be challenging but it is not by any means impossible.¹ Despite a remarkable disagreement amongst primary sources with regard to its title (manuscripts A and D transmit it as *Kitābu ddukkān*, manuscript L as *Kitābu šināʿati alyad*, and IBN ABĪ UṢAYBĪʿAH refers to it as *Kitābu lʿaqrābādīn*), the current scholarly consensus is to consider *Dukkān* and *Aqrābādīn* as two titles for the same treatise, and there is no reason not to adhere to this consensus.²

The presence in *Dukkān* of the same corpus of authorities as in *Nat V* proves that not only Ifrīqī sources but also eastern materials as late as ARRĀZĪ's recipes were available in Andalus towards the mid-10th c.³ It also confirms that the exotic names of compound drugs that surface in the *Urġūzah* did not reach its author through dubious oral sources but rather in written form, which is in fact the way of transmission that ought to be regularly expected with regard to such knowledge.⁴

¹ I have accessed the text of *Dukkān* through three copies, none of which appears to preserve the original text in its entirety. The Damascus copy (= D) corresponds to Ḍāhiriyyah Library MS 3159 Ṭibb 34, which is written in Maġribī script perhaps as late as 1394 (cf. HAMARNEH 1969: 236). A much smaller fragment is transmitted in the Algiers copy (= A), National Library MS Maġmūʿ 1746 no. 3 (cf. HAMARNEH 1969: 240–241). I could consult these two copies at the Frankfurt Institut für Geschichte der arabisch-islamischen Wissenschaften. Quite recently a hitherto unidentified copy emerged from my research: London, British Library MS Or 5927, fols. 1r1 – 67r15 (= L). This third copy is acephalous (it lacks the introduction and the index of contents) and its colophon on fol. 67r13–15 alludes to the title of the treatise as *Kitābu šināʿati alyad mina lʿašribati waġayri dālīka* and ascribes it unambiguously to IBN ʿABDIRABBIH. The manuscript is also of Maġribī (quite probably Andalusī) origin and the dispensatory is cotransmitted there alongside IBN ZUHR's *Aġḍiyah* and ATTUĠĪBĪ's treatise on gastronomy (cf. ELLIS and EDWARDS 1912: 47, who catalogue it as an “anonymous pharmacopœia”). It was also listed by HAMARNEH 1975: 249–250 [n.v.], but it may not have been identified as IBN ʿABDIRABBIH's dispensatory as no later source mentions this third copy. References to a further additional copy and to an early-modern abridgement are provided by SEZGIN 1970: 301.

² Cf. IBN ABĪ UṢAYBĪʿAH, *Ṭabaqāt* 490²²; also HAMARNEH 1969: 237, SEZGIN 1970: 301. The latest update on the biography and the written output of IBN ʿABDIRABBIH is KUHNE 2012, where the reader shall find further indications of earlier literature. For ease of reference I stick throughout to *Dukkān* as the title for all three witnesses.

³ Three different dates for the death of IBN ʿABDIRABBIH are transmitted, the latest being 966. The composition of the *Urġūzah* is dated ca 930 by KUHNE 1980: 299, but there is no way to ascertain whether the dispensatory predates or postdates the medical poem.

⁴ The two main assumptions in KUHNE's analysis of the *Urġūzah* must be therefore revised. Names such as *saġaznāyā* and *dabūd* (or any other realisation of their basic ductus) did not enter Andalus “de viva voz con los médicos orientales que se establecieron en al-Andalus y los españoles que hicieron viajes de estudios a Oriente” (KUHNE 1980: 308), nor is it “muy difícil que se dispusiera tan rápidamente de obras como el *K. al-Manšūrī* de al-Rāzī” (KUHNE 1980: 308 n. 83). On a side note, it would be tempting to assume that the mention of these drugs in the *Urġūzah* implies the chronological priority of *Dukkān*, but no item from the category of *kuštaġāt* (cf. *Urġūzah* 94) is included in the dispensatory, which means that one ought to look

From a strictly chronological point of view, the inclusion of ARRĀZĪ's two abridged formulas (= *Pharm* 3.2 and 4.13) in *Dukkān* might be combined with the narrative of the arrival in Andalus of some texts written by the polymath from Rayy as early as ca 920 through MUḤAMMAD B. MUFLIT.¹ If in his return from the *riḥlah* this Ḡayyānī merchant brought not only philosophical but also some medical texts by ARRĀZĪ, that might explain the massive presence of materials from his dispensatory in *Dukkān*. Incidentally, this datum is of some import for the question of the chronology of the parent compilation from which *Nat* III and IBN ALHAYTAM's *Iktifāʾ* derive. It is possible that a copy of *Ḥawāṣṣ* might have travelled together with ARRĀZĪ's other texts and, in any case, the remarkable celerity with which these materials were transmitted across the Mediterranean can no longer be doubted.²

One final remark on the relationship between *Dukkān* and ARRĀZĪ's output. If the chapter *Dukkān* XIV on the oils actually elaborates on the homonymous chapter in ARRĀZĪ's *Aqrābādīn*^B, then the compilation of that section (and perhaps also of others in the book) reflects intelligent complementation and also a non-negligible effort to expand the inherited material. This can also be compared to the strenuous task involved in the compilation of *Ḥawāṣṣ* (or of IBN ALHAYTAM's *Iktifāʾ* if my hypothesis is not admitted) and suggests a context of intense intellectual activity far beyond mere copy of eastern texts in tenth-century Andalus. A few observations on this shall be introduced in Chapter 9 and also in the conclusions to the whole dissertation.

Dukkān and Natāʾiḡ: dependence or cognacy?

Any dependence of IBN ʿABDIRABBĪH's comprehensive collection of formulas from the much modest selection transmitted in *Nat* III must be ruled out. There is not one single chapter in which *Dukkān* could be proved to be a subset of *Natāʾiḡ*. The contrary assumption, in turn, would be much easier to prove given that for many chapters *Dukkān* could have been the pre-existing compilation from which ALʿILBĪRĪ borrowed his recipes. A systematic analysis of this problem cannot be attempted here, but I would like to point out two simple considerations that might suggest a relationship other than direct dependence between these two texts.

The first one relates to structure. If *Nat* II.2, *Nat* III, and even *Nat* IV are reflective, as I think they are, of the author's compilatory strategy, ALʿILBĪRĪ does cer-

elsewhere for their origin, probably to the materials transmitted from AHRUN in such texts as IBN ISḤĀQ's *Kunnāṣ* or IBN MĀSAWAYH's *Nuḡh*.

¹ Cf. FIERRO 1987: 162 n. 5. This anecdote has already been referred to above in Chapter 5.

² On the chronology of *Natāʾiḡ*, see Chapter 9 below; on the possible date of the source text for *Nat* III (namely *Ḥawāṣṣ*), see Part III, Chapter 1.

tainly not make an impression as a highly creative borrower. The whole architecture of those three sections (from the micro-level of epigraphs to the macro-level of chapters) is a straightforward imitation (ie a material copy) of the arrangement that he found in his source texts.¹ Had he exploited *Dukkān* as the copy-text for his pharmacopoeia, our author ought to be credited with a drastic reworking of the original materials that would have required designing an entirely new macrostructure (there is no significant overlap between the two divisions into chapters) and accordingly a redistribution of the recipes.

Moreover, in order to produce the extant text of *Nat V* ALʿILBĪRĪ would have had to change, with no apparent motivation and to no gain whatsoever, the relative order of the formulas within the new clusters.² And he would have done so with virtually every single chapter in the section. Elaboration on the source text would have also involved changes in the nomenclature of some drugs and even linguistic adaptation of a text that was already “sufficiently Andalusī”. All that is quite a lot of effort for the section of an average pandect addressed to an anonymous recipient by a physician from Ilbīrah. Furthermore, such a practice does not seem to agree with the usual *modus operandi* of compilers.

Second, even if the above argument were disregarded, there is still a remnant of recipes in *Nat III* that are not to be found in any of the extant witnesses of *Dukkān*. The clearest example is the series of five medicinal powders in *Pharm 1*. If a relationship of dependence is assumed, their inclusion in *Natāʿiḡ* would reflect authorial intervention in the form of complementation of the copy-text with an additional source (which in this case might be IBN ALĠAZZĀR’s *Zād*). Now, had ALʿILBĪRĪ been simply copying from *Dukkān*, it would be the strangest thing to ignore the eight recipes available in his source only to borrow some others from elsewhere. One could argue that it might be a case of suppletion (ie this particular chapter may have been missing from his copy of *Dukkān*), but then a number of different *ad hoc* explanations would be required for each one of the divergences only to justify a premise that may well be unwarranted.

Arguments and counterarguments could be adduced and even when a systematic (ie statistic) analysis shall be made available the question may remain open to interpretation. I hope to have shown, nevertheless, that there is some reason not to presume a direct dependence of *Nat V* from *Dukkān*. The recent

¹ In the particular case of *Nat IV* this imitation may have been limited to the trophognostic treatise, but the argument is still valid.

² As seen in *Pharm 7* the order of the recipes for the oils recorded in *Nat V* is certainly not the historically original one, but the same disagreement is shown by the brief sequence of preserves in *Pharm 4* and extends, in fact, to the whole compilation. In this regard, the only way to admit that *Nat V* might be the offspring (through borrowing) of *Dukkān* would be to assume that ALʿILBĪRĪ was playing dice.

revision of the tenth-century Andalusī medical tradition has revealed, in fact, a fascinatingly complex picture in which IBN ISHĀQ's five-volume *Kunnāš* emerges as a key text and which further includes several now-anonymous compilations that were in circulation in tenth-century Andalus (more on this in Chapter 9).

In order for these concluding remarks not to become a disguised history of Andalusī pharmacopoeical literature I shall address one last question before putting an end to this series of previews of the sections of *Natāʾiğ*. Because of the clear chronological implications of the matter a word must be said about the possible dependence of *Nat V* from IBN ALĠAZZĀR's *Zād* and a quick look at the Qayrawānī tradition may reveal the existence of some hitherto unnoticed source of medical knowledge.

The route between Qayrawān and Andalus and a problem with Ibn Alġazzār

The survey of *Nat V* has shown that as far as the recipes *qua* written artefacts are concerned a third text must be added to *Dukkān* and *Natāʾiğ*: the recipes collected in the pharmacopoeical books within AZZAHRĀWĪ's *Taṣrif*. I have already stated that the level of word-by-word identity that obtains between the formulas transmitted by these three texts is mostly unparalleled, both in extent and in degree, in the later Andalusī tradition. At all effects these three texts must be considered typical representatives of a tradition of pre-Ṭayfī pharmacopoeia that would be quite radically discontinued by historical events.

Now, while *Dukkān* and *Natāʾiğ* share not only much genetic material but also an overall layout and skeleton (above all they draw from the same limited corpus of recipes), AZZAHRĀWĪ's behemoth of a dispensatory stands on a whole different level.¹ The range of sources from which AZZAHRĀWĪ culls his formulas is impressive and a few otherwise unattested titles of some consequence are reflected there,² but it is his large dependence from IBN ALĠAZZĀR that concerns me here. Not a few recipes that in *Natāʾiğ*–*Dukkān* are unscribed appear indeed in *Taṣrif* with an explicit mention of that Qayrawānī physician. At least as far as IBN ʿABDIRABBIH is concerned one may assume, on chronological grounds, that he must have accessed these materials from a source other than IBN ALĠAZZĀR. Accordingly, ALʿILBĪRĪ's dispensatory ought perhaps to be

¹ From a strict genre perspective one should speak of 'non-autonomous pharmacopoeical books' within *Taṣrif*; but to all effects the summation of those sections amounts to an actual *Aqrābādīn* and it is in this sense that I refer to them as a dispensatory.

² Cf. most particularly the recipes transmitted from IBN ĠULĠUL's *Kitābu lʿadwiyati lmaḥzūnah*, some of which are located by BOS, KĀS, LÜBKE, and MENSCHING 2020: 170 n. 1267. Mark also a recipe for «شرب المطفات لا تعرفه العامة، وهو شراب الخاصة» in ALHĀŠIMĪ, *Mağālis* II (K 146₁₁–147₂), which transmits it, through MANŠŪR, from IBN ĠULĠUL's *Kitābu ṭibbi lmulūkī* that he would have composed for caliph ALḤAKAM.

considered an additional witness to that particular tradition, for the glaring disagreement between the explicit ascriptions in *Taṣrīf* and the absence of IBN ALĠAZZĀR's name from *Nat V* can hardly respond to a sort of strange cancellation strategy.¹

On the other hand, given that something of the quoting technique of IBN ALĠAZZĀR can be inferred from his extant works (especially from *Iṣtimād*, where it can be proved beyond doubt that he draws extensively from IBN ḤIMRĀN without virtually ever mentioning him as his source) and taking likewise into account that on occasion he apparently arrogates to himself some formulas documented in an identical form elsewhere—the suspicion seems warranted that the actual source for the recipes collected in *Natāʾiġ–Dukkān* may be, either directly or through some mediating compilation, the output of the founder of the Qayrawānī school of medicine, IBN ḤIMRĀN.

No monograph on compound drugs has ever been ascribed to this Baġdād-born physician, however. Recent research has suggested that he did author a pharmacopoeia, but the evidence produced is far from conclusive.² It is likely,

¹ The fact that an author deliberately skips the closest link in the chain of transmission need not always have an ideological or emotional motivation and in this respect the use here of the concept of cancellation may carry unwanted (and anachronistic) overtones. As a matter of fact, with very rare exceptions (as for instance AZZAHRAWĪ himself, who includes not a few intermediary links in *Taṣrīf*, authors in their capacity as recipe-compilers probably never felt compelled to mention the name of those who, just like them, had been for the most part recipient-distributors of a common legacy. Authors may have felt, regardless of their rank, entitled to mention the names of the first inventors establishing thereby an ostensible link of continuity—and of almost tangible immediacy—with the received authorities. Why should IBN ALĠAZZĀR be cited if the recipe was explicitly ascribed to IBN MĀSAWAYH? Why IBN MĀSAWAYH if the author was GALEN? Accumulation of authorities was certainly a luxury in a genre so eminently practical and economical as pharmacopoeia, and very much unlike in ḥadīth science it certainly would not have contributed in any significant way to the legitimation of the physician as a member of the medical tradition. At any rate, this phenomenon is by no means peculiar to the Islamicate corpus: most of the impressive list of *auctoritates* that GALEN somewhat boastfully cites in his two pharmacopoeical monographs (*Sec. loc* and *Per gen.*) he actually had accessed through the previous compilations of ANDROMACHUS, ASCLEPIADES, and CRITO (cf. SCARBOROUGH 1984: 219, n. 102).

² Cf. BOS, KĀS, LÜBKE, and MENSCHING 2020: 103, where they suspect that a “fragment of it is apparently” preserved in Escorial, RBME MS Árabe 887, fols. 25–40. Now, even from the catalogue description of the contents of the fragment (cf. DERENBOURG 1903: II 99–100) it is rather obvious that it cannot possibly be attributed to IBN ḤIMRĀN since *some* of the recipes are *ascribed* to the author, which would make no sense if they were penned by him. What is even more compelling, the author's uncle MUḤAMMAD B. AḤMAD is mentioned twice, which points unambiguously towards IBN ALĠAZZĀR, who included in his works many a recipe from his uncle MUḤAMMAD B. AḤMAD, cf. for instance a recipe for the lohoc of poppies in *Suṣāl* IV (M 48r 1–14). A similar conclusion may be inferred with regard to the *Kitābun fi lṣaqaqir* in Bursa (Haraççioğlu MS 1126, fols. 125r–192v), since the fact that its compiler “regularly stated that” IBN

on the other hand, that at least some of the recipes ascribed to him were excerpted from his book on melancholy and perhaps also from his treatise on hygiene *Risālātun fī ḥifāḍi ṣṣiḥḥah*.¹

An alternative Qayrawānī source?

Nat V and *Dukkān* share a recipe for a complex non-inebriating *buḥtaǧ* that they both ascribe to an enigmatic IBN ANNADĀ, who is nowhere to be found in bibliographical sources (either mediaeval or modern) as a medical author.

An apparent namesake of this mysterious figure is mentioned no less than thirty-eight times in the twelfth-century Andalusī *ṣumdaḥ*.² A limited overview of a sample from these mentions allows for a provisional observation: either the IBN ANNADĀ cited in the *ṣumdaḥ* combined two quite disparate professional profiles or two different authors are being referred to by this name.

On the one hand there is a set of passages in which he is collocated with eastern (botano-)lexicographical sources (most often alongside ABŪ ḤANĪFAH and ABŪ ḤARŠAN), which would seem to make him an unsuitable candidate to be a pharmacopoeical authority (but mark, nonetheless, the text of entry no. 1382). On the other hand, there are a few instances in which the allusion to IBN ANNADĀ appears in a quite different context and he is explicitly associated with physicians. Furthermore, at least in two cases (nos. 943 and 5010) he is mentioned alongside IBN ṢIMRĀN (once actually between him and DŪNAŠ B. TAMĪM), which may be a strong indicator of some kind of link with the Qayrawānī tradition.³ This possible association to the Ifrīqī school and the nature of the recipe

ṢIMRĀN “had prescribed the following remedy to sufferers from the respective diseases” does not bear out the assumption that such recipes were necessarily taken “from a book on compound drugs”.

¹ Recipes are concentrated in the second book of *Māliḥūliyā* and are most conveniently marked and numbered by GARBERS in his edition, cf. *Māliḥūliyā* II (G 160₁₈–183₁₄). They amount to at least twenty-nine different drugs (under no. 8 several abridged preparations are mentioned) and include seven different hazelnut-formed pills (بنادق), two digestives (جوارشن), three medicinal powders (سغوف), one syrup, two versions of the drug of musk, two hieras, and two oils, besides other categories not reflected in PHARMACOPOEIA. Any relevant coincidences have been duly indicated in the critical apparatus and in the survey above. As for IBN ṢIMRĀN’s dietetic monograph, nothing can be said about its contents (cf. ULLMANN 1970: 190).

² Cf. the corresponding entry in the comprehensive index to that work in BUSTAMANTE, CORRIENTE, and TILMATINE 2010: II 971. Mark that in the *ṣumdaḥ* the name is consistently spelled as «ابن الندى» (except, for example, in B–C–T 168₁₆), whereas both *Nat V* and *Dukkān* read rather «ابن الندا», which might admittedly be interpreted also as reflecting IBN ANNADĀ?

³ Fifteen different entries have been selected for this sample (only the number of the lemma is given as a reference and if not expressly indicated otherwise the name is simply coordinated, with no particular quote, to the neighbouring authorities): [203] after SULAYMĀN B. ḤASSĀN (ie IBN ĞULĠUL) and ABŪ ḤĀTIM; [572] preceding ABŪ ḤANĪFAH; [582] quoted after two citations

transmitted from him (a *buḥtaǧ*, for which see above *Pharm* 6.1) make of IBN ANNADĀ an extremely interesting character in a narrative that remains to be written.

from ABŪ ZIYĀD and ABŪ ʿAMR; [943] explicitly collocated with other physicians (AZZAHRAWĪ, IBN ʿIMRĀN, IBN ANNADĀ, DŪNAŠ B. TAMĪM); [985] quoted after a citation from ABŪ ZIYĀD, [1343] between ABŪ ḤARŠAN and ABŪ ḤANĪFAH; [1382] ABŪ NAŠR and he affirm that one the varieties of lousewort (*ǧaṣdah*) enters the recipes of the theriac and electuaries (B–C–T 131₅₋₆); [1627] again his opinion is shared with ABŪ NAŠR; [1661] twice: first with ABŪ ḤANĪFAH and ABŪ ḤARŠAN; then again associated with lexicographers (الرواة), his condition of “transmitter” being made even more explicit as it is stated «إلا أنه يروينا بالخاء معجمة» [1701] preceding ABŪ ḤARŠAN; [1775] following a reference to the Baṣrī tradition («وهذا مذهب أهل البصر»); [4256] after DIOSCORIDES and before Ibn Ġanāḥ, his identification of *qayṣūm* with *qṣintin* is rebutted; [4713] alongside ABŪ ḤANĪFAH, ABŪ ḤARŠAN, and ALʿASMAʿĪ; [5010] against physicians, alongside IBN ʿIMRĀN; [5013] explicitly amongst lexicographers, mentioned between ABŪ ḤARŠAN and ALʿASMAʿĪ, with data related to Iraq. For the abbreviation سع representing IBN ʿIMRĀN, cf. BUSTAMANTE, CORRIENTE, and TILMATINE 2010: II 973.

8.5 Complementary notes to *Nat V*

Pharm 1 itrifal

Given the preference of the Arabic language for harmonic prosthetic vowels, the word is probably to be read as *itrifal* (cf. FELLMANN 1986: 161, 213–214 n. 66), but other pronunciations (particularly *a-*) were certainly possible and IBN ALḤAŠŠĀZ was quite persuaded that *-fu-* was the correct vocalisation, cf. *Mufīd* [56] (C–R 8_{1–2}). Mediaeval Latin borrowed the Arabic term as *trifera* (also spelled *triph-era* and *tryphera*), whence Middle English *trifera* and *trifer* (cf. NORRI, *DMVE* 1118–1119).

A Greek etymology from τρυφερόν ‘delicate, dainty’ as proposed by DOZY *SDA* I 28a is untenable, as is VON WARTBURG’s identical suggestion for Middle French *trifere* and Late Latin *trifera* in *FEW* XIII.2 343–344 s.v. *trypheron*. None of the drugs known by this epithet in the Graeco-Hellenistic tradition bears any resemblance to Islamicate triphalas, cf. GALEN, *Sec. loc.* IV.8 (K XII 758₁₅–759₃) and *Sec. loc.* VII.4 (K XIII 85₁₃–86₂).

The correct Sanskrit origin signalled by SCHMUCKER 1969: 75–76 no. 48 had long been established in the Arabo-Islamicate tradition. Already in the 10th c. ALḤWARIZMĪ records Indian «تری اہل» as meaning “the three ingredients” («*attalātatu ahlāt*») in *Mafātiḥ* II.III.6 (V 176_{3–4}) and this definition is echoed through the centuries by IBN HINDŪ, *Miftāḥu ṭṭibb* VIII s.v. (Q 82_{15–16}) and ALQALĀNISĪ, *Aqrābādīn* XX s.v. (B 49_{13–14}).

The circulation of some recipes for triphalas ascribed to GALEN, however, may have misled the Cairene pharmacist ALṢAṬṬĀR ALḤĀRŪNĪ into thinking that the name, the meaning of which he actually knew, was of Roman (ie Greek) origin: «*wahādihī luḡatun Rūmiyyatun* يتريافيليا», cf. *Minhāḡ* V.22 إطرينفل صغير (A 70_{26–27}).

The name *triphala* has been preferred here to *trifer(a)* both to avoid any confusion with the actual descendants of τρυφερόν and to make the etymology of the word more immediately noticeable.

Pharm 2 iyāraḡ fiqrā

The correct interpretation of Greek ἱερά πικρά was overall well transmitted through time and space in the Arabo-Islamicate corpus. The double equation ἱερά = *ilāhī* and πικρά = *murr* was received by IBN ATTILMĪD, *Aqrābādīn* II [56] (K 64₁₉), and *aššarīf* (instead of *alʔilāhī*) may well be an euphemism in IBN HINDŪ, *Miftāḥu ṭṭibb* VIII s.v. (Q 83₄).

A partial translation of the Greek name was also available in the form «*alʔiyāraḡu lmurr*» in IBN SARĀBIYŪN, *Kunnāš* VII.IX.2 (L 52v 12 – 53r 4) and also in AB-

ULḤASAN AṬṬABARĪ, *Buqrāṭiyyah* III.21 and VI.36 (B 89r 5, 187r 6); cf. likewise the gloss «الدواء المرّ» «حماة» in BAR BAHLŪL, *Lexicon* 147₄ within the lemma «حماة» «حماة».

In Andalus, IBN ĠANĀḤ extracts from *Sec. loc.* an identification of *iyāraġ* as “a drug made of colocynth pulp” in *Talhīṣ* [87], and from *Loc. affect.* he draws a translation of *fiqrā* as “bitter” for *Talhīṣ* [755]. AZZAHRĀWĪ, in turn, affirms that Greek *iyāraġ* means “bitter drug”, although he also echoes GALEN’s remark on ‘hiera’ being properly the name of a drug made of colocynth pulp, cf. *Taṣrīf* V (S I 393_{27–28}). Later on IBN ALḤAŠŠĀZ affirms that *iyāraġ* means «*dawāʾun mushil*», whereas *fiqrā* he correctly identifies as «*murr*», cf. *Mufīd* [81] (C–R 10₁₁).

A simplified appellation *fiqrā* that mirrored Greek πικρά was also in circulation in Arabic, as for example in the aforementioned locus in IBN SARĀBIYŪN’s *Kunnāš* («*alladīyudīā “fiqrā”*»), as well as in Syriac (cf. PAYNE SMITH, *Thesaurus* 3121 s.v. «حماة» and also the Syriac *Book of medicines* 80₉ and 98₁₈).

Pharm 3 *balādūrī*

Cf. «*maṣġūnu lʾanqardiyā (wahuwa lbalādūrī)*» in ALMAĠŪSĪ, *Kāmil* II.v.7,₂₂ (S II.2 321_{11–24}); «*dawāʾu lʾanqardiyā: huwa maṣġūnu lbalādūrī*» in IBN HINDŪ, *Miftāḥu ṭṭibb* VIII s.v. (Q 83_{3–4}); also IBN ĠAZLAḤ, *Minhāġ* 125 (L 218v 8–19).

On the other hand, a transliteration of Syriac «*ܠܒܐܕܘܪܝܐ*» (cf. PAYNE SMITH, *Thesaurus* 282) circulated widely in Arabic as أنقرديا / أنقرديا and some years ago the alleged Byzantine etymon ἀνακαρδία was argued to be a ghost by DIETRICH, who with the friendly collaboration of SERIKOV proposed rather ἐγκαρδία (cf. DIETRICH 1996: 600).

In Andalus, the equation of *anqardiyā* with *balādūr* is already recorded by IBN ISHĀQ, who had found it in AHRUN’s book (cf. IBN ĠANĀḤ, *Talhīṣ* [2] (أنقرديا)). A full description of the fruit is provided by IBN ĠULĠUL in *Tāminah* [28], where *balādūr* is compared in form to a heart («*wahuwa qasṭalun fi šakli lqulūb*»), then it is stated to be a Roman word meaning ‘heart’ (G 15_{4–9})—which is indeed the same analogical basis for the denomination *encardia* attested in PLINY as the name, there, of three different stones, cf. *NH* XXXVIII.10_[58] (I–M V 453_{16–4543}). For a quite exhaustive analysis of the anacardium remedy in the Islamicate tradition cf. BOS 1996, which must be complemented with the linguistic data provided in BOS, KĀS, LŪBKE, and MENSCHING 2020: 202.

On a side note, I provisionally adopt a transliteration *anq-* (rather than the prevalent *anaq-*) precisely in view of the revised etymology of the word.

Pharm 4 ġuwārišn

For the etymology of the word, cf. Persian *guwāridan* ‘to digest’ and ‘to be digested’ (already Pahlavi *gugār(i)dan*, cf. MACKENZIE, *CPD* 38).

The form best attested in Arabic in the 9th and 10th centuries is *ġuwārišn* (with an *-n*), cf. AṬṬABARĪ, *Firdaws* VI.IV الجوارشونات في (§ 474₁–481₂₁); also «*alġuwārišnu: alhādūm*» in IBN HINDŪ, *Miftāḥu ṭṭibb* VIII s.v. (Q 8₇). However a pseudoetymological association with the native Arabic verb *ġaraša* ‘to bruise, to bray, to pound’ seems to have obtained relatively early and this induced some lexicographers to include it *sub radice* √*ġrš*, while the further analogical pressure of the triradical pattern may have helped to spread the form *ġawāriš* that came to substitute for the older one.

This evolution seems to have been intuited by the compiler of the glossary to ARRĀZĪ’s *Manṣūrī*, who defines *ġuwārišn* (so in manuscript K) as «*alhādīm*» and adds that a pronunciation «*ġawāriš*» was used by some Arabs, cf. IBN ALḤAŠŠĀZ, *Mufīd* [283] (C–R 31₅).

Incidentally, the earlier form in *-n* that manuscript P of *Natāʔiġ* uses quite consistently is not recorded in CORRIENTE, *DAA* 94b *{JRŠ} II despite being well attested in Andalus: it is the only form used by AZZAHRĀWĪ throughout *Taṣrīf* and also the one known to IBN ĠANĀḤ from AHRUN’s book (cf. *Talḥiṣ* [254]). In the 11th c. ALHĀŠIMĪ has an *n*-less form, cf. «*ġawārišu lkammūni waġawārišu lʔanīsūn*» in *Maġālis* I.1.28 (K 76₈).

Pharm 4 dabīd

This word is registered already by DOZY in his additions and corrections to the first volume of his *Supplément* (cf. *SDA* I 863) having found it in the then only known copy of IBN WĀFID's *Tadkirah*. More recently CORRIENTE adds the testimony of IBN QUZMĀN's *dibīd* (cf. *DAA* 191a *{ḌBD}).

The word *dabīd*/*dabīd* is in fact extensively documented in Andalus as a technical term for a hepatic electuary and the first attestation of the word on Andalusī soil can be dated back to the tenth century, since it features already in IBN ʿABDIRABBĪH's *Dukkān*, and only some decades later it is present in AZZAHRĀWĪ's *Taṣrīf* too (see the parallels registered in the survey of *Pharm 4*). Further Andalusī documentation includes, in roughly chronological order: IBN WĀFID «ذبيد» and «لگا» in *Wisād* XI.12|19 (A 149₈₋₁₄, 152₅₋₈); ATTAYMĪ «ذبيد ورد» against stomachaches, *apud* ALHĀŠIMĪ, *Mağālis* I.I.28 (K 75₁₉₋₂₀); then «ذبيد الراوند وذبيد الورد وذبيد الكركيا» in *Mağālis* I.I.28 (K 80₂), and two instances of «ذبيد ورد عشاري» in *Mağālis* I.I.28 (K 77₁₄, 78₁₈); ZUHR, *Muğarrabāt* [136] «صفة ذبيد يُصلح الكبد الفاسد» [138], (A 55₁₂₋₅₆), «صنعه بالفستق في تقوية الكبد وتسخين اللون» [167], (A 56₈₋₁₁), «ذبيد ورد عشاري» [191|197], (A 66₁₂₋₁₉), «نسخة ذبيد لإصلاح المعدة والكبد» [191|197], (A 75₁₅, 79₅₋₁₅); IBN RUŠD, *Kulliyāt* «ذبيد الورد» (F-A 462₁₄₋₁₅), and also *Talḥiṣāt* 270₂₋₃ «الذبيد العشاري: مما يختص بتقوية كبدك».

Cf. an observation on this name by ZUHR's in *Ağdiyah* s.l. «ذکر ذبيد الورد» (G 90₄₋₅), where he asserts that *dabīd* is

اسمٌ أوقعه الأطباء على كلِّ معجون يُقَوِّي الكبد، والورد من أدويته.

For the earlier Qayrawānī tradition, besides the parallel loci for each individual recipe that have been pointed out above, cf. IBN SULAYMĀN:¹

Istisqāʿ 133v 20–21

ומן הרפואות המורכבות: כדביד אלך ודביד כרכום ודביד הריברברי ודביד
הברבריש ודביד הקושט

Istisqāʿ 134r 8–9

דביד הריברברי ודביד הכרכום ודביד הלך

¹ I quote the text of his monograph on dropsy from the Hebrew translation transmitted in Paris, BnF ms Hébreu 1173, for which cf. MUNK 1866: 216.

After him, cf. IBN ALĠAZZĀR for the treatment of the liver (*Zād* V.2) and also against dropsy (*Zād* V.3):¹

Zād V.2 (T 404₆₋₇)

ومن الذبيدات مثل ذبيد الراوند وذيبيد العصارات أو ذبيد لكا أو ذبيد كركم أو دواء القسط أو ذبيد كبريتا وما أشبه ذلك.

كبريتا [كبريتا] T.

Zād V.3 (T 409₁₆₋₁₇)

من المعجونات مثل ذبيد الراوند أو ذبيد اللك أو ذبيد الكركم.

Zād V.3 (T 411₁₋₂)

من ذبيد لك وذيبيد قسط أو ذبيد كركم.

Zād V.3 (T 421₂)

ذبيد راوند وذيبيد كركم وذيبيد لك وذيبيد ورد ودواء القسط.

Beyond that, early mentions of this special category of hepatic drugs can be located in AṬṬABARĪ, who in *Firdaws* prescribes the use of several *dabīd* drugs (of turmeric, of musk, of lacquer) for diverse ailments of the heart, stomach, womb, and bladder, and he actually provides recipes for the hepatic of anacardium («ذبيد أنقرديا»), the hepatic of turmeric («ذبيد كركم»), the “yellow” (perhaps rather “lesser”) hepatic of lacquer («ذبيد لكا الأصفر»), and the hepatic of sulphur («ذبيد كبريتا») in *Firdaws* VI.VI.1 (§ 456₄₋₁₉, 459₁₈₋₂₃, 459₂₄-460₃, 460₁₅₋₂₃, respectively).

A Persian origin has been assumed since DOZY, *SDA* I 863 (then CORRIENTE *DAA* 191) and indeed STEINGASS does record *dabīd* “An electuary, medicine” without marking it as an Arabic word (cf. *CPE* 503). However, VULLERS finds no clue at all amongst native lexicographers about the nature of this drug or the origin of the word and wonders whether *dabīd* may be a cognate of ذبيب or even a transmissional variant thereof; the latter word being registered by him as ذبيب ‘*quaevis res pulsando emollita* (نرم كفته) in *LPLE* I 810b s.vv. (cf. also STEINGASS, *CPED* 503 *dabīb* ‘Anything made soft by beating’).

Given that the Iranian connection does not appear to be a promising one, it is maybe worth exploring a different possibility. In view that all *dabīd* drugs are consistently named after their most characteristic ingredient and that some of them show an unmistakably Syriac form (cf. ذبيد لكا and most especially ذبيد كبريتا), *dabīd* may well be a fossilised reflection of Syriac — *ܕܒܝܕ* (ܕܒܝܕ) corresponding to

¹ Add a mention of «ذبيد لكا أو ورد» in *Zād* 402₁₁.

τὸ διὰ τοῦ/τῆς — (φάρμακον), which itself was largely fossilised as a true prefix διὰ- already in GALEN's time. In Syriac a substantivisation of such noun phrases is documented in the names for several dishes, as for instance ܘܨܘܪܘܬܐ (= رُمَاتِيَّة) and ܘܨܘܪܘܬܐ (= حَصْرَمِيَّة), which ELIAS BAR SINAËUS enters in his dictionary precisely under the lemma ܕܒܝܕܐ *dabyad* (cf. PAYNE SMITH, *Thesaurus* 1548 s.v. ܕܒܝܕܐ). An example of this construction is probably found in the translation of τετραφάρμακον and ἑπταφάρμακον salves as «ܘܨܘܪܘܬܐ ܕܘܨܘܪܘܬܐ ܕܘܨܘܪܘܬܐ ܕܘܨܘܪܘܬܐ» in the Syriac *Book of medicines* XIII (B 252₇₋₈). The same syntactical construction has been previously shown for the athanasia antidote in that text, which is in fact full of instances of this particular nomenclature. Confirmation of this hypothesis is provided by AṬṬABARĪ's reference to a «شيف يُسْتَى ديدمرا», for which a recipe is provided in *Firdaws* IV.III.4 (§ 174₄₋₁₀) and which must be compared to δίασμυρον in GALEN, *Sec. loc.* IV.VIII (K XII 774₁₆₋₇₇₅). Cf. further the musk-based drug being referred to twice as «دييد المسك» in *Firdaws* 226₁₆ and 277₂₄) but then all three recipes for that remedy are entered as «دواء المسك» in *Firdaws* 454₈₋₄₅₆₃, which corroborates that *dabīd* bears no meaning in itself. This variation is in no way peculiar to AṬṬABARĪ, and ALṢAṬṬĀR ALHĀRŪNĪ justifies his entering the lacquer drug under the rubric «دواء اللك» because “there is no difference whether one says “*dabīd*”, “*dawā*” or “*maʿjūn*” since they refer to one and the same thing” (cf. CHIPMAN 2010: 21–22).

As far as the formulas are concerned, the early Andalusī stock of formulas for *dabīd* was most probably borrowed from Qayrawān: three of the five recipes in *Pharm* 4 have identical parallels in IBN ALĠAZZĀR and 4.32 is explicitly ascribed to IBN ṢIMRĀN.

Pharm 7 siefs

The word *sief* is attested in English since the 15th c. (cf. NORRI, *DMVE* 16–18) and it inherits a defective representation of etymological /ʃ/. In the early manuscript tradition it was often spelled as *scief* in Latin (cf. Catalan *xief*, borrowed directly from Arabic) but it was afterwards simplified, as *sc-* was no longer understood to represent a palatal sound.

Arabic *šiyāf* (also اشيف with some uncertainty as to the quality of the initial prosthetic vowel) does not only refer to a certain category of mostly dry collyria but also to suppositories, cf. IBN HINDŪ, *Miftāḥu ṭṭibb* VIII s.v.: «*waššiyāfu kul-luhā ašyāʿun mutamāsikatun tuḥmalu fī dduburi waʿfī qubuli lmarʿah; wamīna ššiyāfi mā yaḥtaṣṣu bilṣayn*» (Q 83₁₄₋₁₅) and also the note to *das(s)ās* in *Ther* 3₅ above. This semantic duality was actually inherited from Greek medicine, cf. IṢṬIFĀN's translation of κολλύρια for the eyes as *šiyāfu fayn* (more often simply *šiyāf*) in *Ḥašāʾiṣ* 1:91 أقفاليس (P 21_V 4 | T 87₁₆) ≡ *Materia medica* 1:89 ἀκακαλλίς (W I 83₃) and of anal and vaginal κολλύρια likewise as *šiyāfāt* in *Ḥaš* 2:160

دراقونطيون (P 51v1 | T 200₁₇₋₁₈) ≡ MM 2:166 δρακόντιον (WI 236-7). Cf. also ANTYL-LUS' explanation of the diversity of κολλύρια in ORIBASIOS, *Collectiones* X.XXIII Περὶ κολλύριων (R II 64₁₈₋₆₅).

Besides, although the Arabic lexicographic tradition agreed upon a derivation of the word from the autochthonous root √šwf, a Syriac origin has long been suspected (cf. RICHTER-BERNBURG 1983: 64 n. 33a) and ܫܘܦܐ (from a cognate root √šwp) is indeed well documented since SERGIOS' translation of GALEN'S *Simpl. med.* (cf. PAYNE SMITH, *Thesaurus* 4101-4102), yet this etymology is not mentioned in the collective commentary on IBN ĠANĀH, *Talḥiṣ* [1001], where rather a possible link to Persian šāf is suggested (cf. BOS, KĀS, LÜBKE, and MENSCHING 2020: 1117-1118).

Pharm 7 bāsiliqūn | rūšanāʿī

Greek βασιλικόν was quite probably mediated by Syriac, cf. two recipes for ܫܘܦܐ / ܫܘܦܐ recorded in the Syriac *Book of medicines* V (B 89₁₀₋₂₁) that share the basic composition of Islamicate basilica. Incidentally, MARGOLIOUTH, *Supplement* 58 s.v. subsumes the two different pharmacopoeic meanings of ܫܘܦܐ under the same translation 'Royal ointment', but this should refer only to *Book of medicines* XIII (B 252₇), where the τετραφάρμακον salve is mentioned by this name.

A double interpretation of *bāsiliqūn* as *malakī* 'royal' (but also 'angelical'!) or *mulūkī* 'royal' has been preserved through the centuries, cf. «*albāsiliqūn, wamaḡnāhu "Imulūkīyyu" awi "Imalakī"*» in IBN ATTILMĪD, *Aqrābādīn* X [250] (K 125₉₋₁₄) and also «*almalkāyā (ayi lmalakī) liramadi ḡadūt*» (reflecting Syriac ܫܘܦܐ) in *Aqrābādīn* X [258] (K 127₁₁₋₁₄); likewise «*kuḡlu lbāsiliqūn (wamaḡnāhu: almulūkī)*» in IBN ABILBAYĀN, *Dustūr* VII.1.3 (S 51₁₇). The apomorphic reinterpretation as 'angelical' is evident in «*wahuwa mansūbun ilā lmalāʿīkati lisurʿati atariḡi waḡuhūri nuḡḡihī*» in *Dustūr* VII.1.9 ܫܘܦܐ (S 55₁₁₋₁₅) ≡ ALṢAṬṬĀR AL-HĀRŪNĪ, *Minḡāʿ* XII.10 ܫܘܦܐ (A 136₂₇₋₁₃₇₃).

For the Persian synonym *rūšanāʿī*, cf. IBN SARĀBIYŪN, *Kunnāš* VII.33.5 (L 228r 1 - 231v 11) ≡ *Breviarium* VII.33 (V 83vb 56 - 84rb 54); and also AṬṬABARĪ, *Firdaws* IV.III.5 دواء الباسليقون (S 177₁₂₋₁₉), where «*روشنائی*» is explicitly said to be the name by which the Persians know this drug. Cf. likewise IBN HINDŪ, *Miftāḡu ṭṭibb* VIII s.v.: «*albāsiliqūn min adwiyati ṣayn: maḡnāhu rrūšanāʿī, kaʿannahū yanfaʿu min ḡulmati ṣayn*» (Q 836). In Arabic, the denomination *rūšanāʿī* (with diverse spellings) became canonical especially amongst authors with an Iranian background, cf. ALMAĠŪSĪ, *Kāmil* II.v.22,14 (S II.2 401₁₈₋₂₁); but oddly enough SĀBŪR B. SAHL, who gathers at least three recipes for basilica, does not transmit this synonym, although his third formula bears the name of "Persian basilicon"

(*bāsiliqūn Fārisī*), cf. *Šajr* XVI [261–263] (K 196₁₅–197₁₁). It is equally strangely that IBN ATTILMĪD seems not to identify the *bāsiliqūn* with the *rūšanāʿī* in *Aqrābādīn* X [251] *arrūšanāʿī, wamaʿnāhu: annūr* (K 125_{16–21}).

In search of a context

Hopefully the reader has by now gained a clear enough picture of the structure and the contents of *Natāʾiġ*, as well as of the main intertextual affinities and also the some of the genetic relationships that it shows. It is time to tackle, from this knowledge, the thorny question of the origin of the text. In Section 1 a survey of old and new proposals for the identification of its author is provided. As a complement (or rather a supplement) to the scarce and inconclusive data available on ALʾILBĪRĪ, an attempt is made in Section 2 to draw an intellectual and professional profile of the author on the basis of what little information can be gleaned from the text itself.

Given that the inquiry into ALʾILBĪRĪ's identity leads to a dead end, the reconstruction of the likely context of *Natāʾiġ* must focus rather on locality and chronology. In Section 3 a selection of the most significant indicators of an Andalusī context is analysed. An annotated glossary lists the main lexical items that can be interpreted as geolectal markers but not, as I shall argue, as unequivocal chronological markers. Finally in Section 4 I try to summarise all the data garnered from the different sections of *Natāʾiġ* that may be of some interest to the question about the date of the compilation. The discussion focuses mainly on the sources, both explicit and implicit, of the compilation. A plausible chronology for the text is proposed on the basis of this evidence but any definitive conclusions are postponed until a more exhaustive examination of all available data can be conducted.

9.1 Authorship

The different versions in which the author's name features in several loci in the two manuscript witnesses have already been mentioned and commented upon in Chapter 2. It should be noted that this variation is found in both cases exclusively on the title page (which is often not original but rather a later addition to the codicological unit),¹ whereas there is absolute agreement in all four onomastic elements in the mentions of the name in the body of the text. Therefore, unless new external evidence should be found that might suggest otherwise, there ought to be no hesitation to follow the majority reading that transmits the name of the author of *Natāʾiğ* as ABŪ MUḤAMMAD ʿABDULLĀH B. AḤMAD and his *nisbah* as ALʾILBĪRĪ.

The gentilic of the author is indeed unanimously transmitted as *Alʾilbīrī* in all loci in both manuscripts² and in the absence of any plausible alternative it can be quite safely taken as a *nisbah* derived from the well-known Andalusī city and *kūrah* of Ilbīrah.³ There is no way of ascertaining, however, whether the gentilic implies in this case that the author was actually *born* in Ilbīrah. Although an implication of nativeness is often assumed without further consideration, the range of meanings of the *nisbah* also includes adventitiousness of the person that *acquires* it, since it testifies in a broader sense to their “path through life, geographical as well as intellectual”.⁴ In Section 2 I shall argue that our author must have been active as a professional physician in Ilbīrah or otherwise he was particularly identified as a coming from that city or *kūrah* (thence his being known as “the Ilbīrī physician”). In either case the connection (genetic, professional, or both genetic and professional) to Ilbīrah may be of some consequence for the chronological context of the author, as the *madīnah* was sacked in 1010 and its inhabitants emigrated massively to Ġarnāṭah,⁵ after which Ilbīrah

¹ Cf. GACEK 2009: 277–278. In P the title page has certainly been slightly retouched and perhaps even wilfully designed to match the script and style of the initial folios of the manuscript (let it be recalled, however, that this is assessed from inspection of the digital reproduction). The script of the title page of D, on the other hand, is perhaps not dissimilar to the subsequent text, but then the copyist's hand is not a particularly hard one to imitate. This unequal value of the different instances of the author's name seems to have gone unnoticed so far.

² The apparent disagreement on the title page of P reflects, as has been shown above, more a misreading than an actual variant. That it was taken at face value by ASCARI (no doubt as a consequence of the circumstances of a hasty survey) became inconsequential thanks to the correction of DE SLANE.

³ This identification was already intuited by DE SLANE 1895: 529. As usually in the Andalusī tradition the *nisbah* may refer either to the province or to Madīnat Ilbīrah proper.

⁴ SUBLET 1995: 54. This is particularly manifest in the case of complex *nisbah* chains of two, three, or even more elements, such as the frequent *Alġarnāṭī Alʾilbīrī* (some concrete examples of which are to be found below).

pretty much vanishes from the Andalusi scene. This datum is considered in the discussion of chronology in Section 4. Of the Andalusi origin of the author, on the other hand, there can be no doubt, and the text is certainly written in an Andalusi context and with a local readership in mind.

One candidate to be identified as ʿABDULLĀH B. AḤMAD ALʿILBĪRĪ has been proposed so far, which is certainly a considerable step forwards from the initial vagueness of bibliographic and catalogue references. The first modern allusion to *Natāʿiḡ* is a brief note by BROCKELMANN in the addenda to his *Geschichte der arabischen Litteratur* in which he simply records the two alternative names of the author and states that he wrote before 1215.¹ Even afterwards the only effort made to go beyond the catalogue reference by HAMARNEH was a negative identification with a twelfth-century namesake and it was not until quite recently that a positive identification was first proposed in a cosigned entry in the *Biblioteca de al-Andalus*.² There both versions of the author's name are still accepted as equally valid and the two scholars suggest identifying him with a certain traditionist named ʿABDULLĀH B. AḤMAD who was born in Qalʿat Alʿaṣṣab (in the *kūrah* of Ilbīrah) somewhen during the second half of the 9th c. He was considered a descendent of SAʿD B. MUʿĀD and studied under such masters as IBN ʿABDILMALIK B. AYMAN (d. 942) and AḤMAD B. ZIYĀD (d. 937). Nowhere is it mentioned, however, that he might have had any connection to medicine, but he seems rather to have been occupied with legal counselling and contract making.³ Although in some contexts this would not have been necessarily incompatible with other activities, the lack of any allusion to his being also a physician is important here given that the medical profession of the author appears to have been, as shall be seen below, a distinctive trait of his profile.

All things considered, CARABAZA's and GARCÍA's proposal is laudable but still inconclusive, as it is based exclusively on onomastic coincidence and neither

⁵ Cf. HOPKINS 1986: 1110.. The history and archaeology of Ilbīrah have attracted the attention of scholars since the end of the 19th c. (cf. GÓMEZ 1888; ESPINAR 2006; GARCÍA-CONTRERAS, RÍOS, and ALONSO-VALLADARES 2022).

¹ Cf. BROCKELMANN 1942: 1243 (additions to his *Supplementband* III 895). Even if he mentions the two known manuscripts of *Natāʿiḡ* he certainly had no information on the colophon of manuscript D (thence his dating of the text).

² Cf. CARABAZA and GARCÍA 2009: 384. All biographical data on ʿABDULLĀH B. AḤMAD is gathered from IBN ALFARADĪ, *Tārīḡ* I 413₆₋₁₁ no. 714 and ZIYĀD, *Tartīb* VI 154₁₅₋₁₈ no. 163. A physician bearing the same name had been previously discarded by GARCÍA SÁNCHEZ 1995: 191 n. 2, and up to that date the author had been simply affirmed to have lived during the 12th c. in PEÑA *et al.* 1981: 95, which is an echo of HAMARNEH's assumption.

³ His approximate birthdate is inferred from IBN ALFARADĪ's affirmation in *Tārīḡ* I 413₁₁ that he was mentioned by ḤĀLĪD (B. SAʿD), whose biographies span from 635 to 941/942, therefore he must have died towards the middle of the 10th c. On his profession IBN ALFARADĪ simply notes that «وكان معول أهل موضعه عليه في عقد شروطهم وفتياهم» (*Tārīḡ* I 413₁₀ ≅ ZIYĀD, *Tartīb* VI 154₁₇₋₁₈).

ʿabdullāh nor Aḥmad are by any means rare names in an Islamicate context. There is very little against (and much in favour of) a mid/late-tenth- or early-eleventh-century chronology for the composition of *Natāʾiğ*, but this ʿABDULLĀH B. AḤMAD may have lived a bit too early if his demise must be assumed to predate 942 (see below the discussion on chronology). In order to avoid the temptation of circular reasoning and lest this research should be contaminated with non-factual premises, the text has been treated as anonymous and achronous to all effects.¹

On the other hand, internal evidence brings no light at all regarding several relevant questions related to the biography of the author. Did he at some point of his life move from Ilbīrah (if he had been born there) and settle somewhere else? Or did he rather move *to* the city to practice medicine there? Did he ever travel abroad (probably in the context of his *riḥlah*) and get access to some texts that may have been unavailable in his homeland? Can it be inferred from the fact that the only two extant copies of *Natāʾiğ* are of eastern origin that ALʿIL-BĪRĪ stayed (or even died) somewhere in the Mašriq after the composition of his *kunnāš*? These are just some of the many questions that could not be answered despite all hermeneutic efforts.

On a side note, this situation—namely knowing precious little about the author of a text of some length and of some import for the history of Islamicate science—is far from exceptional, especially for those who are forced to give some attention to works that are either less central or less well-covered by bio-bibliographic sources. To mention just two examples (for this is not a point that needs to be developed here), all biographical data on the eleventh-century Ṭulayṭulī physician ALHĀŠIMĪ, the author of such an important witness to Andalusī non-courtly medicine as his *Kitābu lmağālisi fi ṭṭibb*, has to be extracted from internal evidence.² In the case of ABULMUNĀ ALKŪHĪN ALṢAṬṬĀR and his *Min-hāğu ddukkān*, it is basically thanks to the colophon of the Gotha manuscript that the text can be located in 1260 Cairo, whereas its author, for whom we have a full name and an obvious communal affiliation, remains “otherwise unknown”.³

¹ Here the lack of a proper term is deeply felt to designate a work the author of which is only known by name.

² Cf. KADDOURI 2005: 10–13. In the text the year 1057 is mentioned with regard to a session with his master ATTAYMĪ; then two visits related to the same medical case are recorded for the years 1071 and 1077. The partial reconstruction of ALHĀŠIMĪ’s biography on this scanty basis is (legitimate) speculation.

³ Cf. CHIPMAN 2010: 1.

9.2 Profiling the author

The physician from Ilbīrah

Not even the most sceptical may doubt that ALʿILBĪRĪ must have been a practitioner, in some capacity, of medicine, although the precedent of his most illustrious townsman IBN ḤABĪB, who authored a medical compendium without being himself a physician, may inspire some caution. Now, IBN ḤABĪB's motivation to compile a book on "the medicine of the Arabs" (and also one on Islamic star lore, and another one on history) was quite specific and cannot by any means be interpreted as a genuine trend by which non-physicians would have devoted their time and energy to the production of medical texts. Furthermore, throughout *Nat* II.1 and most especially in its proem and in its epilogue (which ought to be considered the most original segments and therefore also the most reflective of the author's attitude) ALʿILBĪRĪ reveals himself as a committed adept to the medical art. His engagement can be also inferred, of course, from the painstaking compilation of the book, which required not only some patience and resources but also a confident command of the principles of medical theory and practice.

Even if he is not to be considered the author, in strictly creative terms, of most of the materials collected in *Nat* II.2, understanding and reproducing with remarkable accuracy and occasional linguistic adaptation IBN MĀSAWAYH's text is no minor feat, especially for an Andalusī physician. His interpretation of *Nuǧh* is far superior than that of ZUHR (whose blatant misreadings are not all caused by a defective Vorlage) and that is something worth of note. Then, his regimen and his dispensary are quantitatively modest when compared to most representatives of the *Aǧḍiyah* and the *Aqrābādīn* genres respectively,¹ but the important fact here is that ALʿILBĪRĪ's *Natāʾiǧ* remains to date one (and perhaps the earlier) of the two only known representatives of the comprehensive *kunnāš* in Andalus. The other one was, of course, AZZAHRĀWĪ, a court physician with access to one of the best collections of sources ever exploited in the country.

A more accurate examination of *Nuǧh* may reveal further details about the extent and the quality of the author's intervention in the text, but there is very little hope that new evidence should emerge concerning his actual medical practice. In this regard and before moving forwards, I would like to highlight one curious datum that had long escaped my attention and which may not be entirely irrelevant. In all three instances in which the author's name is mentioned in the text he is referred to as Abū Muḥammad ʿabdullāh/Abū ʿabdillāh Muḥammad

¹ As I have already said, this is a spurious comparison in that in general terms *sections* of larger books should not be compared to autonomous treatises even if co-generic.

“b. Aḥmad *the Ilbīrī physician*” (ie “the physician from Ilbīrah”) rather than as “Abū Muḥammad ʿabdullāh b. Aḥmad *Alʿilbīrī the physician*”. The inversion of the normal order of the elements makes of “physician” a *laqab*, which certainly emphasises the author’s professional status. On the other hand, it is quite evident that such a way of reference as “the Ilbīrī physician” would make most sense *outside* Ilbīrah.¹

Also an apothecary?

There is no radical incompatibility, in principle, between the professions of the physician and the apothecary that might make a parallel activity unthinkable of,² but so far I have not come across any evidence for the exact combination physician-and-apothecary in Andalus.³ As a matter of fact, the overall picture drawn by contemporary sources is one of remarkable antagonism between physicians and apothecaries, but that may well be more a partial (both one-sided and interested) representation than a genuine reflection of everyday life. In any case, the answer to the question whether *ALʿILBĪRĪ* was a physician *and* an apothecary depends in good measure on the ascription and the originality (or lack thereof) of some of the texts contained in *Nat I APOTHECONOMY*, neither of which can be established beyond doubt.

One can say thus much: *Nat I* is quite evidently addressed to apothecaries and reflects a great familiarity (one that could hardly be gained from mere perusal of books) with the elements of that profession. To be sure, the first segment of the subsection on simple drugs *Nat I.3.1* could have been written even by a *muḥ-tasīb* with the help of an informant, and a physician like *IBN MĀSAWAYH* could

¹ The most evident parallel case of such an intercalation of the profession between the *nasab* and the *nisbah* is *ALKĀTĪB ALQURṬUBĪ* (otherwise *ALKĀTĪB ALʿANDALUSĪ*), which was indeed the *laqab* of ʿARĪB B. SAʿĪD.

² One should bear in mind here that “[i]t was not regarded as incompatible with the dignity of the profession for a physician to engage in business as a sideline” (GOITEIN 1971: 258, where several Jewish physicians are mentioned who gained their livelihood as merchants) and drug-handling would be, of all trades, most allied to medicine. The analysis of the social standing of apothecaries in mid-thirteenth-century Cairo shows that they “belonged to the class of traders and shop-keepers” (CHIPMAN 2010: 60).

³ The link between the medical profession and the drugstore must have been much closer than what elite-centred sources suggest. To the references provided in Chapter 4 add «boticario *haquīm huquemé*» and «botica *hanūt haquīm*» in *Vocabulista arávigo* 118b 2 and 118a 37, respectively (where *ḥakīm* is a usual synonym for *ṭabīb* ‘physician’ but not for ‘apothecary’). The testimony of fifteenth-century Ġarnāṭī Arabic cannot be retrojected, of course, to tenth- and eleventh-century Ilbīrah, Qurṭubah, etc, but it is nevertheless reflective of an association that can only be intuited in some biased depictions of market- and street-physicians. Unfortunately I am not so confident in the narrative constructed from biobibliographical sources as to affirm that “many physicians owned pharmacies or had special sections at their ‘clinics’ for this purpose” (HARMARNEH 1962: 62).

have signed not only that segment but also a good half of *Nat* I.3.2 *On stones*.¹ Now, even the limited preview offered above in Chapter 4 has hopefully shown that the author's knowledge is deeply rooted in the *reality* of the market. The pervasiveness of the first person in chapter I.4 *On the shelf-life of drugs* might be interpreted as additional evidence for ALʔILBĪRĪ's involvement in drug-handling if only it could be demonstrated to be a genuine reflection of his own experience and not a derivative piece (see below Section 4 for a discussion of this point). But even if it were original, one might still argue that also physicians must have kept their own stores and checked the quality of their drugs.

On the other hand, there are some hints that suggest that *Nat* I may have been written by a physician wishing to "instruct" the members of the apothecary profession, especially with regard to the limits of their activity lest they should encroach someone else's trade—a subject on which the author is particularly emphatic. This apparent distancing himself from apothecaries might also be a clue.

In sum, whoever wrote *Nat* I APOTHECONOMY was either a professional apothecary and physician, or a physician exceptionally well informed about this craft. These two professions were certainly never coterminous and a clear-cut distinction emerges from the documentation between drug-handlers and drug-makers on the one side and physicians on the other. As seen in Chapter 4, the picture of the exact relationship between them in caliphal Andalus remains to be drawn.

The professional distinction may have been further blurred outside capital cities (which for obvious reasons are overrepresented both by primary literature and by modern research)² and it is far from impossible to imagine that in some contexts a learned apothecary may have doubled as physician and the other way

¹ On a frivolous note, IBN MĀSAWAYH could have actually signed the entire text of *Natāʔiğ*, as he authored independent treatises on aromatics and on gems (*Ṭib* and *Ġawāhir*, respectively, which amounts to a substantial part of *Nat* I), on therapeutics (most especially *Nuğh*, which provided the blueprint for *Nat* II.2), on the specific properties (precisely a head-to-toe *Ḥawāṣṣ* that may have been the first of its kind in the Islamicate tradition and a precedent to ^α*Ḥawāṣṣ*), and on trophognostics and dietetics (cf. ULLMANN 1970: 199, and also *Azminah*). Given that *Nuğh* (and quite certainly also his larger pandect on therapeutics) contained a great many recipes and that a remarkable amount of formulas are also borrowed from him by IBN ALĠAZ-ZĀR in *Zād*, very little is left in our text that may have been alien to the impressive output of this Syro-Iranian physician. To be clear, only *Nat* II.2 bears a demonstrable direct genetic relationship to his oeuvre.

² With the only major exception of ALṢAṬṬĀR ALḤĀRŪNĪ it is only through the physicians' eyes that we can catch a glimpse of the activity of the drug-handler, who is only an accidental character (often as a qualified informant) in the author's own narrative. As usually, negative depictions are mostly anonymised and even collectivised ("drug-handlers", "syrup-makers"), whereas valuable information is referred to an identifiable and contextually reputed individual ("So-and-so has informed me").

round. The essentially synchronical nature of most individual texts, moreover, often prevents us from taking into consideration the temporal dimension. The author of *Natāʾiğ* was certainly a physician when he compiled the book, but he may also have started his career as an apothecary before reaching a higher social status. Once again *Nat* I.4 might shed precious light on this question. If the first-hand information on the shelf-life of simple drugs were original, then one might safely admit that ALʿILBĪRĪ must have kept his own store¹ and that his experience as an apothecary (*qua* keeper of drugs) must have extended for over fifteen (and perhaps even twenty) years.

Perhaps any progress in the reconstruction of the Andalusī drug-market as proposed in Chapter 4 shall help to bring some light to this question. In the meantime I would like to point out that there was at least one physician active in caliphal Qurṭubah for whom no professional link to drug-handling is documented and yet shows an unparalleled familiarity with real market commodities and with the origin and even the Andalusī distribution of many simple drugs. That physician is, of course, IBN ĞULĜUL, and it is only recently that some well-deserved justice has been done to his pivotal rôle in the western medico-pharmacognostic tradition.²

A philosopher?

Trying to outline an author's intellectual profile is admittedly complex and at the same time extremely hazardous. The risk of misconstruction and the temptation of overinterpretation are both too present, and the consequences of such mistakes are too embarrassing. Even in the case of a reasonably well-studied figure with a larger and far more explicit output an expert in the matter can still allude to "Ibn Masarra's complex and elusive intellectual profile".³ There is no chance, therefore, that a satisfactory picture could be sketched here.

The most evident sources, both material and inspirational, for the philosophical prolegomena of *Nat* II.1 have been summarily analysed in Chapter 5 and

¹ Here, as in Chapter 4, I avoid the word 'shop' as it is far more specific than the original Arabic expression *ṣindī*, which can convey even simple possession. This admittedly euphemistic strategy notwithstanding, the sheer quantity of different drugs with which the author appears to have some experience, the separate chapter on the instruments of the craft, the explicit reference to *selling* drugs in the deontological segment, and the arguable allusions to a diversified clientele throughout *On stones*—all of this seems to bring to mind an actual shop. A direct link between the author and this shop, however, remains to be provided.

² Cf. the impressive amount of data collected and insightfully analysed by BOS, KÄS, LÜBKE, and MENSCHING 2020: 139–153. Any future study of IBN ĞULĜUL'S output ought to follow that lead and it should also incorporate the revised reading of his *Ṭabaqāt* and of official histories of medicine in general propounded by ÁLVAREZ MILLÁN 2004.

³ DE CALLATAÏ 2014: 266.

there is very little to add here. Only a more detailed examination of the text, conducted preferably by a historian of philosophy in Andalus, shall show whether ALḤILBĪRĪ's rudimentary philosophy has any genuine interest or not. A recapitulation of the available evidence may be useful, however, in the context of this inquiry into the author's figure.

The overall impression caused by *Nat* II.2.2 (for what little philosophy is to be found in the book clusters all there) is certainly one of unsophisticated discourse with regard to proper philosophical theory. Eastern parallels but also some fragmentary witnesses of the local production confirm that specific terminology was long integrated into the philosophical and even theological discourse by the 10th c. While ALḤILBĪRĪ is heir to this tradition and shows some familiarity with at least a few of the Fachtermini of the discipline, the absence of any reference to form and matter, for instance, or of any overt allusion to the question about the first Bringer-into-existence, confers a distinct character to the text. This need not be interpreted, of course, as reflective of amateurism (which may nevertheless be a plausible explanation) but it might be rather a result of the author and his addressee sharing a common ground that made any explicit discussion of some matters superfluous. After all, despite its bombastic title, *Natā'iğ* is first and foremost a book on medicine, not on philosophy, the latter being a complement or an instrument (both on the intellectual and on the rhetorical levels) but certainly not a subject.

As far as quantity is concerned, maybe the paucity of the materials ought to be measured by their relevance to the topic in the eyes of the author. It is not, perhaps, that he did not know any more but that he may not have felt necessary to delve into matters tangential to his point. Besides, it may not be entirely unjustified to bring to the fore a further possible factor for inexplicitness. In the likely temporal context of the work (a hypothesis on which is to be found below) those that devoted themselves to philosophy

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يكتفون ما يعرفون منها، ويظهرون ما تجوز لهم فيه من حساب والفرائض والطب وما اشبه ذلك.

On the other hand, there is no reason to doubt the sincerity of the author's commitment to the path of philosophy, in a general noetic and also in a specific *falsafī* way. It is quite possible that he devoted part of his time to the study of this branch of knowledge. Even if he may have been little more than a dilettante, this interest should be added to his profile. His selection of sources and, above all, the quite successful synthesis of different epistemic strands that he implements in *Nat* II.1 testify in favour of this hypothesis. As highlighted in Chapter

5, the piece of Andalusī Islamic philosophy represented by this brief text is a worthy representative of a trend that ultimately goes back to the first Muslim generation and it is at the same time unique in its own context. There is no shortage of parallels in the local tradition, to be sure, but ALḤILBĪRĪ's particular blend is, as far as I am aware, quite idiosyncratic.

Whether all of this qualified or not as being a philosopher in the author's context, that is a whole different story that cannot be told by me here. As to the vexing question of the author's possible ideological affiliation, I cannot but pay heed to DE CALLATAÿ's qualified piece of advice and avoid laying "a disproportionate emphasis on formulating the identification of the authors as representatives of such or such ideological group".¹ I simply cannot fathom what his stance may have been regarding the debate on ALKINDĪ's philosophical proposal, but the fact must be noted that he admits several of the elements of that tradition into his text. Those appear to be, not insignificantly, the less controversial ones, and the author carefully avoids touching upon the exact modality of creation, emanation, and other related theories that are discussed in far more detail and in quite unambiguous terms by the IḤWĀN or in Andalus by IBN MASARRAH.

In sum, there is enough positive evidence to admit that the author may have considered himself a philosopher and judging from his text he certainly deserves to be conceded at least the status of a philosophising physician. He certainly was no IBN RUŠD, but there is no reason to suspect that he might have been a philosophaster. After all

the term *falsafa* did not refer to speculation about God and man and the world in some general, vague way, but always explicitly or implicitly signified a body of doctrine and a style of thought that was dominated by a Neoplatonized Aristotelianism carried over from Aristotle's late Greek commentators. And the name *falāsifa*, or philosophers of Islam, referred specifically to those individuals who attached themselves to that body of doctrine and mode of thought, and who took it upon themselves to spread and develop them in their own Islamic environment, often in the face of suspicion and opposition from certain quarters in Islamic society.²

¹ DE CALLATAÿ 2014: 267. The warning relates, evidently, to the IḤWĀN, but it applies with the same force to any other individual, group, or community.

² SABRA 1994: 3.

9.3 Inferring locality from the text

The most conclusive proof of an Andalusī origin for the author is his use of such exclusively western and characteristically Andalusī lexical items as *banānīs*, *laḥṣīyah*, *silbāḥ*, *qinnāriyah*, etc, and even Amazighic *tākūt/tākawt*, *tābūdā*, and *tāḡan-dast*.¹ It is not a mere coincidence that Andalusī features should appear precisely in the sections in which authorial intervention appears to be highest, and the conclusion seems fairly obvious that *Natāʾiḡ* was originally written with an Andalusī readership in mind. With almost no exception, glosses and synonymical substitution adapt eastern/standard terminology to local use, not the other way round. These glosses (let alone original geolectalisms) cannot have been introduced by eastern copyists and, moreover, such an authorial practice would have no sense at all if the text had been written for Mašriqī readers.

For obvious reasons the presence of geolectal markers is most interesting (and also most significant) in the context of passages of non-Andalusī origin. The case of western words appearing in probably pseudo-Galenic excerpts has been pointed out in the survey of *Nat* II.2, and in the same section some of IBN MĀSAWAYH's phytonyms have been either glossed or directly substituted for by local synonyms (cf. particularly *ḡantūriyah/ḡintawriyah* instead of *qanṭūriyūn* as echoed by ZUHR, or the explanation of *šaḡaratu uḏuni lfaʾr* as *mardaquš* and of *furbiyūn* as *tākūt/tākawt*). It is less sure, but still quite probable, that some of the synonyms for the names of vegetables and fruits in *Nat* IV may also reflect authorial intervention, although others (most evidently those that gloss an eastern word by an eastern synonym) are certainly inherited from the unidentified source of that segment.

The information provided by terminology as an indicator of locality (ie of geographical context) does not correlate, however, with its significance as a chronological marker. For several different reasons old nomenclature can be retained for centuries without linguistic updating. This is especially true of some epistemic genres, medicine and pharmacognosy being two of the most conservative ones. Except for some remarkably assertive authors, the names for ailments, remedies, and drugs were large and by inherited and passed on gener-

¹ It should be noted that since research on the Mediaeval Maḡribī lexicon is virtually inexistent, this significant lacuna in our knowledge bears negatively on the assessment of the premodern geolectal distribution of some of these words. It can be affirmed without reservation that all the items considered here are positively attested in Andalusī Arabic, yet virtually all of them have been in use in the Maḡrib too. On the other hand, perhaps some morphosyntactical evidence could also be added to this list, such as for instance the plural form الجوار for Classical (and in general non-Andalusī) Arabic الجواري and other analogous forms, but there can be no certainty that such forms are original and have not been altered by the process of manuscript transmission.

ation after generation. When present, contextual adaptation in this tradition takes most often the form of glosses to the received reading—which makes instances of substitution all the more interesting. This tralatitiousness of knowledge (for it affects not only the form but also the contents of what is transmitted) results in the impossibility to assign a date to an achronous text on the sole basis of the terminology used in it.¹ In the case of archaisms, their mere presence in a text is entirely uninformative with regard to chronology and it is only through combination with additional elements of judgement that they can become significant. Our text transmits a great many lexical items of remarkable antiquity, but this feature is mostly derived from the fact that it reproduces verbatim sources that go back to the 9th c. Thus, sporadic instances of *ṭilāʾ*? (exclusively in *Nat* III) rather than *šarāb* or *ḥamr* for ‘wine’ tell us nothing of the author’s own linguistic use, and the same can be said of so many words that he simply copies (without perhaps even understanding some of them) from PSEUDO-GALEN, IBN MĀSAWAYH, and the anonymous compiler of ^α*Ḥawāṣṣ* (who in turn depended on mediated echoes of even older sources).

In the following epigraphs some of the most conspicuous geolectal features of *Natāʾiḡ* are analysed. These traits are grouped according to a thematic criterion: Andalusī place names; nomenclature of the signs of the zodiac, planets, and months; phytonyms (both in an independent context and as glosses); and finally a residual category of *realia* (used here as a blanket label) that includes names for vessels and every-day products. The aim of this analysis is manifold. While the main focus is laid on locality,² tangential remarks on chronological implications and intertextuality are also to be found here. On the other hand, the discussion of the names of plants (and at least one fish) may be of some additional interest as it touches also upon the question of identification.

Some readers might have preferred a strictly alifatic arrangement of the items (a sort of glossary), which would have certainly made consultation of any par-

¹ An exception to this rule are borrowings and neologisms the first appearance of which can be dated at least approximatively. To put some extreme (and therefore clearest) examples: Amazighic and Proto-Romance borrowings could hardly predate the Arabo-Islamic invasions of north-western Africa and the Iberian peninsula, and a French word in a Maḡribī text would most certainly rule out a tenth-century chronology. Such level of certainty, however, is rarely met in historical studies. Experience shows that Greek words (and ideas) had entered Arabic well before the period of the earliest translations, and Amazighic and Andalusī phytonyms reached Persian (at least canonical lexicography) without any actual contact (other than bookish transmission) between these two regions.

² To be clear, there has never been any doubt about the origin of the text (and of its author) at least as far as recent scholarship is concerned. My point here is not to (over)prove this origin but to show the degree of Andalusiness of the text. A study of the diverse degrees of linguistic adaptation through time and space, and also across epistemic genre boundaries, might reveal significant differences between authors, regions, periods, and scientific traditions.

ticular word much easier. However, semantic and thematic clusters are also significant and they moreover allow for general conclusions. There is not point, I think, in disaggregating the names of the planets and the zodiacal signs and introducing them individually as separate lemmata. By the same token, collecting all botanical glosses under one single epigraph may help to gain an idea of their possible stratigraphy and typology, which would be impossible in a general glossary or otherwise would necessitate much redundancy in the explanation.¹

Finally, one non-negligible benefit of this dislocation of the philological commentary is that it unburdens greatly the survey of the individual sections and prevents to some extent the always onerous presence of full-page-long footnotes.

¹ I am aware that all these data ought perhaps to be reworked in the future into a proper glossary, either a general one or preferably several particular ones to be appended to the pertinent sections of *Natāṭīḡ*. That may well be the most natural course of action in a standard publication, but in the case of this dissertation (which is, after all, a draft) and until a more exhaustive scrutiny is conducted, I cannot consider the following notes a true glossary. Let it be noted, on the other hand, that I deliberately exclude from this analysis a few additional phytonyms in *Nat I* for which the reading is not established beyond doubt.

Local toponymy

Hitherto the main argument in favour of the Andalusī origin of the author (besides his *nisbah*, of course) has been a solitary mention of a minor toponym, namely *Šulayr*, which appears within the entry on spikenard (*sunbul*) in *Nat* I.3.1 (P 5v 2).¹ Despite the misspelling transmitted by the unique witness to this locus,² the identification of mount *Šulayr* is quite unproblematic.³ However, the compellingness of such an isolate mention would be far from conclusive by itself (the author might be reproducing here a passage found in his sources, as so many easterners did) and there actually are other elements that provide, especially when combined, better grounds for geographical contextualisation. In fact, the allusion to a minor and far less known toponym can be adduced as additional evidence.

¹ The significance of the mention of this toponym in *Natāʿiğ* was already noted by GARCÍA SÁNCHEZ 1995: 194. On a side note, some of the conclusions arrived at in that paper are somewhat jumpy. That ALʿILBĪRĪ may have collected the spikenard-resembling aromatic spike that grew on *Šulayr* is very probable; to infer from this single mention of such a common herb that he had a profound botanical knowledge “tanto a nivel teórico como práctico” (GARCÍA SÁNCHEZ 1995: 194–195) is somewhat of an overstretched interpretation of the text. While it may not be necessarily false in this case, such a hermeneutic strategy can often lead to wrong conclusions insofar as it does not take into account the possibility of an indirect (either oral or more frequently written) transmission of this knowledge.

² It has been previously shown that P reads « في جبل شُكَيْرٍ » as a result of a trivial misreading of *ش* /-k-/ instead of *ل* /-l-/. The same misreading must have gained some currency beyond the borders of Andalus, for it is apparently received by ALQALQAŠANDĪ, *Šubḥ* V 215₁₄|8₁₀ (which includes the fragment of a poem by IBN ŠADRAH), although his explicit source, namely ALʿUMARĪ, *Masālik* IV 117₃₇, has rather «شَلِيرٍ» (as pointed out by its editor). This misreading seems to surface also in IBN ALWARDĪ, *Ḥarīdah* III (Q 19₂₁ | Z 68₃₋₄), where the toponym is edited as «شَمَكِيرٍ», but the Riyadh manuscript (which is actually of western origin) reads clearly «شَكْمِيرٍ» on the corresponding locus on fol. 13r 13.

³ In the Islamicate tradition the fame of the ever-snowclad mount *Šulayr* had reached already by the beginning of the 10th c. eastern geographers such as ALHAMADĀNĪ, who locates it at four days' distance from Qurṭubah in *Buldān* 88₅₋₆. On this *topos*, cf. also AZZUHRĪ, *Ġaʿrāfiyah* 214₁₅₋₂₁₃₁₀; ALḤAMAWĪ, *Buldān* III 26ob 7–19. Its reputation as a home to Indian and Syrian plants is echoed by ALQAZWĪNĪ, *Atār* 339₁₅₋₂₄; and ŠAMSUDDĪN ADDIMAŠQĪ, *Nuḥbah* 242₂₀₋₂₁. A wealth of pre-Islamicate documentation on this mountain is provided by GOZALBES 2008: 56–59, where the reader will find references to PLINY's *Solorius mons* in *NH* III.6; JULIUS HONORIUS, *Cosmographia* 20B.1: «*Singilius fluvius qui oritur de radice montis Saluri*» (R 36₁₀₋₁₁); RUFUS FESTUS AVIENIUS, *Ora maritima* 432–433: «*Silurus alto mons tumet cacumine*»; down to ISIDORE, *Etymologiae* XIV.8.16: «*Solorius a singularitate dicitur, quod omnibus montibus solus altior videatur (sive quod oriente sole ante radius, eius quam ipse cernatur)*».

In *Nat* I.3.2A.17 *On tutty* (P 10r 14) a *Baṭarnīyyah* variety is included amongst the species of tutty and it is glossed as “the Andalusī one”. This mention is highly significant, for Baṭarnah was a small hamlet (*qaryah*) near Ilbīrah from which the finest tutty is known from tenth- and eleventh-century sources to have been extracted.¹ In the Andalusī medical corpus Baṭarnī tutty is only exceptionally mentioned, but it was certainly well-known to IBN ĠULĠUL, who provides invaluable corroboration for the metallurgical operation described by ALḤILBĪRĪ:²

IBN ĠULĠUL C IBN SAMAGŪN, *Ġāmīf* توتيا 12–ت (S IV 169_{19–23})

ومن التوتيا ضربٌ يكون عندنا بقرية تُدعى “بَطْرَنَة” من عمل البيرة، وهي قِطْعٌ حِجَارِيَّةٌ صلبة بَرَاقَةٌ بيض يُصْبِغُ النحاس بها أصفر. وهي جَيِّدَةٌ عَلَى التَّجْرِبَةِ، نَافِعَةٌ إِذَا أُحْرِقَتْ وَفُصِّرَتْ بِالغَسْلِ بِالماءِ مَرَارًا. وَلَهَا فِي العَيْنِ مَنفَعَةٌ كَبِيرَةٌ فِي الرَّمَدِ وَغَيْرِهِ، وَقَدْ جَرَّبْنَاها فَحَمَدْنَاها.

قِطْعٌ حِجَارِيَّةٌ] وهي حجارة صلبة *in marg*

This Baṭarnah has been identified with a place name *Pago de Paterna* documented in Castilian at the beginning of the 16th c. and still in use, and it seems to correspond to what is nowadays the archaeological site of El Maraute (Salobreña, Granada), which in the Islamicate period was inhabited from the mid-10th to the 12th c.³ The name derives ultimately from Latin *Paterna* (the femi-

¹ The earliest documentation for the tutty mines in Baṭarnah is found in AḤMAD ARRĀZĪ’s *Chronicle*, the Arabic original of which (*Aḥbār*) is lost but the pertinent locus can be accessed through the Castilian translation, in which «*el venero del attutia*» called «*Paten e viua*» is mentioned, cf. *Crónica* 24. Then in the 11th c. ALBAKRĪ expands this information in *Masālik* II 386_{16–17}: «*wamaṣḍīnu ttūtiyā ḥayyibati bisāhili Ilbīrah, biqaryatin tusammā “Baṭarna”. wahiya azkā ttūtiyā waḥaqwā fi ṣan’i nnuḥās. wabiḡibāli Qurṭubata ttūtiyā, walaysat kalbaṭarnīyyah*». A reference to tutty amongst the minerals extracted from unspecified mines in Ilbīrah is made also in ALḤIM-YARĪ, *Rawḍ* 46a 8–9 s.v. أَعْرَانَاة. Let it be noted that there were other places named Baṭarnah in Andalus (as for instance in Balansiyā, cf. ALMAQQARĪ, *Naḥḥ* IV 448₁₉; IBN ḤIDĀRĪ, *Bayān* II 478_{19–479₂₁}) but none of them was ever associated to any mining activity.

² IBN SAMAGŪN’s lengthy excerpt in *Ġāmīf* IV 169_{10–170₉} (perhaps from *Tabyīn*?) is all the more significant in that IBN ĠULĠUL’s text could not possibly be the source (at least not the only one) of ALḤILBĪRĪ’s entry, yet it contains some parallel evidence for the varieties of tutty available in the tenth-century Andalusī market. An extremely abridged version of IBN ĠULĠUL’s account is recorded by AZZAHARĀWĪ in *Taṣrīf* XXVIII.1.25: «*wattūtiyā ḥiya ḥiḡāratun tuḥraḡu min maṣḍīnin fi nāḥiyati Ilbīrah, biqaryatin tusammā “Baṭrāna”* [«بَطْرَانَة»]» (S II 380_{1–2}). The only later mention of this *nisbah* in the Andalusī medical corpus known to me is the mention of «*kuḥlu ttūtiyā lbaṭarnīyyah*» in a recipe by IBN WĀFID in *Wisād* 70_{1–4}.

³ Cf. MALPICA CUELLO 1983: 185–188; GÓMEZ BECERRA, MALPICA CUELLO, and MARÍN DÍAZ 1986: 142. A survey of the results of an archaeological intervention in 1995 is provided by GÓMEZ BECERRA 2000. El Cerro del Toro has been proposed as the exact location of the mine, which might actually represent “la primera atestación del uso del zinc en forma metálica en Europa en una época tan temprana como los ss. IX y X” (MARTÍN CIVANTOS 2005: 342).

nine form of the cognomen *Paternus*) in such phrases as *uilla Paterna* (analogous to *pagus paternus*).¹

Even if it is not an Andalusi place name (and it is not my aim here to analyse all the geographical references contained in *Natāʿiğ*), it is worth noting the allusion to *Sūsī* copper in *Nat* I.3.2A.3 *On copper* (P 6v 2). As in the case of the contiguous “Roman [*Rūmī*] copper”, which could be a learned echo of the Corinthian copper or rather a reference to copper imported from Christian lands, there is no certainty as to the identification of this variety. It might even refer to the ancient royal city of Susa in Iran but, in view of ALʿILBĪRĪ’s tendency to mention real market commodities rather than—or, more exactly, alongside—exotic items inherited from bookish lore, I am inclined to interpret it as a reference to the copper imported from the far-western Sūs (*Assūs Alʿaqṣā*). Dried Sūsī copper (*annuḥāsu lmaṣbūgu ssūsī*) is listed indeed by AZZUHĪ amongst the main exports from this region to Ifrīqiyah, the Mağrib, Andalus, and also the Christian territories (the lands of the Rūm and the Ifraṅğ).²

Other toponymic references have been dealt with in the survey of the section in which they are found, with the exception of the apparent mention of “Genovese saffron”, which shall be examined separately below on account of its significance as a probable chronological marker.

The signs of the zodiac

A conspicuous feature that may shock many an unwary reader of any Andalusi text including some star lore (be it astronomy or astrology) is the idiosyncratic use of non-standard names for some of the planets and the zodiacal signs.³ As far as the latter are concerned, local nomenclature refers to Aries as *Alkabṣ*, to Gemini as *Attawʿamān*,⁴ and to Virgo as *Alṣadrāʿ*—rather than as *Alḥamal*, *Alğawzāʿ*, and *Assunbulah*, respectively.

¹ For an interpretation of the possible origin of place names of the type *Villapadierna* (and also simply *Padierna*, *Padiernos*) in the province of Salamanca that might apply in general to Roman *Paterna*, cf. LLORENTE 2003: 121–122 (originally published in 1974); cf. further POCKLINGTON 2010: 127.

² Cf. AZZUHĪ, *Ġaṣrāfiyah* 190:18–19, where Sūsī sugar, Darfī indigo, and alum are also mentioned.

³ Some eastern reader of *Natāʿiğ* was certainly surprised by this names and felt compelled to add their standard equivalents under the corresponding words on manuscript D.

⁴ A more dialectal realisation *tawwam* (also late Ġarnāṭī **tewém*) is also attested for Andalusi Arabic, cf. CORRIENTE, *DAA* 75a *{TʿM}, where the zodiacal meaning of the dual is not registered.

For Andalus, the oldest extant witness to this synonymy is IBN ḤABĪB, who claims to draw his astronomical lore from MĀLIK B. ANAS himself (d. 795):¹

Nuġūm 174₁₋₆

قال عبد الملك — حدّثني ابن أبي أويس عن مالك قال: «بروج الشمس اثنا عشر بُرجًا، ستة شاميّة وستة يمانية. فأول الشاميّة: الحمل (وهو الكبش)، ثم الثور، ثم التوءم، ثم السرطان، ثم الأسد، ثم السنبلّة (وهي العذراء) — فهذه البروج الشاميّة. وأول اليانية: الميزان، ثم العقرب، ثم القوس (وهو الراعي)، ثم الجدي، ثم الدلو، ثم الحوت — فهذه البروج اليانية».

This excerpt poses two very different problems of interpretation only one of which can be tackled in some detail here. On the one hand, MĀLIK's notions about the zodiac predate by more than a century the period of Graeco-Arabic (and also Perso-Arabic) translations of works on astronomy and astrology, which affects severely the overall picture of the Arabo-Islamic assimilation of foreign knowledge.² On the other hand, the hypothesis of a "Greek background" rests primarily on the assumption that it is MĀLIK that would have added the alternative names for Virgo and Sagittarius, both of which "were derived by the translators from the corresponding Greek Παρθένος and Τοξότης, respectively".³

However, judging from IBN ḤABĪB's practice elsewhere (particularly in his *Ṭibb* and in *Taʿrīḥ*) and even in the same text, such glosses may well have been introduced by the Andalusī traditionist himself.⁴ In this regard it may be significant that the gloss appended to the name of Aries would find no support in Graeco-Arabic translations. In any case, MĀLIK's account appears to include a name *Attawʿam* for Gemini that would eventually become obsolete in the east (where it was mostly substituted for by *Alġawzāʿ*) but found its way into western dialects. In order to better understand the origin of this synonymy and its possible significance as an indicator of a geographical or chronological context, a brief excursus becomes necessary here.

¹ Cf. an additional gloss a little further «šāra liḥamali minhā (wahuwa lkabš)» in *Nuġūm* 174₁₁, but then «wašāra liṣsunbulah» in *Nuġūm* 174₁₄₋₁₅ and «wašāra liḥawws» in *Nuġūm* 174₁₇.

² This is construed as "a serious problem of interpretation" by KUNITZSCH 1994: 165–166, but he had already pointed out the plausibility of the penetration of such knowledge (in the form of *Vorauskenntnisse* according to his own interpretation) before any formal translations were in circulation (cf. KUNITZSCH 1975).

³ Cf. KUNITZSCH 1974: 191–192, 1994: 166.

⁴ Cf. most especially «min Aylūl (wahuwa Šutanbar)» in a report from someone who had studied from ʿABDURRAḤMĀN B. ALQĀSIM in *Nuġūm* 180₁₀, and «fi sabʿi layālin min Nisān (wahuwa Abril)» in *Nuġūm* 181₅. However, the Syriac names of the months are never glossed in the text in the accounts transmitted from MĀLIK B. ANAS.

Mentions of the zodiac in traditionistic sources seem to be extremely rare, which makes MĀLIK's account all the more exceptional. I could find only one single allusion to Gemini as *Alǧawzāʾ* in a report transmitted from MUĠĀHID B. ĠĀBIR (d. ca 720).¹

On the other hand, the Arabic translation, perhaps by QUṢṬĀ B. LŪQĀ (d. 912),² of AETIUS' *Placita philosophorum* contributes an invaluable testimony to the pre-standard nomenclature of the signs of the zodiac. The verses quoted as an illustration of the beauty of the starred sphere preserve a terminology that is a literal translation of the Greek original and at the same time overlaps largely with the one that would be favoured in Andalus:³

Plac. philos. I.6,6 (D 294₂₋₁₄)

ὁ μὲν γὰρ λοξὸς κύκλος ἐν οὐρανῷ
διαφόροις εἰδώλοις πεποικίλται.

τῷ δ' ἔνι καρκίνος ἐστί,
λέων δ' ἐπὶ τῷ, μετὰ δ' αὐτόν
παρθένος ἡδ' ἐπὶ οἱ χηλαὶ
καὶ σκορπίοις αὐτός
τοξευτής τε καὶ αἰγόκερως,
ἐπὶ δ' αἰγόκερῃ
ὑδροχόος δύο δ' αὐτόν
ἐπ' ἰχθύες ἀστερόεντες.
τοὺς δὲ μέτα κριός,
ταύρος δ' ἐπὶ τῷ δίδυμοί τε.

Aetius Arabus I.6,6 (D 110₂₀₋₂₆)

وَأَمَّا الْفَلَكَ مَائِلِ الْبَيْتِ فِي السَّمَاءِ، فَهِيَ الْبَيْتِ
أَنَّ قَدْ زَيْنَ بَصُورٍ مُخْتَلَفَةٍ.
فَإِنَّ فِيهِ مَا قَالَ الشَّاعِرُ:
سُورَةُ السَّرَطَانِ،
وَيَتَلَوُهُ الْأَسَدُ وَبَعْدَهُ
الْحَارِيَّةُ الْبَكْرُ
ثُمَّ الْعَقْرَبُ
وَالرَّايِ بِالْقَوْسِ، وَبَعْدَهُ الْجَدِيُّ
وَبَعْدَ الْجَدِيِّ
مُسْكِبُ الْمَاءِ، وَتَتَلَوُهُ
سَمَكَانٌ مَكْوَكِبَةٌ
وَبَعْدَهُمَا كَبِشٌ،
وَبَعْدَهُ ثُورٌ، وَبَعْدَ الثُّورِ تَوَآمَانٌ.

By the mid 9th c. AṬṬABARĪ refers to Pisces quite consistently as *Assamakah* but the nomenclature for the remaining signs is the standard one.⁴ Very much the same applies to ABŪ MAṢṢAR's terminology, although for him the name *Assamakah* is more of an alternative (a less frequent one, in fact) for *Alḥūt*.⁵ All

¹ Cf. ABUŠŠAYḤ, *Ṣaḍamah* XXII.12 [691] (M 1217₇). My search has been, needless to say, strictly superficial and there may be more instances of this synonymy in that genre.

² Cf. DAIBER 1980: 3–15, where an exhaustive analysis is conducted in order to confirm the ascription of this translation.

³ The literal equivalents *Alǧāriyatu lbikr* for Παρθένος 'Virgo' (literally 'the [virgin] maiden') and *Muskibu lmāʾ* for Ὑδροχόος 'Aquarius' (literally 'the water-pourer') appear not to have had any fortunes in the Arabic tradition.

⁴ For Pisces, cf. AṬṬABARĪ, *Firdaws* II.I.18 (§ 56_{16|18}), VII.III.3 (§ 546₁₈), VII.IV.17 (§ 574₁₂, 575₈). For the remaining signs, cf. *Firdaws* II.I.18 (§ 56₁₉₋₅₇₁₆) also VII.IV.17 (§ 574₁₃₋₁₇). For *Assamakah* as the main name of the sign of Pisces, cf. also *Rūmiyyah* I.8|11 (M 56₈, 58₁₈, 63₁₃), against one single instance of *Alḥūt* in *Rūmiyyah* I.6 (M 52₁₇).

twelve standard names are used by the IḤWĀN in their specific epistle on astronomy.¹

Philological sources, however, provide some additional evidence for the antiquity of the double nomenclature:

ABŪ ḤANĪFAH C IBN SĪDAH, *Muḥaṣṣaṣ* IX 12₁₅₋₁₈

هي اثني عشر برجًا: الحمل (وهو الكبش)، ثم الثور، ثم الجوزاء (وهو الصورة)، ثم السرطان، ثم الأسد، ثم السنبله (وهي العذراء)، والميزان، والعقرب، والقوس (وهي الصورة والرامي)، والجدى، والدلو، والحوت (وهي السمكة).

Also IBN QUTAYBAH, after reporting on the standard names, adds that:²

Anwāʾ [135] (H 120_{12-121₂})

وقد يُسَمَّى قومُ الحمل «الكبش»، والجوزاء «التوأمن»، والسنبله «العذراء»، والعقرب «الصورة»، والقوس «الرامي»، والحوت «السمكة» وتُسَمَّى أيضًا «الرشاء».

Still before the end of the 10th c. ALḤWARIZMĪ records a dual nomenclature not only for the signs of Aries (*Alḥamal/Alkabš*), Gemini (*Alḡawzāʾ/Attawʾamān*), and Virgo (*Assunbulah/Alṣadrāʾ*), but also for Leo (*Alʾasad/Allayt*), Capricorn (*Alḡady/Attays*), and Pisces (*Alḥūt/Assamak*).³

It is however somewhat later that a clear explanation of this phenomenon will be provided by ALBĪRŪNĪ. In a show of assertiveness the Iranian polymath expresses his own opinion on which ought to be the correct standard Arabic name of the signs of the zodiac:

Tanḡūm [159] (W 69_{12-70₁₅})

ما الصور التي على منطقة البروج
هي التي وُسِّمَتْ بها البروج، واسم الصورة الأولى من عند الاعتدال الربيعي: الحمل، وهي صورة كبش قد التفت إلى ورائه حتى صار خرطومها على ظهره.
الثانية: الثور، على صورة النصف المقدم من ثور قد نكس رأسه للنطح، فكأنه قُطِعَ | بنصفين على سرّة.
والثالثة: التوءمان، على صورة صبيّين قائمين واضعه أحدهما يده على منكب الآخر.
والرابعة: السرطان، [...] .

⁵ ABŪ MAŠŠAR uses *Assamakah* only in *Madḥal* VI.9 (B-Y 640₈) and VI.12|19|24 (B-Y 648₇), 664₄, 676₃). No traces of this alternative nomenclature are found, in turn, in his *Muḥtaṣar* 1 (B-Y-Y 141-3); nor in ALQĀBIŠĪ, *Madḥal* 119-20 (B-Y-Y 20).

¹ Cf. IḤWĀN, *Rasāʾil* III.1 (R-M 114-6).

² The whole relevant locus is comprised in IBN QUTAYBAH, *Anwāʾ* [131-135] (H 120_{4-122₅}).

³ Cf. ALḤWARIZMĪ, *Mafātih* II.VI.1 (V 210_{14-211₂}). Although the etymological connection is fairly evident, I cannot find a parallel for this use of *Allayt* for Leo.

والسادسة: العذراء، على صورة جارية ذات جناحين قد أرسلت ذيلها.
 [...] والحادية عشر: ساكب الماء، على صورة رجل قائم مادّ اليدين يأخذ بها كوز قد قلبه فانصب الماء إلى مقام رجله وجرى تحتها.
 والثانية عشر: سمكة، على صورة سمكتين قد وصل ذنب إحداهما الأخرى بخيط يُستى خيط الكتان.
 وقد يُستى الحمل كبشًا، فذلك أصوب، لأنه ذو قرون. وعلى قياسه كان يجب أن يُستى الجدي تيسًا لمكان قرنيه [...] وأما العوامة، فقد اشتهر عندهم برج التوءمين بينهم بالجوزاء، وبرج العذراء بالسنبلة، والرامي بالقوس، وساكب الماء بالدلو، والسمكة بالحوث — والأوّل هو الصواب.

In sum, from a diachronical perspective the “characteristically western” terminology happens to be another instance of a differential choice by which some older synonyms available in the primitive tradition were retained in the marginal and quite typically conservative western geolects.

This diachronical digression aside, the fact remains that in Andalus a no longer standard nomenclature for Aries, Gemini, and Virgo features quite consistently in local scientific texts from the 10th c. onwards. Thus, the earliest extant Andalusī text on cosmology, IBN MUṬARRIF’s *Hayʾah*, which appears to have been composed towards the third quarter of the 10th c., shows a dual eastern/western terminology for Aries (*Alḥamal/Alkabš*) and Gemini (*Alġawzāʾ/Attawʾamān*), but not for Virgo (which is alluded to exclusively by its standard name *Assunbulah*). Quite exceptionally, IBN MUṬARRIF reports even the Rūmī names of the signs of the zodiac.¹

Glosses of the type *wayuqālu* containing the western names of the signs are added also by IBN FĀRIS (which, let it be recalled, is probably to be identified as caliph ALḤAKAM’s reputed astrologer) in his *Anwāʾ*.²

In authors largely dependant from eastern philological sources the same feature may perhaps be regarded rather (or also) as a bookish borrowing—even if it partially coincided with their own geolectal practice. Both IBN ʿAṢĪM and IBN SĪDAH record not only the by now familiar triad but also *Assamakah* for Pisces, which does not seem to have been ever naturalised in Andalus.³ The same explanation should be invoked, perhaps, for the almost entirely standard nomen-

¹ Cf. IBN MUṬARRIF, *Hayʾah* 315r–317r, and also CASULLERAS 1994: 91–92.

² Cf. «*alḥamal (wayuqālu lkabš)*», «*alġawzāʾ (wayuqālu attawʾamān)*», and «*assunbulah (wayuqālu lʿadrāʾ)*» in IBN FĀRIS, *Anwāʾ* [17] (F 196₉–197₁). Previously also «*alġawzāʾ (wayuqālu attawʾamān)*» and «*assunbulah (wayuqālu lʿadrāʾ)*» in *Anwāʾ* [9] (F 167₆, 169₁₂).

³ For IBN ʿAṢĪM, who also echoes ABŪ ḤANĪFA’s opinion on the origin of zodiacal nomenclature (namely that it does not stem from the images associated to the signs), cf. FORCADA 1993: 51, 53–55; for IBN SĪDAH, cf. *Muḥaṣṣaṣ IX* 12₁₅–18.

clature for the zodiacal signs in ʿARĪB B. SAʿĪD's *Anwāʿ*, in which the only “local” name is *Alṣadrāʿ*.¹

All in all, even if the nomenclature used by ALʿILBĪRĪ must probably be understood as synchronically geolectal (he chose the names for the planets and signs of the zodiac that were best known to his readership), the crystallisation of these different subtraditions would deserve further study.

Names of the planets

The case of the local western names of some (but not all) of the planets is similar but not entirely identical to that of zodiacal nomenclature. A major early astrological text such as ABŪ MAʿŠAR's *Madḥal* uses exclusively the standard Arabic names of all seven planets,² whereas the traditional account of philological sources includes also the Persian names for most of them.³ Persian names for three of the planets were also available in traditionistic reports related to the very first generation of Muslims.⁴ No synonyms are used by the IḤWĀN, who curiously abstain from mentioning the Persian names of the planets.⁵

In Andalus, IBN MUṬARRIF is probably the best informed amongst early authors, as he reports a threefold nomenclature standard Arabic/Maġribī/Persian for Saturn (*Zuḥal*/*Almuqātil*/*Kaywān*) and Mars (*Almirriḥ*/*Alʿaḥmar*/*Bahrām*), as well as a double Persian synonymy for Jupiter (*Almuštari*/*Hurmuz*, *Albirġīs*), whereas only two names are registered for Venus (*Azzuharah*/*Nāhīd*) and Mercury (*Ṣuṭārid*/*Alkātīb*).⁶ In his own echo of eastern sources, IBN ʿAŠIM records

¹ Cf. *Anwāʿ* 133₁₀, 225₆, 226₁, 232₄, 239₃; the same name is used in the parallel loci (when available) in *Tafṣīl*; cf. also *Qurṭubah Calendar* 85₁.

² Cf. ABŪ MAʿŠAR, *Madḥal* II.1 (B-Y 180₉₋₁₂).

³ Thus, IBN QUTAYBAH records first the standard Arabic names of all seven planets, then adds Persian *Bahrām* for Mars, *Albirġīs* for Jupiter, and *Anāhīd* for Venus, cf. *Anwāʿ* [141] (H 126₇₋₁₅).

⁴ Thus, *Albirġīs* for Jupiter and *Bahrām* for Mars feature in oral traditions on the five planets that allegedly go back to IBN ʿABBĀS and ʿALĪ B. ABĪ ṬĀLIB, and an Iranian (*Ṣaġam*) name *Anāhīd* for Venus was put in ʿALĪ's mouth according to ABUŠŠAYḤ, *Ṣaḍamah* XXII.19 [698] (M 1223₄), cf. also HEINEN 1982: 219–220. While the Iranian origin of the name *Bahrām* is undisputed, *Birġīs*/*Pirġīs* in turn is considered “Arabo-Persian” by VULLERS, *LPLE* I 214b and Arabic by STEINGASS, *CPED* 171. Given that no echoes of Persian terminology are transmitted in *Nat* II.1, this subject shall not be explored here.

⁵ Cf. IḤWĀN, *Rasāʿil* III.1 (R–M 8₇₋₈), XVI.3 (B 73₈₋₇₄). Just two Persian names surface, however, out of necessity, when the siglae for a picture are introduced: for *Zuḥal* K (= *Kaywān*) is chosen since Z stands for *Azzuharah*; for *Almirriḥ* B (= *Bahrām*) given that M represents *Almuštari*, cf. *Rasāʿil* III.5 (R–M 41₋₃).

⁶ Cf. IBN MUṬARRIF, *Hayʿah* 315r–317r; also CASULLERAS 1994: 91–92; SAMSÓ 2020: 505. The use of *Hurmuz* here is doubly exceptional in that it appears to fill the gap left by the absence of a local Arabic synonym and also in that this name (ultimately an evolution of Old Persian *Ahuramazda*, cf. BOYCE 1984: 684–687) is not widely echoed in the Arabo-Islamic tradition—certainly not in Andalus.

likewise *Almuqātil* for Saturn and *Alʔaḥmar* for Mars, in addition to Persian *Albirǧīs* for Jupiter and *Bahrām* for Mars.¹ As late as the 13th c. IBN ALʔARABĪ alludes in *ʔanqā* to Mercury as *Alkātib* and to Saturn as *Almuqātil*, yet Mars he calls by its standard name *Almirrīḥ*.²

	Saturn	Jupiter	Mars	Venus	Mercury
Standard	<i>Zuḥal</i>	<i>Almuštari</i>	<i>Almirrīḥ</i>	<i>Azzuharah</i>	<i>ʔuṭārid</i>
Alt/Andalusī	<i>Almuqātil</i>		<i>Alʔaḥmar</i>		<i>Alkātib</i>
Persian	<i>Kaywān</i>	<i>Albirǧīs</i>	<i>Bahrām</i>	<i>Anāhīd</i>	

Once again, ALʔILBĪRĪ's terminology is most probably geolectal and also consistent, as he uses all three Andalusī synonyms.

Names of the months and seasons

With the only exception of *Nisān* (glossed as *Abrīl*) in *NatPhil* 3.8, our text refers consistently to the months by their Roman names not only throughout *Nat* II.1 but also in the dietetic calendar included in *Nat* III. This usage is, of course, by no means particular to Andalusī Arabic (the same names feature in the calendar ascribed to IBN ʔIMRĀN, an easterner who writes in Qayrawān), but in the Islamicate Iberian peninsula these names were explicitly considered either *ʔaǧamī* (also “of the *ʔaǧam*”, referring in this context to the Romance-speaking population) or *Rūmī* in calendrical texts.³ Their actual form (both in spelling and pronunciation), moreover, may have been different from that of other regions. Let it be noted that this nomenclature is absent from IBN MĀSAWAYH's *Azminah*, and also, incidentally, that in the table for the Roman months drawn by ALBĪRŪNĪ all the names of the months end in *-ūs*.⁴

A complementary note must be added here on the names of two of the seasons of the year. First, in *NatPhil* 4.4.4 and 5.1 the word *qayḍ* is used to refer to a

¹ Cf. FORCADA 1993: 67.

² Cf. ELMORE 1999: 443. Belletristic and Šūfi texts obey, however, to different criteria (rhyme, evocative power) and their testimony has been excluded from consideration here with this sole exception.

³ The original terminology used by ʔARĪB B. SAʔĪD is perhaps hard to reconstruct, as in *Anwāʔ* both *ʔaǧamiyyah* (cf. *Anwāʔ* 140₉) and «*birrūmiyyah*» (cf. *Anwāʔ* 157, 169), and all the remaining months) are found. In the *Qurṭubah Calendar*, in turn, the reference to the *ʔaǧam* features exclusively for *yannayir* ‘January’ (cf. *QC* 14₄). Only half of the months are provided with synonyms «*ʔinda lʔaǧam*» by IBN ʔAʔSIM in *Šuhūr* 7₃, 23₁, 28₁, 37₁, 41₁, 54₁; whereas all twelve of them are reported as *ʔaǧamiyyah* in IBN FĀRIS, *Anwāʔ* [9] (F 161₉₋₁₀).

⁴ Cf. *Tanǧīm* [273] (W 167). As a matter of fact, with the only exception of August (*Awǧustūs*), all the names end in *-iyūs*.

specific time of summer (the text glosses it as *ṣamīnu ṣṣayf*) but also to summer itself. This usage is inherited from pre-Islamic Arabic and in *Natāʾiḡ* it may even be source-dependent,¹ although *qayḍ* is actually very well documented in tenth-century Andalusī calendars in the context of the non-Arabian four-season system.² The second name is *ḥaṣīr* ‘autumn’, which features only once in the text, in *NatPhil* 5.2, in a apparently inverted gloss to *ḥarīf*. Unlike *qayḍ*, this synonym seems to be peculiar to the Andalusī dialect bundle—at least it is not to be found elsewhere in the non-literary corpus, nor do standard lexicographic sources record it.³

Phytonyms (plus one ichthyonym) and botanical glosses

Several different categories are subsumed into this segment that would belong in separate glossaries in a more definitive version of this study. Indication of the section of the book in which each item is found should help to contextualise the use of the word. Thus, geolectal markers in *Nat* II.2 (the majority of items in this catalogue) are almost certainly introduced by the author in order to adapt IBN MĀSAWAYH’s terminology to a local readership. As seen above, in other cases (eg *Nat* II.1 and *Nat* IV) a similar strategy can be suspected but not proved until a plausible source is identified that may confirm whether the synonyms were actually added by ALʿILBĪRĪ or not.

Given that they are the best-covered and also probably the less significant synonyms, local names of vegetables and fruits in *Nat* IV other than *qinnāriyah* have been excluded from this provisional list. As an exception, non-western phytonyms of some interest are dealt with here rather than in a footnote to the corresponding survey in Chapters 4–6.⁴

¹ Some instances of this terminology have been already reproduced in the discussion on the seasonal division of the year in Chapter 5. Let it be recalled that *qayḍ* is considered to be the chaster word for what “people call *ṣayf*” by IBN QUTAYBAH, *Anwāʾ* [117] (H 1048–9), and that in Andalus in a mostly philological context it is the name of a season connected to autumn for IBN ʿĀṢIM, *Šuhūr* 203. By analogy, AṬṬABARĪ’s paraphrase of an Indian source dividing the year into six seasons features the old Arabic names *rabiʿ*, *ṣayf*, *qayḍ*, *ḥarīf*, *wasamī*, and *šitāʾ*, cf. *Firdaws* VII.IV.17 (§ 574₁₃).

² Cf. especially ʿARĪB B. SAʿĪD, *Anwāʾ* 1359₁₁, 202₁, 219₃, 231₁ ≡ *Qurṭubah Calendar* (which GERARD OF CREMONA translates consistently as *cauma*) ≡ *Tafṣīl*.

³ Cf. late Ġarnāṭī Arabic «otañada *ḥarīf* | otañanada assī *aācīr*» in *Vocabulista arávigo* 260a 10. This particular meaning was first recorded and explained by DOZY, *SDA* II 134a s.v. *عصر*; cf. also CORRIENTE, *DAA* 355b *{ṣR}, where only ‘(season and feat of) vintage’ is registered, but not specifically ‘autumn’. This meaning of *ḥaṣīr* appears to be unknown to modern and contemporary Moroccan Arabic, cf. LERCHUNDI, *VEADM* 569a s.v. *otoñada*; HARRELL, *DMA* 253b s.v. *ḥaṣīr* and SOBLEMAN–HARRELL, *DEM* 16b s.v. *autumn* (only *xrif*).

⁴ Cross-references to this list have been provided for such items *ad loc*.

isfindār 'white mustard' (*Sinapis alba* L.) Ther 4.3.2 ⑧

In *Natāʾiġ* this is certainly an inherited item and it is probable that the author could not even identify it, but even so its mere presence in the text is quite remarkable.

Manuscript P reads «اسمدار» here (which is not so far removed from what may have been the original form), whereas the early transmission of this formula has (as shown in the critical apparatus) quite unanimously «خردل» (so IBN SARĀBĪYŪN, AṬṬABARĪ, and SĀBŪR B. SAHL).

In Andalus, the facsimiled manuscript of AZZAHRĀWĪ's *Taṣrīf* has a divergent «سورنجان أبيض», which on the one hand might represent a misreading (سورنجان is nowhere attributed a possible meaning 'mustard') and on the other hand would seem to preserve a peculiar qualification 'white' (stemming perhaps from a textualised gloss?). A recipe for a homonymous pill does include, however, سورنجان (but not mustard) as an ingredient in ALMAĠŪSĪ, *Kāmil* II.VIII.33 (S II.2 198₁₁₋₁₈), while our recipe corresponds there to a «حب آخر» that requires *ḥardal* but no *sūranġān* (S II.2 198₁₈₋₂₁).

Back to Andalus, the etymologically correct form إسفندار is recorded by IBN ĠANĀḤ, *Talḥiṣ* [4] as a synonym of «الخردل الأبيض» from IBN ISḤĀQ's *Kunnāš*.¹ This synonymy was inherited by AZZAHRĀWĪ, who added to it an alternative identification as «الحرمل» (that is 'wild rue') in *Taṣrīf* XXIX.1 (S II 416₃₋₄). The equation of إسفندار to wild rue is dismissed as a corrupt reading by ALĠĀFIQĪ in *Mufradah* I-II s.v. إسفند (V 88 no. 603), but it is the one preferred by the author of *Ṣumdah* [10] اشفندار واشيندار (B-C-T 12₁₄), who nevertheless in *Ṣumdah* [1810] affirms that the white variety of mustard (خردل) is called «اسفندار» in Persian (B-C-T 191).

As pointed out by MEYERHOF 1940: 201, Arabic إسفندار appears to have sprung from a "mauvaise lecture" of Persian اسپندان / اسفندان 'mustard' (cf. VULLERS, *LPLE* I 91a s.v. اسپندان and 672-673 s.v. خردل), cf. also BOS, KĀS, LÜBKE, and MENSCHING 2020: 204-205 for further references.

The Persian name was borrowed into Syriac too as witnessed by BAR ʿALĪ's gloss «خردل أبيض» (cf. PAYNE SMITH, *Thesaurus* 313 s.v. خردل أبيض; BROCKELMANN-SOKOLOFF, *Lexicon* 75b), with such secondary forms as خردل and خردل (cf. *Thesaurus* 2697; *Lexicon* 1029a).

anīsūn = *bisbāsun šāmī* 'anise' (*Pimpinella anisum* L.) Ther 1.5.5 ⑧

The motivation for this gloss is unclear, as *anīsūn* is used regularly, and with no explanation, in three different sections of the book.

So far I could locate the phytonym *bisbās/basbās šāmī* only in a rather late source, namely IBN ALʿAWWĀM, *Filāḥah* XXVI.5 (B II 259₄₋₇), where it is recorded

¹ The pharmacognostic section (perhaps a multilingual glossary) in IBN ISḤĀQ's five-volume pandects contained a remarkable number of words of Persian origin, cf. BOS, KĀS, LÜBKE, and MENSCHING 2020: 126, where a possible link to AHRUN's own *Kunnāš* is suggested that might be relevant here. Let it be recalled that in MĀSAWAYH's *Nuġḥ* (which is the underlying source of *Nat* II.2) different books from AHRUN's pandects are referred to for several recipes.

as one of the supported identifications of *anīsūn* together with “white cumin” (*alkammūnu lʿabyaḍ*) and the seed of “Roman fennel” (*arrāziyānaḡu rrūmī*). The latter two synonyms had already been registered in IBN ǦANĀḤ, *Talḥiṣ* [919] «*rāziyānaḡu rrūmiyyun huwa lʿanīsūn*» and [442] «*alkammūnu lʿabyaḍu ḥulwu huwa lʿanīsūn*»; cf. both also in IBN ALBAYṬĀR, *Tafsīr* 3:53 (B 231₈–232₁).

On the other hand, the equation *bisbās bustānī* = *rāziyānaḡ* (≡ *μάραθρον* ‘fennel’, *Foeniculum vulgare* Mill.) is attested in Andalus by IBN ĠULĠUL, *Tafsīr* 3:65 (G 52₁₀ | D 93₈); and the anonymous author of the *ṣumdah* further affirms that the three varieties of *anīsūn* belong to the taxon *bisbās* (which includes Roman, Nabataean, and Abyssinian varieties) in *ṣumdah* [976] *بشباس* (B–C–T 89₇), while in *ṣumdah* [977] *بشباس رومي* is entered as a synonym of *anīsūn* (B–C–T 89₈)—which all in all leaves us with only a missing link between “Roman” and “Syrian” to complete this sort of philological triangulation.

In any case, the preferential use of *bisbās/basbās* for ‘fennel’ appears to be a particularity of Andalusī Arabic that distinguishes it from the eastern tradition, in which the name *basbāsah* (from Persian *bazbāz*, cf. VULLERS, *LPLE* I 233b) referred rather to ‘mace’ (cf. CORRIENTE, *DAA* 51a *{BSBS}).

Graeco-Arabic *anīsūn* (≡ *ἀνισσον*, cf. also Syriac *ܐܢܝܣܘܢ*) remained, nevertheless, the most usual name of this herb (actually of its seeds) in Andalus since the beginnings of its pharmacognostic tradition, competing only occasionally with *alḥabbatu ḥulwah* ‘the sweet seed’—which must, however, have been prevalent in real non-bookish practice, cf. IBN ALBAYṬĀR, *Tafsīr* 3:53 (B 232₁); and even more so outside the written corpus, as confirmed not only by the testimony of Ġarnāṭī Arabic (cf. «*anīs hābet hulūe hab hulū*» and «*matala vuva o anīs hābet hulūa*» in PEDRO DE ALCALÁ, *Vocabulista arávigo* 102a 11 and 308b 13, respectively; both in CORRIENTE, *LAPA* 39b *{hbb}) but also by its Romance descendants, such as Catalan *batafalua/matafaluga* and Portuguese *batafaluga* (cf. CORRIENTE, *DAAL* 258b s.v. *batafalúa*; CORRIENTE–PEREIRA–VICENTE, *DEIR* 245 s.v.).

baršīyāwušān 'maidenhair fern' (*Adiantum capillus-veneris* L.) *Ther* 3,6.1 ⑧

The manuscript reads actually «وبرشا وشان», but additional evidence would be required to accept it as a genuine alternative for this phytonym. It is quite evidently an inherited item (it is included within a recipe) and this species is not referred to elsewhere in the text by this or any other denomination.

This Iranian name was well known in Andalus since the 10th c. amongst the several synonyms for the maidenhair fern as it had been chosen by IŞTIFAN to translate *Materia medica* 4:134 ἀδιάντου (W II 278₆–281₂) ≡ *Ḥašāʾiṣ* 4:129 ، اديانطن ، برسياوشان (P 96v 23 – 97r 10, which reads «برسياوشان» twice | T 353₁₂–29 edits «برشياوشان»); and also by ḤUNAYN for GALEN's *Simpl. med.* VI.1.7 Περὶ ἀδιάντου (K XI 814₁₄–815₅) ≡ *Mufradah* VI.8 ذكّر البرشياوشان (E 96r 6–10). It is registered accordingly in IBN ĠULĠUL, *Tafsīr* 4:122 (G 86₃₋₄ | D 156₁₂); and it was also known to IBN IŞĤAQ, who provided a Romance equivalent for it according to IBN ĠANĀḤ, *Talhīṣ* [113] (for the complex interpretation of the Romance word, cf. BOS, KĀS, LÜBKE, and MENSCHING 2020: 307–308).

For an overview of the rich synonymy for the maidenhair fern in the Islamicate tradition, cf. DIETRICH 1988: II 639–640, where an explanation of its Persian etymology (namely *par-i Siyāwušān* 'wing/feather of a descendant of Siyāwuš') is provided by MACKENZIE; and also BOS, KĀS, LÜBKE, and MENSCHING 2020: 306–307, 649, 1064–1065, 1073–1074. An alternative origin is suggested by VULLERS, who relates the phytonyms *parsiyāwuš* and *parsiyāwušān* to the constellation name *Parisyāwuš/Paršāwuš* (= Περσεύς, ie Perseus), cf. *LPLE* I 344a.

baqš 'box; boxwood' (*Buxus sempervirens* L.) *Apoth* 2

This phytonym is included here not only on account of its possible interest as a geolectally marked form but also in order to avoid and overlong footnote in the corresponding locus in Chapter 4.

In Andalus the form *baqš* is only marginally attested (its is not even recorded in CORRIENTE, *DAA* 59a *{BQ/KS}), cf. IBN ALŠAWWĀM, *Filāḥah* I.VIII|XIII (B I 429₁, 431₉, 575₂₆; the reading of the word in the former two passages was corrected by DOZY, *SDA* I 103a); and also IBN ŠĀLIḤ 70₂₀ commenting on χελιδόνιον τὸ μέγα.

The forms in *-s* are, in turn, almost universal, cf. بکس already in IBN ĠULĠUL, *Tafsīr* 1:67 (G 19₅ | D 29₁₆), where λύκιον ≡ شجرة الحوض is said to be a species of «شجرة البكس»; then *baqš* in IBN ĠANĀḤ, *Talhīṣ* [990] شمشار (from IBN ĠULĠUL himself) and also *Uṣūl* s.r. √*gpr* «البقس بالسين» (N 143₁₄₋₁₅); *Ḥumdah* [923] بَقْس (B–C–T 74₁₀₋₂₀), where *baqš* is explicitly stated to be the Andalusī name of the tree. Cf. also DIETRICH 1988: I 158 n. 3, and BOS, KĀS, LÜBKE, and MENSCHING 2020: 1109–1110 with further references. After all, *baqš* might well be a non-geolectal spontaneous phonological development (an assimilation not unlike *ḥaṣṣ* for *ḥass*).

Let it be noted, since it seems to have gone unnoticed until now, that in addition to بکسيس in the prologue of *Ḥašāʾiṣ* quoted above, also «بقسین» (probably < بقسيس*) is used by IŞTIFAN to translate πύξος in «وهو شبيه بورق البقسین» ≡ «περι ἄς τὰ φύλλα πύξω ὁμοία» in *Ḥašāʾiṣ* 1:103 حوض (P 23r 15) ≡ *Materia medica* 1:100 λύκιον (W I 91₁₂₋₁₃), to which a gloss on the left margin of P 23r adds «البقسین فیما ذکر الشمشار»

(cf. also a half-readable gloss on the right margin of P 2v with the same synonymy). The word is further corrupted as «البقتيلون» T 94₂₄, «التفسير» E (according to TERÉS' *Appendix* 93), «المجن» M 23v 2, «المعسر» (corrected over the line as «البقتس») B 47v 12, etc.

Then ARRĀZĪ in his synoptical tables in *Alḥāwī* qualifies «سمسس» as Greek for «السمساروس» (H XXII 411b 1–2), which is tentatively identified with شمشار by the editors of the text and confirmed by an explicit quotation in ALĠĀFIQĪ, *Mufradah* ب-II s.v. بقسيس (M 105r 13). A description of *baqs* by IBN ĠULĠUL in some no longer extant treatise of his included the Syrian synonym شمشار (≡ غصغص) and Greek بقسيس too, cf. ALĠĀFIQĪ, *Mufradah* ب-6 بقس (M 69v 12–15).

Incidentally, boxwood may be referred to in a pertinent context by ALĠĀFIQĪ in *Mufradah* ب-II s.v. بكسيس (≡ πυξίς?): «خشبٌ كثيف يُعمل منه صناديق تُعرف بالشام به» (M 105r 13–14), which is most probably taken from DIOSCORIDES' prologue.

No Syriac parallel seems to have existed for this word as a tree name, but there is perhaps حصص as a name of several different types of small vessels, for which BROCKELMANN suspected an origin in πυξίς (cf. BROCKELMANN–SOKOLOFF, *Lexicon* 152b).

bahaġ. *Apoth* 4

The cooccurrence of this name and *bahman* in the same line in the chapter on the shelf-life of drugs had resulted in an unbearable one-line text. By relocating that footnote here I can also draw attention to the interest that may sometimes lie concealed in inconspicuous items.

The oldest extant reference to *bahaġ* seems to be its identification with a variety of *būzīdān* by IBN RIḌWĀN (d. ca 1061), according to ALĠĀFIQĪ, who further reports a more generic equation of *būzīdān* and *bahaġ*, cf. *Mufradah* ب-II s.v. بوزدان (M 106r 13–15). Some folios before he has noted down as his own opinion a combination of these two possible identifications in *Mufradah* ب-24 بوزدان (M 76v 17–19). It is still ALĠĀFIQĪ that provides a most interesting description of *bahaġ* as “hard viscous white roots” that are counterfeited with other similar roots. Herb dealers (*aššaġġārūn*), in fact, would collect a totally different plant and peel its bark in order to sell it as *bahaġ*, cf. *Mufradah* ب-25 بچ (M 77r 4–12). This is an invaluable piece of *realia* for the reconstruction of the Andalusī drug market.

In the *ʿumdah* the name *bahaġ* is likewise registered as a synonym of *mustaġġilah* and *būzīdān*, cf. *ʿumdah* [720] (B–C–T 64₁₄), and it is signalled as specifically Andalusī in [935] (B–C–T 78₃₁); then in [4262] قَدْ قُوِّجَ it is specifically the *būzīdān* imported from Egypt that is said to be known as *bahaġ* (which may be connected to IBN RIḌWĀN's mention of it), while the middle *qadqūġġah* is assigned the synonym “Andalusī *bahaġ*”, in addition to *būzīdān* and *mustaġġilah* (B–C–T 494_{20–26}); cf. also CORRIENTE, *DAA* 69a *{BHJ}, where the only reference for this phytonym is *ʿumdah*.

On the other hand, the roots of a variety of ὄρχις λευκή known in Andalus as *bawl alḥimār* ‘donkey’s-urine’ are affirmed by IBN ŠĀLIḤ 77_{7–10} to be called *bahaġ* in his time (ie towards the end of the 12th c.), and this plant is identified with *Orchis mascula* L. (that is the early-purple orchid or early spring orchis) by DIETRICH

1988: II 358 n. 9, but he points out the possibility that for IBN ŠĀLIḤ *bahǧ* (this is how he reads the word) might actually be a surrogate or replacement for some species of hawkweed (*Hieracium sp.*).

A detailed description of the plant known as *bawlu lḥimār* (also called «عود بوله»[?] in Latin) is provided in ALĠĀFIQĪ, *Mufradah* ب-١١ s.v., where its roots are said to be black; according to the author some people identified one of its varieties with *šukāfā* (≡ ἄκανθα λευκή), while the roots of the second variety were affirmed by some others to be *būzīdān* (M 106v 2–9).

To round up this information, Persian *būzīdān* (cf. also بوزیدان and بوزیدان) was usually identified with the orchid known as ‘fox’s-testicles’ (*ḥuṣā ttaṣlab*), but IBN ĠANĀḤ, who takes some pride in having personally confirmed the correct form of the word as *būzīdān* from his Iranian informant ABULFUTŪḤ (only *būzīdān* is recorded, however, by VULLERS, *LPLE* I 276b and by STEINGASS, *CPED* 206), echoes MASĪḤ’s vague identification of *būzīdān* as “an Indian drug” and further reports having seen it in Saraquṣṭah, to where it had been imported from the east, and he describes it as a “smooth blackish wood”, cf. *Talḥiṣ* [153].

For *ḥuṣā ttaṣlab* (≡ σατύριον) as the name of a medicinal product obtained from some species of orchid, cf. BOS, KĀS, LÜBKE, and MENSCHING 2020: 1146. The definition provided by IBN ĠANĀḤ for *ḥuṣā ttaṣlab* in *Talḥiṣ* [1035] is particularly pertinent to our text, as he describes it simply as “a well-known root” («*aṣlun maṣrūf*»). Let it be remarked that in his entry on *būzīdān* in *Tāminah* [17] (G 11₁₂–12₁) IBN ĠULĠUL does not provide any synonym but describes it as “twisted hard extremely white roots”.

tābūdā ‘reed’ *Ther* 1,3

The presence of this western Amazighic name in *Nat* II.2 is a perfect illustration of the author’s idiosyncratic and quite exceptional approach. Even when he is reproducing the most traditional of passages in medical literature (as shown in the survey in Chapter 6, these instructions go back to pre-Galenic times and are echoed in virtually every epigraph on the treatment of the ears) he is still “original” enough to substitute a local (actually not even Arabic) name for an item that even in the Andalusī corpus is universally referred to by its standard name *bardī*. The latter normally refers to the papyrus (≡ πάπυρος, *Cyperus papyrus* L.), but in this particular context it certainly conveys a wider meaning ‘reed’ (≡ κάλαμος/καλαμίς) as does its western synonym.

As for the Amazighic lexical item itself, *abuda* / *tabuda* (\sqrt{bd}) has long been supposed to be the origin of colloquial and Late Latin *buda*, and in Andalus *tābūdā* / *būdā* (and their respective variants) are widely attested as as synonym for *bardī* and as the name of the reed-mace or bulrush (*Typha latifolia* L.), cf. *Ṣumdah* [768]1147[3894] (B–C–T 66₁₄, 106₁₆, 462₈); also Ġanāḥī «*espadaña yerva būda* | *espadaña assí berdī*» in *Vocabulista arávigo* 242b 33–34 (= CORRIENTE, *LAPA* 23a **bwd*); CORRIENTE, *DAA* 70b *{*BWD*/*Ḍ*/*Ḍ*}; and especially BUSTAMANTE COSTA and TILMATINE 1999: 51 and also TILMATINE and BUSTAMANTE COSTA 2001: 417 no. 6 and 437 no. 176.

tākawt/tākūt ‘resin spurge’ (*Euphorbia resinifera* O.Berg.) = *furbiyūn* *Ther* 1,5,9 |

tākawt/tākūt Pharm 3.6

This Amazighic word features twice in different sections of the book. First in the therapeutic section as a gloss (not doubt by the author himself) to *furbiyūn* (≡ εὐφόρβιον). Then within a recipe for a *muǰūt* panacea that is paralleled only by ḤABDIRABBĪH's *Dukkān*.

It is through this Amazighic phytonym and its Arabic synonym *zaqqūm* that IBN ĠULĠUL explains DIOSCORIDES' εὐφόρβιον in *Tafsīr* 3:76 (G 54₂ | D 97₁₄ | P 70_v); cf. also «تاكوت هو الفريون» in IBN ĠANĀḤ, *Talḥiṣ* [1009]. Neither of them alludes to the linguistic origin of the name, which may be indicative of its being totally incorporated into the lexicon of local Arabic (the fact that the name admits the Arabic article points in the same direction). It is explicitly marked as Barbarī, however, by AZZAHRĀWĪ, *Taṣrīf* XXIX.I «هو (الفريون) وهو اسم بالبربرية، وهو (الفريون)» (S II 420₇, the entry is truncated in the manuscript); then by IBN ALBAYṬĀR both in *Tafsīr* 3:78 (B 240₄) and in *Ġāmiṣ* فريون 26 (B III 158₁). Later IBN BIKLĀRĪŠ specifies that Amazighic «التاكوت» is actually a yellow gum imported from Arabia, Siǧilmāsah, and Fās, cf. *Mustaṣinī* فريون 19 (L 108_v 11–12).

A form *tīkūt* was elicited from a Maṣmūdī informant by the author of *Ḥumdaḥ* [1076] تاكوت (B–C–T 1036–9), [3813] فريون (B–C–T 440₁₃), and [2359] طزفاء (B–C–T 251₉).¹ Cf. also CORRIENTE, *DAA* 79b *{TKT}; TILMATINE and BUSTAMANTE COSTA 2001: 440 no. 203; and especially the references provided in DIETRICH 1988: II 433–434 n. 2, where BYNON registers Moroccan Amazighic *tikiwt* as the only extant form of the word. It surfaces also as *takawt* 'gall (from which a black dye and tannic acid are derived)' in contemporary Moroccan Arabic (cf. HARRELL, *DMA* 161a) and it is one of the few Amazighic Fachtermini to have entered the Persian language, cf. VULLERS, *LPLE* I 415b s.v. تاكوب and also STEINGASS, *CPED* 276 s.v. تاكوب *tākūb* (Iranian lexicographers appear to have inherited a misreading that betrays its bookish transmission).²

tayyil / *tīl* 'dog's-tooth grass' or 'couch grass' (*Cynodon dactylon* (L.) Pers.), perhaps 'common couch' (*Elymus repens* (L.) Gould) *Ther* 3.6.1 (R)

The name *tayyil* (also *tīl*) was given as a synonym of *naǧm* by ABŪ ḤANĪFAH, *Nabāt* III [149], and this synonymy was echoed in Andalus by IBN SAMAĠŪN, *Ġāmiṣ* 3–ث (S IV 178₈) and IBN ĠANĀḤ, *Talḥiṣ* [1026].

On the other hand, the couple *tīl* = *naǧm* was established as the equivalent of ἀγρωστis by ḤUNAYN in his translation of GALEN, *Simpl.* VI.1.3 Περι ἀγρωστεως (K XI 810₈–811₉) ≡ *Mufradah* VI.4 (وهو النجم، وهو اغرستس، وهو النجم) (E 99r 21 – 99v 4), whereas IṢṬIFĀN had left it untranslated in *Mat. med.* 4:29 ἀγρωστis (W II 192_{1–7}) ≡ *Ḥaṣāʾiṣ* 4:28 اغرستس (P 84r 22 – 84v 3 | T 320_{15–21}).

¹ The author notes that two different botanical items were known by this name in his day: the tamarisk seed and the spurge, the latter being the more common in use. From his informant he reports a distinction between *tikūt* 'tamarisk seed' and *tikawt* 'spurge'.

² There is at least one additional Amazighic word that reached Iranian dictionaries (perhaps through IBN ALBAYṬĀR's *Ġāmiṣ*), namely تاغندشت (< *tāǧandast*) 'pyrethrum', cf. IBN ĠANĀḤ, *Talḥiṣ* [1008].

In the Andalusī pharmacognostic tradition it is only *naǧm* that IBN ĠULĠUL registers in *Tafsīr* 4:26 (G 708–9 | D 127₅), but a gloss on the left margin of *Ḥašāʾiṣ* P 84r reads «هو الثيل وهو النجم» and also IBN ŠĀLIḤ 127₆ adds «الثيل» to IBN ĠULĠUL's identification. The double synonymy is echoed also by *ṣundah* [1163] ثَيْل (B–C–T 112_{1–10}); and IBN ALBAYṬĀR, *Tafsīr* 4:27 (G 279₇). For further references, cf. DIETRICH 1988: II 539–540; and BOS, KĀS, LÜBKE, and MENSCHING 2020: 1140.

On the alternative realisations *tīl* and *tayyil* and the disparate identifications proposed by lexicographers, cf. IBN MANḌŪR, *Lisān* XI 95b 26 – 96a 11.

ǧintawriyah/ǧantūriyah ‘common centaur’ (*Centaurium erythraea* Rafn) *Ther* 3.4.2

The substitution of this western phytonym for the original *qanṭūriyūn* in IBN MĀ-SAWAYH's text (as reflected by ZUHR) obeys certainly to a strategy of adaptation to local terminology. In any case, Latin *جنتورية* (realised in Arabic as *ǧintawriyah*, *ǧantūriyah*, and perhaps also otherwise) provides additional evidence of the western origin of the text since it is attested exclusively in Qayrawān and in Andalus.

As indicated in BOS, KĀS, LÜBKE, and MENSCHING 2020: 993, this phytonym is not necessarily a bookish borrowing from Latin *centaurēa* but may have rather entered Arabic through later (and possibly oral) reflections thereof (cf. *centauria* in PSEUDO-APULEIUS, *Herbal*). In fact, it was by no means exclusive to Andalusī Romance-speakers, for «جنتورية» was also known in Ifrīqiyah to IBN ŠIMRĀN as the Roman name of the centaur, cf. IBN SAMAGŪN, *Ġāmiʿ* ق-11 قنطوريون كبير (S IV 21_{24–25}).¹ An identical passage is transmitted by IBN ALĠAZZĀR in *Istimād* 2:59 قنطوريون في القول in which the name in question reads indeed as «قنطوريون» in M 92r 6 (where it is not ascribed to any particular language) but as «الاحردنه سسوره» in S 73₁ (also apparently «سندوريه» in the Florence copy), from which BOS, KĀS, LÜBKE, and MENSCHING 2020: 994 n. 385 infer the existence of a parallel form in *s-* (that is **sintawriyah*) and interpret that the first word must reflect “the language of a town or tribe [...] which we could unfortunately not decipher”. The Latin translation does not provide any help here with «*Centauria uel centaurion uel cosat alaia*» (M 108rb 39–40 | V 213vb 21–22), where the last synonym («*cosa cala|ia*» V, «*cosacolaia*» M) reflects Maġribī *quṣṣat alḥayya* as documented in IBN ŠĀLIḤ 75_{16–17}, also IBN ALBAYṬĀR, *Tafsīr* 3:7 (G 212₂), and Amazighic «كست الحية» in *ṣundah* [4231] (B–C–T 482₁₅).

In Andalus IBN ĠULĠUL gives «جنتورية» as the “Latin” name of قنطوريون الكبير in *Tafsīr* 3:6 (G 45_{11–12} | D 74_{11–12}), corresponding to DIOSCORIDES, *Mat. med.* 3:6 κενταύρειον τὸ μέγα (WI 10_{5–12}) ≡ *Ḥašāʾiṣ* 3:6 قنطوريون الكبير (P 57r 5–17 | T 241_{7–28}); but he used exclusively the Graeco-Arabic transliteration in *Tiryāq* 12₁₀ and 33₂. For IBN ĠANĀḤ, in turn, «جنتورية» (sic in the unicum) is the Romance name of the lesser centaur (قنطوريون صغير) in *Talḥiṣ* [857], whereas IBN ISḤĀQ would have previously

¹ Incidentally, the BOS, KĀS, LÜBKE, and MENSCHING 2020: 994 n. 384 interpret this fragment as stating that the synonym جنتورية corresponds specifically to the lesser variety (a reading induced perhaps by IBN ĠANĀḤ's entry), but this is arguable. The syntactical context suggests otherwise and the Roman name may refer to *qanṭūriyūn* itself.

used this name in order to explain *šibriq* in his *Kunnāš* according to *Talhīš* [946] (again «خنتور به»). Cf. also AZZAHRAWĪ, *Tašrif* XXIX.1 (S II 4376); *šumdah* [1199|4231] (B–C–T 1153, 482_{13–14}).

For the analysis of the Romance forms related to *centaurea*, cf. CORRIENTE, *DAA* 104a *{ČNTRY}; and most especially BOS, KÁS, LÜBKE, and MENSCHING 2020: 993–994, to which Occitanic *senturia* and *centauri* and Oilitanic *centorie* should be added (cf. VON WARTBURG, *FEW* II 583b s.v. *centaurea*).

ḥašā lubān ‘frankincense pebbles’ / ‘storax’? *Ther* 3.4.2 ⑧

This form, which may have been inherited from IBN MĀSAWAYH, is semantically ambiguous. It may represent either actual frankincense (referring therefore to actual ‘stones’ of this substance) or perhaps rather storax (\equiv στύραξ, the resin of *Styrax officinalis* L.).

A literal meaning “frankincense stones” would not be strange at all given that this product comes indeed in the form of small pebbles as those shown to the author of *šumdah* by a trustworthy informant who had collected some frankincense gum in the province of Ṭulayṭulah that had the appearance of “small pebbles [«*ḥašayātun šigār*»] like the pebbles of mastic”, cf. *šumdah* [4754] شجرة اللبان (B–C–T 541_{30–31}).

On the other hand, *ḥašā lubān* is frowned upon as a basilectal name of *ḥasalu llubnā* (ie storax honey) by ALFĪRŪZĀBĀDĪ in *Qāmūs* 1032a 9–10, and the synonymy *ḥasalu llubnā* = *almayṣatu ssāʔilah* was known to IBN ĠANĀḤ, *Talhīš* [710], who does not however mention his source. Moreover, LANE, *AEL* 587c s.v. حصى notes that in his day the name *ḥiṣā libān* was applied to frankincense and also to official rosemary (*Salvia rosmarinus* Spenn., formerly *Rosmarinus officinalis* L.).

silbāḥ ‘eel’ *Ther* 1.3

DOZY records this word both in Andalus and the Maḡrib and suspects an Amazighic etymology in *SDA* I 671 s.v. سلباح (for Moroccan Arabic cf. also *selbāḥ* in LERCHUNDI, *VEA* 82b s.v. *anguilla* and 214b s.v. *congrio*; for the Algerian dialect, cf. PAULMIER, *DFA* 34a s.v. *anguille*). A derivation from $\sqrt{sbḥ}$ ‘to swim’ is suggested, in turn, by CORRIENTE, *DAA* 257b *{SLBḤ}.

Additional attestations in Andalusī medical texts are provided by AZZAHRAWĪ, who mentions the fat of river eels («*šaḥmu ssalābiḥi nnahrīyyah*») precisely in the context of the treatment of ear ailments and alongside the fat of hens and Egyptian vultures (*raḥm*) and the warm blood of a slaughtered donkey, cf. *Tašrif* II.III.7 (S I 96_{19–20}); also ALHĀŠIMĪ, *Maǧālis* XLI (K 99₁₃), and XVIII «دم السلباح» (K 40₉). A whole epigraph is devoted to river and sea eels (*assalābiḥ*) in ALṢARBŪLĪ/ALṢURIYŪLĪ, *Aǧḍiyah* [115] (D 152_{11–153}). By the same name eels enter a culinary recipe in ATTUĠĪBĪ, *Faḍālah* V.1.25 (B 207₈), where they are further assigned the synonyms *anqilah* (= *anguilla*) and *sillūr* (= *silurus*). For late Ġarnāṭī Arabic PEDRO DE ALCALÁ’s *Vocabulista arávigo* registers «*anguilla cilbáha cilbáh*» 101b 21, «*congrio pescado cilbáha cilbáh*» 152b 24, «*ḥafio specie de anguilla çilbáha cilbáh al guǧd*» 164b 19–20 (all in CORRIENTE, *LAPA* 99a **slbḥ*).

A rare form *šilinbāḥ* (with a marginal variant *šilbāḥ*) is registered by late lexicographers as the name of a “long thin fish” («*samakun ṭawilun daqīq*») that matches the description of eels, cf. AZZABĪDĪ, *Tāǧ* VI 551a 13–15 s.v. الضِّلْبَانِخ, which is identical to ADDAMĪRĪ, *Ḥayawān* [541] الضِّلْبَانِخ (§ II 678_{12–13}).

In fact FRAENKEL 1886: 122 rejects an Amazighic origin in favour of a borrowing from Aramaic in view of Judaeo-Aramaic ܣܠܝܢܒܗ / ܣܠܝܒܗ (cf. JASTROW, *DTTML* 1282a and 1283a). Let it be recalled, on the other hand, that Syriac ܣܠܝܒܗ (< σιλου-ρος) is thought to have evolved spontaneously into ܣܠܝܒܗ (with a *-b-*), which BAR ʿALĪ glosses as «السمك المرماهي أو انكليس» (cf. PAYNE SMITH, *Thesaurus* 1125; BROCKELMANN–SOKOLOFF, *Lexicon* 381a; also BAR BAHLŪL, *Lexicon* 689_n) and which shares the initial segment with the eastern forms in ܣܠܝܒܗ / ܣܠܝܒܗ.

sīsanbar ‘whorled mint’? *Ther* 2.3.1₂

In view of parallel loci to the one in which this name appears in *Nat* II.2 it is probably a synonym used by IBN MĀSAWAYH for *nammām*.

For the synonymy of *sīsanbar* and *nammām* as the name of some hybrid mint (perhaps specifically the whorled mint, *Mentha × verticillata*, as proposed in BOS, KĀS, LŪBKE, and MENSCHING 2020: 806), cf. ARRĀZĪ, *Alḥāwī* XXII 224a 5 (thence IBN ĠANĀḤ, *Talḥiṣ* [645]); also IBN ALĠAZZĀR, *Iṣtimād* 2:32 التمام في القول (S 57₁₇); and «سيسنبير: النام» in *ʿumdah* [4423] (B–C–T 506₈); In *Tafsīr* 3:39 IBN ALBAYṬĀR adds the Latin name «مانته» (B 227_{3–4}).

Arabic *sīsinbar* is quite unanimously considered to be a borrowing from Greek σισυμβριον, which for DIOSCORIDES was the name not only of the watercress (*Nasturtium officinale* W.T.Aiton, cf. *Materia medica* 2:128) but also a variety of mint (probably some cross between water mint and wild mint, cf. DIETRICH 1988: II 391) as in *Mat. med.* 3:41 (W II 54_{1–8}) ≡ *Ḥašāʾiṣ* 3:39 تبي التمام وهو تبي، و هو تبي (P 63F 23–63v 3 | T 258_{23–29}). The form سيسنبير may have become canonised in the Islamicate medical corpus through ḤUNAYN’s translation of GALEN, *Simpl. med.* VIII.XVIII.20 Περὶ σισυμβριου (K XII 124_{7–11}) ≡ *Mufradah* VIII.100 ذكر السسنبير (E 133r 10–12); but the word was apparently already attested in pre-Islamic poetry (cf. ABŪ ḤANĪFAH quoted in IBN ĠANĀḤ, *Talḥiṣ* [645]).

šaǧaru uḍuni lfaʿr = *mardaquš* *Ther* 1.3

It remains unclear to me whether the synonymy *šaǧaru uḍuni lfaʿr* = *mardaquš* is a genuine a gloss by the author (and therefore a true reflection of Andalusī pharmacognostic lore) or rather was already included in his Vorlage. The variant *mardaquš* for *marzanǧūš* is not exclusive to the Andalusī dialect (in which *mardaddūš* is, at least at a later date, more characteristic, cf. CORRIENTE, *DAA* 497b *{MRDDŠ}); but cf. one instance of *mardaquš* (against several of *marzanǧūš*) in ALḤĀŠIMĪ, *Maǧālis* II (K 152₁₂). It must be noted that *marzanǧūš* is regularly used without any local gloss in Qayrawān.

In any case, if *ādānu lfaʿr* (mostly in the plural) is the received loan-translation of Persian *marzān ǧoš* ‘marjoram’ (*Origanum majorana* L.), it also is at the same

¹ Also مرددوش in the *Qurtubah Calendar* 41₉ ≡ *maiorana* in the *Liber anoe* 41₂.

time the equivalent of Greek $\mu\upsilon\delta\varsigma \acute{\omega}\tau\alpha$ in IBN ĠULĠUL, *Tafsīr* 2:162 (G 44₂₋₃ | D 71₉ | P 54_v), which corresponds, however, to a phytonym left untranslated by IŞṬIFĀN in *Ḥaṣāʾiṣ* 2:177 اوطا ميوس (P 54_v 21 – 55_r 3 | T 234₁₂₋₂₁) ≡ *Mat. med.* 2:183 $\mu\upsilon\delta\varsigma \acute{\omega}\tau\alpha$ (W I 253₃₋₁₂). This translation was nonetheless retrievable from «ومعنى ميوس اوطا في» «اليوناني آذان الفأر» in *Ḥaṣ* 4:85 السيني (P 92_r 16 | T 342₁₁₋₁₂) ≡ *Mat. med.* 4:86 ἀλσίνη (W II 246₁₀) and, moreover, ḤUNAYN did translate GALEN's $\mu\upsilon\delta\varsigma \acute{\omega}\tau\alpha$ in *Mufradah* VII.118 ذكر آذان الفأر (E 125_v 3–4) ≡ *Simpl. med.* VII.XII.27 Περι $\mu\upsilon\delta\varsigma \acute{\omega}\tau\acute{\omicron}\varsigma$ (K XII 80₇₋₉).

This synonymy seems to be unknown to IBN ĠANĀḤ, who deals separately with *ādānu lfaʿr* and *marza(n)ǧūš* in *Talḥiṣ*: the former he identifies with DIOSCORIDES' $\mu\upsilon\delta\varsigma \acute{\omega}\tau\alpha$ and he affirms to have personally seen it several times (cf. *Talḥiṣ* [48] آذان الفأر and [395] حشيشة الزجاج), the latter he equates to marjoram (cf. *Talḥiṣ* [55] انجرك [386] حبق الفيل [536] مرزنجوش, and [694] عنقر). The identification of DIOSCORIDES' 2:183 $\mu\upsilon\delta\varsigma \acute{\omega}\tau\alpha$ with marjoram is criticised on a note at the bottom of *Ḥaṣāʾiṣ* P 54_v («ويجعلونه المرزنجوش، وليس به»).

šaḡaru ttaṣlab 'black nightshade' (*Solanum nigrum* L.) *Ther* 11

There are four additional instances of the same phrase «بماء شجرة (ة) الثعلب» in *Ther* 1.5.5, 1.7.1, 3.1.2, and 4.3.2 (for the most part within received recipes and with a fairly equal distribution of the forms شجرة / شجر), whereas the allegedly non-basilectal variant عنب الثعلب (paralleled by Syriac *ܥܢܒ ܬܥܠܒ* as in «ܥܢܒ ܬܥܠܒ» in the parallel recipe in the Syriac *Book of medicines* 52₁) is completely absent from the whole collection of *Natāʾiḡ*.

In the east شجرة الثعلب is documented as early as ALḤALĪL B. AḤMAD, *ṣayn* VIII 377₁₋₂ s.r. √ في: «ألفنا: شجرة الثعلب، له حب كالعنب»، to which he adds that some scholars would correct this expression: «لا يُقال "شجرة الثعلب"، ولكن "عنب الثعلب"» (the synonymy *fanā* = *ṣinabu ttaṣlab* was known in Andalus to IBN IŞḤĀQ according to IBN ĠANĀḤ, *Talḥiṣ* [749] الفنا).

Cf. also «ماء شجرة الثعلب» twice in AṬṬABARĪ, *Firdaws* IV.vi.3|13 (§ 213₅, 264₁), but «عنب الثعلب» for the fruit in *Firdaws* IV.vi.4 (§ 224₉). Let it be noted that the same ingredient «ماء شجرة الثعلب» enters a preparation against dandruff in IBN ALĠAZZĀR, *Zād* I.5 (B–K 84_{5|6}), where one of the manuscripts transmits rather «عنب الثعلب»; the editors consider that this term “is not otherwise attested” but infer, correctly, from the Latin and Hebrew translations (*solatrum*/שולטרם) that it may be a synonym of عنب الثعلب (cf. B–K 85 n. 121). The same extract or water is mentioned in the formula for GALEN's pill in *Zād* I.10 (B–K 120₁ | T 91₉₋₁₀).

In Andalus this name appears to be only marginally attested (unlike the almost universal عنب الثعلب), but cf. significantly an identical «ماء شجرة الثعلب» in ALḤĀŠIMĪ, *Maǧālis* I.1.6 (K 23₃).

ṣalqam 'squirting cucumber' (*Ecballium elaterium* (L.) A.Rich) *Ther* 1.1.2

This word is not to be found in the parallel excerpt transmitted by ZUHR, which may reflect either simplification on the side of the Iṣbīlī physician or perhaps a gloss *ḥanḍal* = *ṣalqam* that a copyist of *Natāʾiḡ* may have misunderstood. This is the only instance of the word *علقم* in *Natāʾiḡ*.

For the Andalusī identification with the squirting cucumber, cf. IBN ĠANĀḤ, *Talḥiṣ* [826] «فتاء الحمار هو العلقم» and the additional synonym *صاب* in *Talḥiṣ* [802] that he borrows from ABŪ ḤANĪFAH (on which cf. BOS, KĀS, LÜBKE, and MENSCHING 2020: 938–939); also AZZAHRĀWĪ, *Taṣrīf* XXIX.I, where it is equated to «فتاء جبلي» (S II 437_{10–11}).

On the other hand IBN ĠULĠUL did not apparently include this synonym in his explanation of DIOSCORIDES' σίκυς ἄγριος in *Tafsīr* 4:138 (G 88_{7–8} | D 162₁₀), but IBN ṢĀLIḤ 162₁₁ did and at the bottom of the right margin of *Ḥaṣāʾiṣ* P 98v an early gloss reads «هو العلقم وهو المعروف بفتاء الحمار». The word was also in use in the region of Ṭulayṭulah as reflected repeatedly by ALHĀŠIMĪ (cf. *Maǧālis* 76₁₅, 82₈, 89₁₇, 104₃, 151₅, 109₁).

For the alternative and less widespread identification of *علقم* as colocynth, cf. «علقم عن أبي حنيفة هو الحنظل، وهو المعروف بفتاء الحمار» in AZZAHRĀWĪ, *Taṣrīf* XXIX.I (S II 434₁); also *Ḥumdaḥ* [3469] *علقم* (B–C–T 407_{30–4086}); more references in DIETRICH 1988: II 656 n. 2. Cf. also a use of *ṣalqam* against tapeworms in ALHĀŠIMĪ, *Maǧālis* I.I.28 (K 76₁₅).

fayḡan 'rue' (*Ruta graveolens* L.) *Ther* 1.4

Inherited, perhaps, from the underlying Pseudo-Galenic source and also from IBN MĀSAWAYḤ's text.

Cf. «الفيجن: السذاب» according to ABŪ ḤANĪFAH as quoted by IBN SAMAGŪN, *Ġāmiʿ* (سذاب البرّ / سذاب بري (= سذاب IV 121_{9–10}). Perhaps more specifically wild rue (= سذاب البرّ / سذاب بري) if one is to believe the assertive observation by the anonymous compiler of the Andalusī *Ḥumdaḥ* [3816] *فَيَجِن* that this plant name «ولا يُقال للبيستاني» هو سذاب بريّ، ولا يُقال للبيستاني» (B–C–T 450_{8–9}); but in the east ALBAṢRĪ had identified *فيجن* with domestic rue («السذاب الأهلّي»), cf. IBN SAMAGŪN, *Ġāmiʿ* IV 123₁₅.

The name (diversely vocalised as *fiḡan* or *fayḡan*) is a borrowing from Syriac *ܦܝܓܢ* (cf. BAR BAHLŪL, *Lexicon* 1540_{18–20}; PAYNE SMITH, *Thesaurus* 3100; BROCKELMANN–SOKOLOFF, *Lexicon* 1154a s.v. *ܦܝܓܢ*), which in turn derives from Greek *πῦγανον* 'rue' (cf. also Persian *پيغن* in VULLERS, *LPLE* I 400b). Some considered it actually chaster Arabic than its more usual synonym *saḏāb*, which was seen as an Arabicised Persian word (cf. VULLERS, *LPLE* II 239b s.v. *شذاب*; for Pahlavi *sudāb* 'rue', cf. MACKENZIE, *CPD* 78) with a more restricted meaning 'garden rue', as in the aforementioned passage in *Ḥumdaḥ* and also in [4561] *سذاب* (B–C–T 524_{23–24}).

Nevertheless *saḏāb* (and substandard and dialectal *sadāb*) is the better documented equivalent of *πῦγανον*, whether *ῥῆμερον* or *ἄγριον*, cf. DIOSCORIDES, *Ḥaṣāʾiṣ* 3:43 *السذاب* وهو السذاب، وهو فيغان، (P 63v 18 – 64v 5 | T 260_{1–2616}) ≡ *Mat. med.* 3:45–46 *πῦγανον* (W II 57_{1–6010}); GALEN, *Mufradah* VIII.47 *السذاب* ذكّر (E 129r 4–9) ≡ *Simpl. med.* VIII.XIV.18 *Περὶ πῦγανον* (K XII 100_{16–1018}).

It was so in Andalus too, cf. IBN ĠULĠUL, *Tafsīr* 3:44 (G 508 | D 86₁₃). Further references to both names can be found in DIETRICH 1988: II 395. Let it be noted that فيجن is not registered by IBN ĠANĀH in *Talhīṣ* despite devoting several entries to the nomenclature of the varieties of rue (cf. [407] طفسيا, [640] سذاب جبلي, and most particularly [1006] تافسيا); and it further seems to have been unknown in Qayrawān.

In *Natāʿiġ* a second instance of the same name is found in the recipe for a stomachic likewise ascribed to GALEN in *Ther* 1.5.5. That in our text it may refer specifically to ‘wild rue’ can be inferred from the fact that the presence in the first excerpt of «ماء السذاب المعصور» seems to imply a lexical distinction between the two varieties. This phytonym فيجن is particularly well documented in the use of the eleventh-century Ṭulayṭulī physicians ATTAYMĪ and MANṢŪR as recorded by their disciple ALHAŠIMĪ (cf. *Maġālis* 46₉, 54_{5|6}, 64₄, 120₄, 154₂).

qaṣṭal ‘chestnut’ *Ther* 4.3.7.

The word features at variance with *šāh bullūṭ* in the exact same phrase in *Ther* 3.5. The parallel locus in ZUHR’s excerpt has *šāh bullūṭ*, which confirms that the presence of this synonym reflects indeed authorial intervention.

It reappears in *Pharm* 4.22, not as ingredient but as a term of comparison for a measure, in a recipe for the cumin-drug ascribed to HIPPOCRATES.

For Andalusī *qaṣṭal*, cf. PEDRO DE ALCALÁ «castaño arbol *caztālla castāl*» and «castañā fruta *caztālla caṣṭāl*» in *Vocabulista arávigo* 143b 18–19 (= CORRIENTE, LAPA 166b **qstl*), and also CORRIENTE, DAA 427b *{QSTL/N}.

To the references provided *ad loc.* in the critical apparatus add especially *Sumdah* [919] بلوط (B–C–T 738), and BOS, KÄS, LÜBKE, and MENSCHING 2020: 814–815.

It is worth noting that the use of the synonyms *qaṣṭal* / *šāh bullūṭ* is inconsistent across the putative reflections of ʿARĪB B. SAʿĪD’s *Anwāʿ*. For the month of September, the text reads «والتسطل والبلوط» in *Anwāʿ*? 240₈ (≡ *Tafṣīl*) and also «*et glandes et castanee*») in the *Qurṭubah Calendar* 91₉. But for November one finds «والبوط والشاه بلوط» in *Anwāʿ*? 259₁₄ against simply «البلوط» in *Tafṣīl* and the local synonym in «والبوط والتسطل» («*et glandes et castanee*») in the *Qurṭubah Calendar* 109_{2–3}. On the other hand, IBN ʿAŠIM has *qaṣṭal* in both loci, cf. *Šuhūr* 57₂, 62₁₂.

The alternation *-n* / *-l* is an intra-Arabic phenomenon (further restricted to Andalus) and has no parallel in the Syriac tradition, in which only مصطلى (from Greek κάστανα or rather καστάνεια) is known (cf. PAYNE SMITH, *Thesaurus* 3676; BROCKELMANN–SOKOLOFF, *Lexicon* 1387b).

qataf ‘garden orach’ (*Atriplex hortensis* L.) *Ther* 3.6.1 ①

It was rather the Arabicised name *sarmaq* (from Persian *sarmaġ* / *sarmak*, cf. VULLERS, *LPLE* II 286a) that featured in the received translation of DIOSCORIDES, *Materia medica* 2:119 ἀνδράφαξ (W I 192_{14–18}) ≡ *Ḥašāʿiṣ* 2:113 وهو السرمق (P 45F 16–18 | T 193_{6–10}), whereas the synonym *qataf* was introduced by ḤUNAYN in *Simpl. med.* VI.1.73 Περὶ ἀτραφαξίως (K XI 843_{1–15}) ≡ *Mufradah* VI.72 ذكّر القطف (E 101F 12–20).

Our word is not recorded, however, by IBN ĞULĠUL in *Tafsīr* 2:101 (G 36₁₁₋₁₂ | D 53₄), where rather *albaqlu rrūmī* is given as the local name for the plant; but IBN ĞANĀḤ uses it in the explanation of several synonyms in *Talḥiṣ* [124] «*albaqlatu dḍahabiyatu hiya baqlu rrūm, wahiya lqaṭaf*» and [636] «*assarmaqu huwa lqaṭaf*» from ALḤISRĀʿĪLĪ and ABŪ ḤANĪFAḤ (references provided in BOS, KĀS, LÜBKE, and MENSCHING 2020: 793).

qulb 'Indian mug bean' / 'common gromwell'? *Ther* 3.6.1 [®]

Were plant names to be considered *prima facie* an authentic reflection of the author's botanical knowledge or of autochthonous jargon, *qulb* could be identified quite straightforwardly with common gromwell (*Lithospermum officinale* L., also known as 'stoneseed'), which was attributed a powerful litholytic and diuretic virtue since Antiquity. This was indeed the identification established in Andalus by IBN ĞULĠUL, who notes down *qulb* as the equivalent of DIOSCORIDES' λιθόσπερμον in *Tafsīr* 3:132 (G 63₈₋₁₀ | D 116₂₋₃ | P 78r), while IŞṬIFĀN had left the latter untranslated in *Ḥaṣāʾiṣ* 3:138 ليشسفرمن (P 78r 11-16 | T 301₂₃₋₃₀₂₄) ≡ *Mat. med.* 3:141 λιθόσπερμον (W II 150₁₅₋₁₅₁₀).

IBN ĞULĠUL knew also a Latin name for this plant: *saxifraga*, which he interpreted correctly as «كاسر الحجر أو مُشطية». Further references for this synonym in DIETRICH 1988: II 497. The equivalence of λιθόσπερμον and Arabic *qulb* was not, however, an Andalusi innovation, for this name features already in the passages that ARRĀZĪ quotes from DIOSCORIDES («حَبّ القلب يفت الحصى»), PAUL OF AEGINA («القلب يفت الحصى»), and RUFUS («القلب يفت الحصى»), cf. *Alḥāwī* X.4 (H X 135₁₉, 128₂₀, 149₁₂₋₁₃).

Now, considering that the recipe has an unmistakable eastern origin and that *qulb* is explicitly qualified in the text as "Indian", it is much more likely that it refers here to what precisely IBN MĀSAWAYH (the author of the underlying text) describes as "a greyish Indian seed that resembles linseed, only that it is larger than it" and which ṬĀBIT B. QURRAH equated to *māš hindi* 'Indian mug bean' (*Vigna radiata* (L.) R. Wilczek). Both identifications are noted down in a combined passage by ARRĀZĪ, *Alḥāwī* XXII 54₂₋₄, which is echoed in Andalus by IBN SAMAGŪN, *Ġāmiʿ* 3-3 قلب (S IV 17_{15|18-19}), where the first passage is actually ascribed to IBN MĀSSAH AL-BAŞRĪ; also IBN ĞANĀḤ, *Talḥiṣ* [824] قلب; and *ʿumdaḥ* [4239] قلب (B-C-T 484₂₆₋₂₇), where IBN MĀSAWAYH's passage reads "smaller" rather than "larger". Probably a similar identification may be assumed for IBN SARĀBIYŪN too in view of his explicit reference to «الدواء الهندي المعروف بالقلب» in ARRĀZĪ, *Alḥāwī* X.4 (H X 151₈).

Incidentally, we have an invaluable piece of information on the actual availability of this eastern item in Andalus: in the 11th c. seeds of mung bean (*māš*) were imported from the east by IBN ḤASDAY and planted with success in one of IBN ŠUHAYD's private gardens, but they were not to be found anywhere else in Qurtubah according to IBN ĞANĀḤ, *Talḥiṣ* [545]. This begs the question, of course, of how practicable (or rather impracticable) many of the received recipes actually were. For the identification of the species involved in this synonymy and further references on this transmission, cf. BOS, KĀS, LÜBKE, and MENSCHING 2020: 718, 962.

qinnāriyah ‘thistle; artichoke’ *Nat* IV *Troph* 2.12

For *qinnāriyah*, cf. the following sources in chronological order, IBN ALĠAZZĀR in *Buġyah* «الكنكر: القنارية», *apud* IBN SAMAGŪN, *Ġāmiʿ* ك-45 (S II 158₁₄₋₁₅), IBN ĠULĠUL registers قنارية as the popular name of ἀκκωνθος in *Tafsīr* 3:17 (G 47₁₋₃ | D 78₁₀₋₁₁) and he gives the same identification and a detailed description in some other text echoed in IBN SAMAGŪN, *Ġāmiʿ* II 157₅₋₁₁).

IBN SAMAGŪN himself affirms «الكنكر صنف من الحرشف يُسَمَّى “القنارية” بالطيبانية و“أفانس”»، with no ascription, in *Ġāmiʿ* II 157₁₂; IBN ĠANĀḤ reports the same equation from both IBN ĠULĠUL and IBN ALĠAZZĀR’s *Buġyah* in *Talḥiṣ* [461], while he remarks «الكنجر هو الذي يقال له في بلدنا “القنارية”، وهو يُجَانَس الحرشف» in *Uṣūl* s.r. √ĠRĠR (N 558₃₋₄) and again «والكنجر هو الذي يُقال “القنارية” عندنا، وهو ضرب من الحرشف» in *Uṣūl* s.r. √DRDR (N 168₁₃₋₁₄), the latter locus is not identified in BOS, KĀS, LÜBKE, and MENSCHING 2020: 635.

IBN ZUHR glosses قنارية as “garden artichoke” («خرشف بستاني») in *Aġḍiyah* VIII.20 (G 63₄₋₆); the same name is given as the synonym “amongst the people” of the garden artichoke that known by physicians as كككر in *ʿumdah* [1631] حرشف (B–C–T 156₃₁₋₃₂).

For *laṣif* (also *laṣaf*), cf. especially *ʿumdah* [1631], where this variety of artichoke (حرشف) is described in all detail and is identified as the wild *qinnāriyah*, yet a smaller species of *laṣif* is mentioned that matches perfectly the chromatic description provided in *Natāʾiq* and which was called *šibiyā* ‘cuttlefish’ because of the whiteness of its leaves (B–C–T 157₁₉₋₂₉); cf. also Andalusī *laṣaf* as a synonym for the wild artichoke (حرشف بزي) corresponding to DIOSCORIDES’ σκόλυμος in IBN ALBAYṬĀR, *Tafsīr* 3:14 (B 215₂₋₃), which aligns with identification of «الحرشف المعروف» as σκόλυμος supported by IBN ṢALĪḤ 77₁₉₋₂₀.

As to the etymology of *qinnāriyah*, the eastern (and ultimately Greek) connection proposed by CORRIENTE (going back to κινάρα / κυνάρα)¹ can be supported by Syriac sources² and also by several loci in ARRĀZĪ’s synoptical tables in *Alḥāwī* that transmit an equation قنارى = كككر which seems to have been ignored so far.³

¹ Cf. CORRIENTE 2001: 178–179; a derivation from Latin CINARA is dismissed and CORRIENTE’s proposal is approvingly mentioned, yet without further discussion, in BOS, KĀS, LÜBKE, and MENSCHING 2020: 634. On a side note, despite the conventional vocalisation *qannāriyah* prevalent in secondary literature, there is little (if any) grounds to decide between etymological *qin-* and *qan-*. In fact, CORRIENTE’s hypothesis of an early pseudoetymological derivation from *canna* ‘reed’ (which seems to be the reason for choosing *qan-* over *qin-*) does not seem to find much support either in the extant documentation.

² Cf. كككر glossed as حرشف by BAR SAROŠWAY in BAR BAHLŪL, *Lexicon* 180₃₉₋₁₀, and also كككر as a thistle that Persians called «كناروس» and the Greek in turn «قناريا» (which ALMARWAZĪ would have further glossed as «كنجر») in *Lexicon* 1775₃₋₆.

³ Cf. particularly «قناريا: كككر» in *Alḥāwī* XXII 317b 8, which is better transmitted in an explicit quote «الكنكر: القنارية» in IBN SAMAGŪN, *Ġāmiʿ* ك-45 (S II 158₁₃₋₁₄). Further evidence for this synonymy can be found in «كناروس؟: شوكة مأكولة، وهو نوع من الحرشف، أكبره وأغلظه» in *Alḥāwī* XXII 147a 9–12, for which the manuscripts read «كناروس» / «كناره س» and quite certainly also in the equation «قناريا: الشوكة التي تُسَمَّى القناروس» in *Alḥāwī* XXII 317b 2–3, which must share

kabbār 'caper [tree/fruit]' (*Capparis spinosa* L.)

As shown in Chapter 6, all three main names of the caper are present in the book.

Cf. CORRIENTE, *DAA* 453b *{KPR}, where some contamination with Latin *caparis* is postulated in order to explain such Andalusī forms with *-p-* as *capár* and *mucappár*. The Arabic form كَبَار is explicitly marked as vulgar by IBN ĠANAĦ, *Talḥiṣ* [20] أصف and it is absent, indeed, from most Andalusī texts in the medico-pharmacognostic tradition, which makes its appearance here all the more significant. It is simply listed alongside كَنْكَار / كَنْبَكَار and قَبَار as a synonym of كَبَر in *ʿumdah* [2419] (B–C–T 257₁₉).

The same form *kabbār* is documented also for Maġribī Arabic in LERCHUNDI, *VEADM* 46a s.v. *alcaparra*, but it appears to have been unknown in Qayrawān.

On a side note, for κάππαρις the Syriac tradition favoured a form قَفَا with *q-* (cf. BAR BAHLŪL, *Lexicon* 182₄₂₂–182₅₂; PAYNE SMITH, *Thesaurus* 3698; BROCKELMANN–SOKOLOFF, *Lexicon* 1395b).

kundur = *lūbān* 'frankincense' *Ther* 2.2

Both words were apparently used by IBN MĀSAWAYH judging from ZUHR's parallel excerpts: *kundur* features five times in *Ther* (once specified as 'white frankincense'), and *lūbān* / *lubān* is also found five times (plus one instance of *ḥ ḥaṣā llūbān*, for which see the corresponding entry above). Both synonyms are also mentioned in other sections of the book. It is uncertain, therefore, whether the gloss was introduced by ALʿILBĪRĪ or not.

For the same gloss in the Andalusī tradition, cf. «كُنْدُر: هو اللبان» in *ʿumdah* [2417] (B–C–T 257₁₇). The two names are collocated already by IBN ĠULĠUL as the equivalents of DIOSCORIDES' λιβανος in *Tafsīr* 1:29 «وهو الكندر» (G 14₁₀ | D 19₁₄), cf. *Materia medica* 1:68 (W I 61₁₅) ≡ *Ḥašāʾiṣ* 1:59 وهو الكندر (P 16r 13 | T 64₁₃).

With regard to *lūbān*, a Semitic etymology is generally accepted for λιβανος, as suggested by Syriac لحيص (cf. PAYNE SMITH, *Thesaurus* 1885; BROCKELMANN–SOKOLOFF, *Lexicon* 667b) and Hebrew לְבַנָּה, perhaps on account of its whiteness.

For *kundur*, in turn, a Persian or alternatively an Indian origin have been proposed (the latter would be related to Sanskrit कुन्दुरु *kundurū*), cf. DIETRICH 1988: II 113; BOS, KÄS, LÜBKE, and MENSCHING 2020: 441. Yet VULLERS suggests Greek χόνδρος in *LPLE* II 895b.

On a side note, a pronunciation with a diphthong (ie *lawbān*) seems to be attested for Andalusī Arabic, cf. late Ġarnāṭī «encienso macho *laubīn dacár*» in *Vocabulista arávigo* 233a 37 (= CORRIENTE, *LAPA* 187a **lwbñ*) and further documentation in CORRIENTE, *DAA* 476a *{LBN} I.

an origin (perhaps ḤUNAYN's multilingual glossary) with the previously quoted entry in BAR BAHLŪL'S *Lexicon* 177₅₃₋₆.

maḥār 'shells' *Ther* 4.3.4.

As a derivative from the lexematic root $\sqrt{ḥwr}$ *maḥārah* (plural *maḥāwir* or *maḥār*) refers, apparently because of its whiteness, to a shell or a shell-like bony item («*aṣṣadafatu awnaḥwuhā minā lṣuḍm*»), cf. IBN MANḌŪR, *Lisān* IV 222a 18–19 s.r. $\sqrt{ḥwr}$. Already ALṢAṢMAʿĪ had equated *maḥārah* to *ṣadafah*; and ALLAYṬ would have related this word to an actually non-existing root $\sqrt{mḥr}$ while giving a similar definition «*dābbatun fī ṣṣadafayn*» (cf. *Lisān* V 160a 25 – 160b 6).

The word is fairly well documented in the west (cf. DOZY, *SDA* I 334b s.r. $\sqrt{ḥwr}$; for Andalus, CORRIENTE, *DAA* 143a *{ḤWR}) but it is virtually absent from the medical corpus, where *ṣadaf* is the regular name of shells. I have noted one single mention of *maḥār* as an ingredient of a medical preparation in Andalus, in the context of the treatment of a wound on a patient's penis: «*tumma tuḥmalu baṣḍahu lṣaḥāqiyā awi lwardu lmaḥāru lmuḥraq*» in ALḤĀŠIMĪ, *Maǧālis* I.1.37 (K 92₂₀₋₂₁). As a term of comparison for the appearance of whitened camphor it features also in *ṣumdah* [2508] «*fatuṣnaṣu minhu ṣibhu ṣafāʾiḥa waṣibhu lṣulūsi waṣibhu lmaḥār*» (B–C–T 263₂₆₋₂₉).

Incidentally, there is a philological crux that may involve this word in IBN ĠANĀḤ, *Talḥiṣ* [596], where the editors interpret the lemma as «محاز» (which they admit that is not recorded anywhere s.r. \sqrt{hrr}) and translate it interrogatively as 'inflammation/burn', giving priority to the reading transmitted by AZZAHRĀWĪ in *Taṣrīf* XXIX.11 (S II 446₂₇). It would be possible, however, to retain the original reading «محار هو الختم» of the manuscript and to understand *ḥatam* in its meaning 'ornaments' (= الخلي), which would certainly suit the interpretation of *maḥār* as 'shells' (cf. this synonymy in IBN MANḌŪR, *Lisān* XII 163a 23 – 164a 22 s.r. $\sqrt{ḥtm}$ with a lengthy digression on pre- and proto-Islamic ornaments).

maywīzaǧ = *ḥabburraʿs* 'stavesacre, lice-bane' (*Staphisagria macrosperma* Spach, formerly *Delphinium staphisagria* L.) *Ther* 1.5.3

This gloss may not be particularly significant as a geolectal marker since this name is also documented in Qayrawān and apparently even further east in the early corpus of Syro-Arabic and Graeco-Arabic translations.

Arabic حب الرأس for Greek σταφίς ἀγρία is marked as local («عندنا») in IBN ĠULĠUL, *Tafsīr* 4:139 (G 88₉₋₁₁ | D 162₁₅), where it is added to زبيب الجبل and ميوزج with which IṢṬIFĀN had translated the corresponding entry in *Ḥaṣāʾiṣ* 4:146 (P 99v 12 | T 358₂) ≡ *Mat. med.* 4:152 (W II 296₁₆). However, according to IBN SAMAGŪN, *Ġāmiʿ* 59 حب الرأس (S I 241₁₈) and IBN ĠANĀḤ, *Talḥiṣ* [332|537] the equation *maywīzaǧ* = *ḥabburraʿs* had already been established by (the Arabic translation of) GALEN (IBN ĠANĀḤ even locates the locus in *Per gen.*, which must correspond to the only mention of σταφίς ἀγρία there, cf. K XIII 809₅) and also by AHRUN. A triple synonymy involving all these names was noted down in Qayrawān by IBN ʿIMRĀN and it was known also in Andalus to IBN ALḤAYṬAM and IBN ʿABDŪN (cf. IBN SAMAGŪN, *Ġāmiʿ* I 242₁₋₃).

In any case, this synonym must be considered the main Andalusī denomination of stavesacre judging from the Iberian Romance reflections of *ḥabb arrás* (eg

Catalan *fabarràs* or Castilian and Portuguese *abarraz*, for which cf. CORRIENTE, *DAA* 73a s.v. *abarraz*; also CORRIENTE–PEREIRA–VICENTE, *DEIR* 5 s.v.).

For the Middle Persian etymology of *maywīzaǰ* (< **mēwīzag*), cf. DIETRICH 1988: II 657 n. 4; CORRIENTE, *DAA* 518 *{MYWZJ}; also VULLERS, *LPLE* II 1234 مَوِيَز 'uvae passae' and مَوِيَزَك 'bacca quaedam nigra'.

nāranǰ 'bitter orange' (*Citrus × aurantium* L.) *Ther* 3.4.2 ②

Like several other members of the citrus group, the fruit of this cultivated cross is one of the many items that the Islamicate tradition did not inherit from Greek sources (neither DIOSCORIDES nor GALEN mention it). In Andalus it is accordingly described by *Ibn Ġulǧul* in his supplement to *Materia medica*, cf. *Tāminah* [26] (G 149–11), where it shares an entry with the lemon (ليمون), both being considered Indian species of citrus (*utruǰǰ*).

The sowing of seeds of citrus (*utruǰǰ*) and of bitter orange (*nāranǰ*) is placed in the month of April by ʿARĪB B. SAʿĪD in *Anwāʾ*? 1898, but only citrus is mentioned (in a quite different context) in the *Qurṭubah Calendar* 496. The latter text is identical to IBN FĀRIS, *Anwāʾ*? [9] (F 166₁), whereas *Tāfṣīl* omits both trees altogether.

It is also classified as one of the several varieties of citrus (*utruǰǰ*) in *ʿumdah* [545] أُنْجَح (B–C–T 37₃₂–38₄), and a synonym 'the adulterers' apple' (نَفَاح الزَّوَانِي) is provided in *ʿumdah* [1068] (B–C–T 102₂₈). Besides, bitter orange peels are listed amongst the medicinal items (حشائش) that avail against pleurisy in *ʿumdah* [5080] يَزْبَه بُنْتَه (B–C–T 581₁₇).

For the identification of the species, cf. DIETRICH 1988: II 548 n. 10 and the references provided there. As for the Persian etymology (or rather mediation) of the word, cf. VULLERS, *LPLE* II 1274b s.v. نَارَنْجَك 'pomum s. malum aurantium', where he further points towards Sanskrit नारङ्ग *nāraṅga* 'orange tree' (for which cf. MONIER-WILLIAMS, *SED* 537b).

Realia

banānīs (P 3v 5, plural) 'a kind of vessel' (according to the text, it must be glassed (*muzaǰǰaǰ*) in order to store robs).

The first modern mentions of the word are made quite contemporaneously by DOZY, *SDD* I 118a s.v. (with a single reference to the *Vocabulista in Arabigo*), and by SIMONET 1888: 433, who finds it in the manuscript materials on Moroccan Arabic by LERCHUNDI: "*pennīs* 'cantarito de barro de esta figura' [followed by a stylised drawing of its form]"; which would be published as LERCHUNDI, *VEADM* 168 s.v. *cantarito redondo de barro*.

For the Andalusī dialect bundle, cf. CORRIENTE, *DAA* 67 *{BNS} 'a kind of pitcher or basket', for which he documents two different vocalisations of the singular as *binnīs* and *bannīs*, as well as two plurals: *banānīs* and *banānis*. The proverb recorded by the thirteenth-century paroemiographer AZZAĠĠĀLĪ in *Amtāl* [6] «إِذَا هَبَّتِ الرِّيحُ. «فَالْبِنَانِيْسُ تَدْخُلُ (B II 3) is complemented by an extremely informative footnote by the editor of the collection, BENCHERIFA, who finds two attestations of the word

dating from the 10th c. and further documents several different meanings (particularly ‘inkwell’ amongst later Mağribī authors).

This is certainly the same word that the copyist of the anonymous *Tamrah* consistently spells as «نتيس». It is often unqualified (P 24v 1|7|17, 25r 7|9|11|18), but it is also said to have a neck and a mouth. There is a specific epigraph on the use of this vessel for distillation («نتيس التصعيد» P 78r 6 – 78v 18) in which it is compared to a ‘bottle’ (*qārūrah*), and even a most pertinent reference to «التيس المزجج» is found in P 78r 7.

SIMONET suggests an etymological connection to the same word that surfaces as Late Latin *benna*. This is recorded by DU CANGE, *GMIL* s.v. *benna*² from HIMCMAR OF RHEIMS’ *Vita Remigii episcopi Remensis* (written in 877–878): «*et accepit cervisam in vasculis, prout potuit; quae omnia in vase quod vulgo benna dicitur collocavit*» (KRUSCH 1896: 322_{12–14}). From a document dated 1493 a further attestation is provided by DU CANGE: «*De decem biscornutis seu Bennis debent unam biscornutam seu Bennam pro decima*», to which he appends that “*Hic Benna sumitur pro vase quo vindemiae colliguntur et feruntur racemi*”.

The Latin word has been sometimes identified as the same Gaulish borrowing *benna* ‘a two-wheeled cart with a body of basket work’ and which is ultimately related to the word that evolved into English *bin* ‘chest, basket’ (cf. KLEIN, *CEDEL* 173b s.v.).

laḡšīyah (P *17v 12) ‘lye’

It is recorded in the form *laḡšīyah* by DOZY, *SDA* II 538a s.v.; and also by SIMONET 1888: 355–356. The two forms are registered in turn by CORRIENTE, *DAA* 478 *{LXŠ} and 482 *{LGŠ}. Cf. further «*colar paños naâmél lexía*», «*colada de paños leḡxía*», and «*lexía leḡxía laḡáxi*» (with an Arabic plural!) in *Vocabulista arávigo* 123 17, 148b 12, and 292b 16, respectively (= *LAPA* 184a–184b *Lxš).

To the references to the preparation of raisins with lye in agronomical literature indicated by DOZY (namely IBN LUYŪN and IBN ALĀWWĀM *Filāḡah* II 667_{11–12}), add «*أغشية الصابون*» in ALHĀŠIMĪ, *Maḡālīs* I.1.50 (K 112₂) and an additional reference to «*أغشية*» in *Maḡālīs* I.11.52 (K 113₁₀), with reanalysis of /l-/ as the Arabic article.

The term is attested also in Moroccan Arabic by LERCHUNDI, *VEADM* 468 s.v. *lejía* but I cannot any find other documentation for its contemporary use in Mağribī Arabic.

It is a borrowing from some descendant of Late Latin **lixiva* (*|*lakšia*|), ultimately from *līx*. For a summary overview of the evolution (through an adjective *lixivus*, then *lixivūs*) from Latin to Romance forms, cf. VON WARTENBURG, *FEW* V 384–386 s.v. *lixivūs*.

9.4 The question of chronology and the sources of *Natāʾiġ*

Let me begin by establishing the positive chronological limits of the discussion. On the one hand, there is an absolute *terminus ante quem* provided by the date of the copy of the core text of *Natāʾiġ* in the year 1174 according to the Damascus manuscript. If the date recorded in that colophon corresponded to the actual compilation of the book, its author would be a rough contemporary of IBN ZUHR. An approximative *terminus post quem* is to be assumed, on the other hand, from the presence of ARRĀZĪ (d. 925)¹ amongst the explicit (albeit indirect) sources both in *Nat* III and in *Nat* V. To be clear, there is no definitive evidence to pull the limit date of the composition much earlier than 1174,² whereas the actual *terminus post quem* would be marked rather by the date of the arrival of texts by ARRĀZĪ (more precisely his dispensatory and his monograph on the specific properties) in Andalus. As shown above, there is a possibility that some of those texts were available in the region as early as the 920s and it is a fact that at least his *Aqrābādīn* was consulted by SAṢĪD B. ʿABDIRABBIH somewhen during the second third of the 10th c. and his *Ḥawāṣṣ* was likewise elaborated upon at the latest by IBN ALHAYṬAM in the last third of the same century. Everything beyond that is interpretive and relies on inferential evidence, but accumulation of evidence confers greater plausibility to some hypotheses (in this case, to an earlier chronology) over others.

What might be called a ‘typological argument’ is, no doubt, the weakest in terms of absolute probative value but also, I would argue, one of the strongest at a non-factual level. The strong impression of archaism made by the text (by all its sections indeed) is hard to deny, as is its overall resemblance to *Firdaws* and to the *Hārūniyyah* or the *Tuhfatu lʾaṭṭibāʾ*, which is strengthened by its dissimilarity from any other text, Andalusī or otherwise, known to me. Now, this has traditionally been enough grounds on which to build full-blown hypotheses about far more consequential texts than *Natāʾiġ*, and generation upon generation of academic work on the Graeco-Roman tradition shows that even such an ethereal concept as ‘style’ can be a legitimate instrument to hermeneutics and text criticism.

¹ Cf. KAHL 2015: 2, with reference to alternative and less probable dates for ARRĀZĪ’s demise.

² Let it be recalled here that neither P nor D are autographs and that they both certainly derive from different Vorlages that were not authorial copies either. If the title of D, which like P includes a *raḥmah*, is contemporary to the copy, then the author had already passed away some time before 1174. Since the *raḥmah* was probably inherited from the Vorlage, this lapse of time might be elongated, but there is no evidence whatsoever on which to speculate in this regard.

In the preceding chapters (and also immediately above when discussing the locale of the text) I have once and again alluded to some apparently primitive features: a combination of vaguely natural philosophical (but remarkably not *formal* philosophical) discourse with rudimentary medical theory, a strong dependence from pseudepigraphic works, pre-standard terminology. I have also been quite emphatic that many of these traits must be attributed to the author's sources and need not be reflective of the actual temporal context of the book. The essentially tralatitious nature of learned medicine (particularly in its literary manifestations) precludes any certainty in this regard. What looks archaic may well be only secondarily so (by inheritance) and it might even be purposely *archaïcising* (by conscious imitation). The analysis of 'style' (as a blanket term for terminology, phraseology, and even noetic approach) is no doubt enticing—and I, for one, have devoted to it much time and energy, with no regrets—but its conclusions are hard to substantiate and especially to translate into concrete data. In the particular case of *Natāʾiğ*, I have already expressed my reluctance to accept the utility of style *by itself* as chronological indicator.

The same applies large and by to typology, which has great descriptive power but the possible conclusions drawn from it can be easily rebutted, like those derived from style, by the conservativeness of the written tradition. Fossilisation and a widespread tendency to fossil collection are formidable enemies to chronological research. Let me put one illustrative example of the uncertainty of the conclusions drawn automatically from typological and stylistic analysis. Only a few lines before I have alluded to the strong and highly suggestive resemblance in contents and in overall 'look' shown by *Firdaws*, the *Hārūniyyah*, and *Natāʾiğ*. I could insist further in the apparently archaic nature of the terminology found even in *Nat* II.1, for which no particular source could be pinpointed. And yet an absolutely marginal work compiled at the very end of the 18th c. by a Mağribī mystic shares most of the typological and a great deal of the phraseological and terminological archaic features of those three texts (it even inherits the old *turāb* and *turābī* for the earthy element). As a matter of fact, LECLERC's description of this *Dahābu lkusūf wanafyu ḍḍulumāt* by IBN ʿAZZŪZ ALMARRĀKUŠĪ (d. 1789) might as well have been a catalogue entry for *Natāʾiğ*:¹

¹ LECLERC 1876: II 307. A copy of the text, made apparently by LECLERC himself, is held in Paris, BnF MS Arabe 6469 and is available online. For IBN ʿAZZŪZ, "a cobbler of Marrakesh to whom thaumaturgic gifts were attributed and who died in odour of sanctity", cf. further the unsigned entry "SIDĪ BALLĀ" in the *Encyclopaedia of Islam* XII 124b, which must be corrected (I have no access to the newer edition and these mistakes may have been already amended); the reference to LECLERC's *La chirurgie d'Abulcasis* and the ascription to IBN ʿAZZŪZ of *Kaṣfu rrumūz* are both wrong. The text of *Dahāb* is extremely interesting (not least because of the local notes added by its author) and would deserve an edition and a study.

C'est un résumé qui donne cependant une large place aux question théoriques. Il présente une disposition bizarre. Après les généralités, de l'histoire naturelle, l'hygiène et la pathologie, nous trouvons un traité des propriétés des animaux puis la monographie des affections oculaires très détaillée.

The striking parallelism could be pushed even a little further, because IBN ʿAZZŪZ's ophthalmological section appears to reproduce extensively IBN ʿALĪ's *Tadkirah*, just like *Nat* II.2 is essentially an extensive excerpt from IBN MĀSAWAYH's *Nuǧh*. The existence of such late texts (which, by the way, would make for an enjoyable object of study) challenges the absolute validity of style-based textochronology.

There is one fundamental difference, however, between *Dahābu lkusūf* and other similar texts on the one hand and *Firdaws* and also *Natāʾiǧ* on the other: the sources. All these texts share a heavy and unconcealed (actually rather exhibited) dependence from ARISTOTLE and GALEN, to which AṬṬABARĪ and AR-RĀZĪ are added in the case of *Natāʾiǧ* and *Dahāb*; but only the latter (and latest) text mentions also IBN SĪNĀ and ALʿANṬĀKĪ. This is, needless to say, a necessary consequence of the chronology of the texts involved, and that its precisely my point here: dependence on old sources is not by itself probative enough, but when combined with independence from (or unrelatedness to) later sources it can be quite compelling.

The contribution of source criticism: positive sources

As seen in Chapters 4–8, cognates and parallels for the contents of *Natāʾiǧ* cluster all in Andalus around the second half of the 10th c. The journey from the preview of *Nat* I to this chapter has been long and a recapitulation may be in order.

Traditionistic reports aside (by their very definition their testimony cannot be adduced here), two of the most arguable sources for *Nat* II.1 are ALKINDĪ's *Tawhīd* (= *Ūlā*) and the IḤWĀN's *Rasāʾil*. In the case of the former, the author had access, either directly or indirectly, to the more complete text reflected also by IBN ʿABDIRABBIH in his *ʿiqd*. The use of such philosophical sources in an Andalusī context, as well as the overall unsophisticatedness of the discourse, I am presently inclined to describe as remarkably early and quite probably pre-Ṭayfi.¹

Then, IBN MĀSAWAYH's *Nuǧh* is a curious manual to choose for one's own therapeutic section. Its apparent availability in late-tenth-century Qayrawān and the appreciation shown to it by IBN ALĠAZZĀR may not be entirely insignificant here. It can be argued, of course, that ZUHR made the same choice in the first

¹ As I have stated in Chapter 5, I can claim no competence in the history of philosophy in Andalus and the above observation is liable to correction.

third of the 12th c. (which, incidentally, is not far removed from the *terminus ante quem* of our compilation), but the case of the Iṣbīlī physician is quite different. He basically prepares a sort of “abridged edition with commentary” in which acknowledging his source is instrumental to his purpose, although with an ambiguous attitude between enthusiastic (and certainly interested) agreement and silent appropriation.

To *Nat* III a whole part of this dissertation is devoted and the reader shall find there much digression and hopefully also some useful information. Suffice it to mention here that the section is a subset (by selection) of a no-longer extant medicine-centred top-to-toe *Ḥawāṣṣ* treatise (= ^α*Ḥawāṣṣ*) that was also exploited in the exact same way by IBN ALHAYṬAM for his *Iktifāʿ*. The parent compilation must be dated some years after the divulgation of ARRĀZĪ’s *Ḥawāṣṣ* (which is one of its main sources) and necessarily before the demise of IBN ALHAYṬAM, who passed away during IBN ĞULĠUL’s *floruit* towards the end of the 10th c. It must be considered, thus, roughly contemporary to IBN ALĠAZZĀR’s own “extended edition” of *Ḥawāṣṣ*. According to an alternative hypothesis, it is *Iktifāʿ* that provided the architecture and the building blocks for *Nat* III, and in that scenario the *terminus post quem* for would be 978–1002 (IBN ALHAYṬAM dedicates the book to ALMANṢŪR and refers to him as *ḥāǧīb*). Once again, *Natāʿiǧ* could still be two centuries younger and passages from *Iktifāʿ* were still available to IBN ALBAYṬĀR in the 13th c.

Many of the pieces brought together in *Nat* IV are apparently old and some may be genuinely so, but dietetic literature is a remarkably conservative genre and ultimate dependence from ninth-century sources (MĀSARĠAWAYH and IBN MĀSAWAYH, for instance) is probably greater than anywhere else. That some fragments are transmitted in essentially the same form by late Andalusī authors such as IBN ḤALṢŪN and ARRUNDĪ should however inspire caution. However, one segment stands out from that section: the monthly calendar for which I can find one single parallel (in this case certainly a precedent) in the Islamicate tradition. Once again this apparent borrowing is paralleled by IBN ʿABDIRABBIH’s *Ṣiqd*, which at first glance might suggest a mediation (and that in itself would be noteworthy, for a belletristic anthology is a most unlikely source of medical knowledge for a physician to exploit) but in both cases such a mediation is rather implausible (not to say impossible). From ALKINDĪ our author borrows (perhaps at second hand) passages that are not included in the *Ṣiqd*, while the differences in wording between the two extant calendars point clearly to a different path of transmission. In any case, there is a new link to tenth-century Qayrawān to be noted here.

Finally, there can be no doubt that the closest and most significant relation-

ship obtains between ALʿILBĪRĪ's collection of recipes and IBN ʿABDIRABBIH's *Dukkān*. In extent and in quality (ie formal identity) this resemblance can only be compared to the one that obtains between *Nat* III and IBN ALHAYṬAM's *Iktifāʾ*? Affinity is noticeably lower with regard to AZZAHRĀWĪ's *Taṣrīf*, and this is all the more relevant given that on strictly statistical grounds the probability of a coincidence with the massive pharmacopoeia of the caliph's physician should be expected to be higher than with the much more limited (but still impressive) dispensatory compiled by the poet's nephew.

I should insist, for the last time, that the significance of this affinities is enhanced by a radical dissimilarity from all other co-generic texts in the Andalusī tradition. In the case of *Nat* V no such level of cognacy is shown by any of the recipe collections (either independent *Aqrābādīn* or chapters within a larger treatise) in the later local production. A likely ridge or watershed emerges (for which historical political causes could be easily pinpointed) that seems to separate these three pharmacopoeias from all subsequent representatives of the genre, and once again an unmistakable (but as yet undefined) thread links these three Andalusī text to the Qayrawānī school represented by IBN ʿIMRĀN (whose name is explicitly mentioned by all three authors) and by IBN ALĠAZZĀR. The absence of any reference to the latter in IBN ʿABDIRABBIH's *Dukkān* can be explained by their respective chronologies, while in the case of *Natāʾiḡ* it might be indicative of an Andalusī mediation (perhaps through *Dukkān* itself) that contrasts with AZZAHRĀWĪ's direct and intensive use of *Zād* (and also *Maʿīdah* and *Buġyah*) as a source for recipes. Even in that case, not all the Qayrawānī materials collected by ALʿILBĪRĪ for *Nat* V were available in *Dukkān*, which certainly poses a problem with no easy solution.

The hazardous hermeneutics of silence

The five recipes for medicinal powders that ALʿILBĪRĪ copies in *Pharm* 1 cannot possibly stem from *Dukkān* but have an exact match, both in text and in sequential order, in IBN ALĠAZZĀR's *Zād*. There is no doubt that the most straightforward explanation for this coincidence is to assume a borrowing, which in this case can only have obtained in one direction. And yet I have already voiced my doubts about the correctness of this assumption. My reluctance does not obey either to sheer stubbornness or to some invested interest (I am not trying to prove that "my author" is older than anyone else) but to the fact that the implications of such a borrowing are not easy to reconcile with other evidence provided by *Natāʾiḡ*.¹ That evidence is the *absence* of any arguably borrowing from

¹ In the particular case of *Zād* the unreliability of the only available edition of the corresponding part of the book adds to my hesitation. The multilingual critical edition painstakingly prepared

Zād in the remaining sections of the book and the discussion touches precisely upon the complex matter of the interpretation of the absence of evidence.

To simplify the matter: although we cannot hope to know why compilers selected such and such recipe or such prescription instead of the one next to it, we can nevertheless make some educated guesses on compilatory techniques on the basis of common sense and plausibility. Now, even if it contains an awful lot of recipes, IBN ALĠAZZĀR's *Zād* is no dispensatory and it never was transmitted as such. Had the compiler of *Nat V* gained access to a copy (even a fragmentary one) of that comprehensive therapeutic pandect, that should probably show elsewhere, particularly in *Nat II.2*. In Andalus AZZAHRĀWĪ borrows many a recipe from *Zād* but the influence of that book is not limited to pharmacopoeia and can be noticed virtually on every page of the therapeutic section. As a matter of fact, if *Zād* had been available to ALZILBĪRĪ, then *Nuġh* would be a surprising choice as a source text.

Those recipes must have been mediated, then. That would certainly explain both the overall independence of *Natāʔiġ* from *Zād* and the omission of IBN ALĠAZZĀR's name from *Nat V*. But then (1) a likely mediating text ought to be found and (2) I have already shown that AZZAHRĀWĪ transmits the same recipes with no ascription, which would be quite irregular if he had borrowed them from *Zād*.

I shall not push the argument farther because it is not difficult to imagine all kinds of counterarguments (for instance, that even if *Zād* had been available to our author *Nuġh* is much shorter and therefore easier to copy). What I am trying to defend here is that some absences (of sources but also of bits of knowledge) can be highly significant in some contexts and that their existence must be duly noted and combined with positive evidence garnered from other quarters. In this regard evidence from silence in *Natāʔiġ* is not limited to the sources that are nowhere explicitly mentioned but extends to the information that those sources transmitted and that was widely (even generally) received but which does not seem to be reflected anywhere in our text. It is not only that positive (explicit and arguable) sources appear to point towards a tenth-century context but also that there is not one single bit of data that may betray a later date for the text. Or is there?

Possible indicators of a later chronology

The late attestation of some of the items mentioned in *Nat I.3.2 On stones (burkānī*

by BOS, KĀS, and KCVAUGH has shown that whole strings of recipes are transmitted in some manuscripts that were certainly not included in the original *Zād*. Unfortunately I cannot wait for the completion of that superb edition to confirm my doubts and my current understanding must be based on the only evidence available to me at this time.

sulphur, for instance) has been duly noted and cursorily commented upon in Chapter 4. An explanation was also sketched there according to which the late date of the documentation for certain *realia* need not be interpreted in all cases as proof of a late chronology for the existence itself of such items. There is no doubt that the fabrication and use of the *banānīs* (or of any other vessel or instrument, for that matter) predates the first attestation of the word in the written tradition, and even more obvious illustrations of this principle could be provided for any cultural and linguistic context.¹ Great caution must be exercised in order not to hypostatise the written manifestations of words while at the same time one must be aware of the chronological plausibility or implausibility of a given attestation.

Those who must venture into the jungle of medical and especially pharmacognostic terminology shall find the most reassuring guide in ULLMANN'S *Wörterbuch zu den griechisch-arabischen Übersetzungen des 9. Jahrhunderts* (very unfortunately *non vidi*), but we are left pretty much in the dark in most other areas of knowledge. This shortcoming is perhaps most deeply felt in the non-elitist epistemic traditions usually referred to as practical arts and crafts. That is the reason why I can presently only note this conspicuous gap in the written documentation of these words in the hope that future research may shed some light on the question.

There is, on the other hand, one item—or more precisely a word—that needs special attention. As pointed out in Chapter 4, the author appears to mention a variety of saffron that might be read as “Genovese” (جنوي realised perhaps as *ǧinuwī*). With one single exception, all mentions of “Genovese saffron” in Islamicate sources known to me stem from the 13th c. or later and are mostly found in a practical alchemical context. The earliest testimony amongst these appears to be ALBŪNĪ'S (d. 1225) *Šamsu lmaṣārif*.² Now, there is at least one possible earlier attestation. The same ingredient enters a recipe for an ink in the *ʿumdatu lkuttāb* ascribed to ALMUʿIZZ BIN BĀDĪS ATTAMĪMĪ AṢṢANHĀĠĪ, who passed away ca 1025. Although the ascription is debatable, the eleventh-century

¹ On a side note, what is self-evident in the case of some every-day objects appears to be sometimes ignored with regard to immaterial (particularly intellectual) manifestations. All too often is the first written documentation of an idea, a belief, or an observation interpreted as the very first time in the history of a given community (or even of the whole humankind) that such an idea or belief was held or such an observation made.

² Cf. «الزعفران الجنوي» in *Šams XXVI* (Q III 116₃₁). The date of ALBŪNĪ'S demise is provided by ULLMANN 1972: 390 n. 4. Further attestations include, with no chronological order, «زعفران جنوي» mentioned amongst ingredients (*ḥawāʾiǧ*) for ink in IBN ALBAṢĪṢ' commentary to IBN ALBAWWĀB'S *qaṣīdah* verses nos. 12–13, cf. IBN ALBAṢĪṢ, *Šarḥ* 54₁; «الزعفران الجنوي» is added to white lead in order to obtain a yellow dye in the absence of arsenic according to ALʿARMĪYŪNĪ, *Ṣanāʾif Ṣanāʾif* IV,5 (B 258); ADDĪRBĪ, *Muǧarrabāt* 29₁₂.

date of the text may be less dubious¹ and in *Kuttāb* 1203 this variety is glossed as the “Frank” (*Jfranġī*) saffron. This interpretation (which coming from a western author ought to be considered well-informed) is indirectly confirmed by IBN ALʿUḤUWWAH (d. 1328) in his manual on *ḥisbah* when he mentions Genovese and Catalan saffron together:

Maʿālim XXV (L 1244–5)

ومنه من يخلط الجنوي مع الكيتلاقي ويبيعه بجنوي، والمعسل بالكيتلاقي ويبيعه بجنوي.

It seems, after all, that Genovese saffron, an especially appreciated variety, *may* have been known in Islamicate markets already in the early 11th c., which would bridge the gap between my proposed date for *Natāʿiġ* and the thirteenth-century attestations of the word.

On a more personal note, this particular word and the item to which it refers have haunted my for the last years, like a dreadful philological nightmare, from my initial inclination to emend the reading as *ġanūbī* (in reference perhaps to southern Yemen) to my more recent speculation about the possibility that it might refer to some variety imported from Andalus to Guinea (following a hint provided by AZZUHRI). The problem (for those, of course, so privileged as to have such problems) is that the earliest attestation of the *nisbah* itself is rather late and that any references to Genovese saffron are even far later.² Incidentally, I am not the only one to have lost some time with this word.³

In sum, even if all the evidence *in favour* of a high dating is left aside for a moment, there is probably nothing in *On stones* that speaks definitely *against* it or that is demonstrably incompatible with an early, even tenth-century, date.

¹ Cf. ISKANDAR 1984: 22, n. 99–100, where further references are provided and an alternative authorship by IBN ALBAWWĀB (d. 1032) is reported. Mark that this IBN ALBAWWĀB is the author of the verses mentioned in the preceding note and in the commentary of which the same *nisbah* is found.

² Arabic جنوي (= *ianuensis*) features in a Sicilian document dated 1182 (cf. CUSA 1868: 210₁₅[16]₁₇ + 211₁₄), Latin text in 184₃₂[33]₃₅ + 185₉). It is attested also in Syriac as ܢܫܘܒܝܐ (cf. PAYNE-SMITH, *Thesaurus* 750 s.v., with one single reference to thirteenth-century BAR ʿEBRĀYĀ/IBN ALʿIBRĪ’s *Chronicle*. For Andalus, cf. «genouesa cosa de ally genui | genovisco assi genui» in the *Vocabulista arávigo* 266a 20–21 (= *LAPA* 37b **jnw*). The only significant mention of a Genovese variety of saffron is the entry written by Antoni BRUCALASSI for the *Dizionario delle scienze naturali* 909a, where *gruogo genovese* is glossed as *crocus medius*; the context, however, is strictly contemporary and it is listed alongside *gruogo ambrosino*, *calabrese*, and *napoletano*, also *gruogo di Corsica*, *di Sicilia*, and *d’Istria*.

³ When discussing the word in ALʿIRĀQĪ’s *Ḥaḡāʿiq* and considering the reading “Genovese” RAGGETTI finds that “[t]his lexicographical direction is not particularly productive or reliable” and suggests an otherwise unattested (and grammatically rather implausible) derivation from “the participial form (*ġannā*) of the verb *ġanā*” and translates it accordingly as ‘freshly plucked saffron’ (RAGGETTI 2021: 168–169).

It all depends on the “I”

It can only be seen as an irony of fate that the one piece of evidence in the whole text of *Natāʾiǧ* that might provide a more accurate chronological reference and even make of this marginal treatise a piece of some import for the Andalusī medico-pharmacognostic tradition—that bit of possible evidence must remain shrouded in darkness for now.

As seen in Chapter 4 the whole subsection *Nat* I.4 *On the shelf-life of drugs* is found in the exact same form in AZZAHRĀWĪ’s *Taṣrīf* XXIX.4. Identity in this case extends to the use of the first person singular (“I did not see”, “I say”, “I have no doubt”, and above all the insistent “it has lasted at my store/in my possession”), which makes of this something quite different from the phenomena of quoting, excerpting, paraphrasing, etc. I shall not give in to the temptation of a new excursus regarding the concept of plagiarism, but the conclusion is unavoidable that one of the two authors has usurped the authorial voice—or perhaps both of them have.

The contribution of textual criticism to the question is virtually null. The differences between the two texts as transmitted in the manuscripts consulted are smaller than the ones that obtain, for instance, between the Istanbul manuscript of *Taṣrīf* and that of ŠEM ṬŌB’s Hebrew translation. Distortion of the Greek and Syriac names of the more exotic drugs and eyeskips are quite evenly distributed amongst the copies. The transmission of *Natāʾiǧ* is quite stable here as elsewhere and although the examination of additional copies of *Taṣrīf* shall help to establish a better reconstruction of the original locus, I doubt that the overall picture should change in any significant way. Differences cluster precisely in the segment on compound drugs and even if *Taṣrīf* could be proved to preserve a more complete text at this point, there is no certainty that D and P have not inherited a defective text.

All other considerations are interpretive. Given AZZAHRĀWĪ’s preeminence as a medical figure, most readers would perhaps be inclined to see him as the borrowee and the obscure town-physician as the borrower. I should then protest that, had ALʿILBĪRĪ gained access to the colossal *Taṣrīf*, it would be not particularly sensible for him to borrow *exclusively* this particular chapter and to ignore the rest of the materials from therapeutics to pharmacopoeia. Once again a possible counterargument would point out the possibility of an independent circulation of just this segment of *Taṣrīf* probably in anonymous form, which would have greatly facilitated its incorporation in any treatise without more effort than copying it. Such a separate circulation is indeed attested for Book XXIX of *Taṣrīf* and there is a third author that echoes the same text on the shelf-life of drugs at a later date: MUḤAMMAD B. IBRĀHĪM ARRUNDĪ, for whom we have no

exact chronology.

In a manuscript held in Tehran a brief tract (*risālah*) on “the ages of simple and compound medicines” is transmitted under the authority of a certain “Ar-rundī Alʿandalusī”. It does not seem to be an extract from ARRUNDĪ’s *Ağdiyah* and whether it derives from *Taşrif* (which is the most likely hypothesis) or from *Natāʾiğ* (quite unlikely), it reflects an entirely different authorial strategy as it *omits* all passages in the first person throughout the text.¹

If somehow ALʿILBĪRĪ could be proved to have borrowed the segment, the *terminus post quem* would not be much affected (one generation at the most); if the opposite were true, in turn, such a finding would contribute definitive evidence in support of the above thesis. The most likely scenario, however, is that the question shall remain unresolved.

An inconclusive conclusion

I sum, while I willingly leave the question of the date of compilation of *Natāʾiğ* open to further scrutiny and consider it achronous to all effects, at the same time I am quite persuaded (but this may be mere wishful thinking) that its author was a coeval of (if not somewhat older than) IBN ALHAYTAM and that the most natural context of the work is to be found in the bloom of medicine, philosophy, and natural sciences in Andalus somewhen before the disintegration of the Qurṭubī Umawī caliphate.

¹ The manuscript is in Tehran, Mağlis-e Šūrā-ye Millī, but at the present moment I have no exact reference to its catalogue identification. The tract on the shelf-life of drugs is transmitted on pages 221–222, and is available online in digital reproduction. The HATA database provides a reference to an article published in the *Revue de l’Institut des Manuscrits Arabes* in 1975 in which it was listed (on p. 162, no. 33). As for ARRUNDĪ, cf. AL-KHATTABĪ 1990: 31, where he suggests a possible date in the 15th c. for the author, and 183–209 for a partial edition of his *Ağdiyah*, which does not contain a chapter on the shelf-life of drugs; a second copy is held in London, WMS MS Arabic 254 (available online).

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Part II

Critical edition of the Arabic text

Prolegomena to the edition

1.1 The fixation of/on a text

There is a profound contradiction between the dynamic and ever-evolving interpretation of a text and the obvious necessity to fix its form. I consider the edition submitted here to evaluation incomplete and provisional. By the time anyone is reading these lines several new versions shall have been produced, each one reflecting a new understanding of a certain locus, a better reading of an obscure word, a more sensible emendation based on additional evidence, a colon instead of a comma... A stop must be put however, at least for now, to the never-ending revision of the text and the apparatus. Hopefully, if this work is ever to see the light in some form or shape, a more satisfactory product will be delivered in the future.

This edition is also too conservative to my own taste in a number of ways. Having been trained (like so many Arabists) in a tradition of strict “normalisation” of any linguistic peculiarity that might appear to diverge from the norms of a reified Classical Arabic, the tendency to “correct”, even when the text needs no correction, is still too strong in me. As a historian of science, moreover, I have been made to believe also in the absolute priority of contents over form, and of the imagined prototext (the author’s *ipsissima verba*) over its historical manifestations (the manuscripts in which those words are actually transmitted). This translates all too often in a task of reconstruction for which the written witnesses are a simple starting point that is quickly left behind. Neither of these two features is intrinsically negative but, as I have repeatedly stated in Part I of this dissertation, a problem (and not a minor one) arises when one substitutes one’s own knowledge for the author’s. There is nothing wrong with supplying a

hamzah or regularising gender agreement, but one ought to be extremely cautious with matters of more consequence. As I shall confess below, I am not sure that I have not succumbed myself to the temptation of overediting.

1.2 Editorial criteria

The reasons for the choice of P as the copy-text have already been explained in Part I. It is the more complete of the two manuscripts and, as a matter of fact, for most of the text there was actually no choice: P is the only transmitter available. The fragmentary section labelled *Damascus Supplements* is edited separately and placed, for no other reason than convenience, at the end of the text. This was certainly not its primitive position (if these fragments were originally part of *Natāʾiġ*) but any other placement would have greatly distorted the continuity of the remaining sections.

For a similar reason but to a quite different effect, the regimen in *Nat IV* has been edited in its extant position in P (that is intercalated). Its presence there has no greater inconvenience than forcing the reader to jump a few pages, whereas changing its placement may have resulted in a falsification of the structure of the book. Depending on the evidence garnered from consultation of the pertinent items included in manuscript D, however, a different arrangement may be necessary in a future version of the edition.

Spelling

Alterations of the text in the form of normalisation have been overall context-sensitive and a difficult equilibrium has been sought between the necessity to meet the expectations of a readership used to an overall normative linguistic form and the express wish not to impose a preconceived grammar onto the text. I have no doubt that ALʾILBĪRĪ wrote his text in Fuṣṣḥā Arabic; assuming otherwise would be unwarranted. Now, on the one hand Fuṣṣḥā is a fluid register and there are no clear-cut boundaries within the linguistic continuum (no need to elaborate here on HARY's concept of *continuglossia*). On the other hand, *Natāʾiġ* may have been at some point written from beginning to end by ALʾILBĪRĪ, but for a large part of the book he actually *copied* texts (or fragments of texts) that had been written in a different time and in a quite different linguistic context. In my survey of the contents of *Natāʾiġ* in Part I a number of apparent incoherences have been noted that reflect the diverse origin of the materials collected in the book. If major terminology differs from one section to another, one should expect some variation to obtain as well regarding such an accidental feature as spelling or some minor grammatical phenomena.

In that regard, I have not felt the urge to implement a search-and-replace strategy and the reader should not be shocked to find *dabīd*, *dabīd*, and *dabīd* and a few similar alternations in the edition and in the apparatus. There are, nevertheless, a number of particular cases in which the dilemma to intervene or not to intervene has been a tough one and, as stated above, my final decision may not have been the best possible one. In any case, the reader shall always find the original reading of the manuscript(s) in the critical apparatus and can thus revert any overediting from my side. Let me illustrate some of these doubts as food for thought.

As an editor, one is almost bound by tradition to mention the *hamzah* and to make explicit its usual absence from the manuscripts. In the case of *Natāʾiḡ* there are not a few traces of an overt representation of the glottal stop in both manuscripts, and most especially P contains an initial sequence of folios that show full *taškīl*, including evidently the *hamzah*. This tallies with the above assumption that the text was conceived, as should be expected, as an elitist product the only possible linguistic vehicle of which was the acrolectal norm. I have therefore normalised regularly the spelling of the *hamzah* throughout the text unless the ductus did not admit such an intervention. A form like «ابرت», for instance, should not be mechanically altered into «أبرت» unless there is some external evidence to support this intervention. The prevalence of the former (and analogous forms) in the written corpus is such that in fact I am afraid that editing «أبرأ» from «ابرا» and «أبرئ» from «يبرئ» as I have here may invisibilise the existence of a genuine non-hamzated variant *abrā-yubrī* that is by no means limited to so-called Middle Arabic. Whenever the morphology of the verb was sufficiently unambiguous I have preserved the original reading. A similar approach was necessitated by the forms transmitted by the manuscripts for جزء 'part' and خراء 'excrement'. I have retained the original variation between جزء (usually spelled جز) and جزو, then خراء and خرو as found in the witnesses.

There is also the thorny question of the interpretation of some cases of final alif. The easiest solution (and the one often applied silently without further discussion) is to normalise all spellings according to the dictionary. However, not even native grammarians agreed universally on the quality of some alifs as either *maqṣūrah* or *mamdūdah*. The etymological criterion is not always helpful, as analogy has always been an active force. In most cases the difference is essentially aesthetic and no harm is done if one decides to follow the manuscripts and edit حصا 'stone; calculus' or rather to spell it as حصى following the norm (the same goes for كلى / كلى 'kidney' etc).

Classification is more conspicuous (and maybe not entirely unproblematic) when طلی 'boiled wine' is changed into طلاء or, inversely, when مصطکا 'mastic' is edited as مصطکی (both are real cases in our text). Not without some hesitation, I have retained the original spellings and admitted all forms as authentic representations of the words involved. Doing the same with the frequent spelling هوي (for هوی 'air' would have only hindered the readability of the text with no gain and the word has been regularly (but never silently) normalised.

In view of the variability of the manuscript tradition I have been as yet unable to draw a clear picture of the distribution and possible significance of the alternative spellings حمى and حمًا (even حماء) 'fever'. After compiling exhaustive lists of the spellings transmitted in the Berlin manuscript of ABULḤASAN AṬṬABARĪ's *Buqrāṭiyyah* and in the facsimile of AZZAHRĀWĪ's *Taṣrif*, a distinct possibility emerged that حماء /*ḥummāʔ*/ 'fever' might be a genuine variant with some reality at least as a written artefact. The question is further complicated, however, by the existence of *ḥummāʔ* as an abstract noun with a meaning quite similar but not identical to 'fever'. In the end, conservativeness prevailed and I have normalised the spelling of this word while recording the original form in the apparatus. One isolated case of the plural حرايات (which is actually relatively frequent in the manuscript tradition) has been retained in *Nat V*.

Dubious morphosyntactical features

Grammatical traits that can be interpreted as geolectal markers have been dealt with in Part I Chapter 9. Here those that are rather reflective of a substandard or even basilectal register shall be briefly commented upon.

As a general principle, whenever the two manuscripts coincide in a reading that may have been inherited (rather than spontaneously introduced by both the copyists) the form has been retained as transmitted by the witnesses. This includes all cases of irregular agreement of the numerals and the non-normative substitution of the accusative and the genitive for the nominative particularly in the text of recipes (جزین and درهین), where a Neo-Arabic trend coalesces with the accidental result of omitting (mentally or materially) the word *wazn*.

The syntactical ambiguity of some impersonal constructions cannot be resolved satisfactorily in one single way. What may appear to be an incorrect use of an accusative object with a non-agentive verb might rather happen to reflect an impersonal use of the third person singular or simply a change to the second person singular. With even more reason the generalisation of the masculine in non-agentive constructions when the patient (ie the syntactical subject) is a feminine should be recognised as a regular phenomenon even in higher registers. As my own understanding of this features evolved I have become more

and more parsimonious with my interventions in the text, but some traces of an earlier practice may have escaped the current revision of the edition.

There are a couple of paradigmatic examples of *casus pendens* in our text that are shared by the two manuscripts and which I have left uncorrected. The phenomenon is not by any means rare even in the acrolectal norm and it cannot be ruled out that the original text already showed such features.

In sum, the current edition offers a far less normativist reading of the text than the initial versions, but it is still overall conservative. To avoid any doubts about the possibility that an irregular or abnormal reading might be an editorial mistake I have registered all dubious cases in the critical apparatus even when the edited text simply preserves the exact form transmitted by the manuscript.

Editorial additions to the text

A conspicuous trait of the present edition is the extensive use of punctuation and of diacritical marks (particularly vowels), as well as of typographical diversity and even colour. I am aware that this practice may not be to the liking of everyone, but it is reflective of my understanding of the editor's task and I deploy these devices as an instrument for the reader, not just as an aesthetic capriccio.

One of the major advantages of uncompromising editing is, without doubt, that one shall never lose two seconds deciding between a basic form and a factitive-causative, or between an agentive and a non-agentive. When the text offers enough evidence, I have assumed some regularity in the use of verbal forms. Thus, *saqaytahū* suggests that it is the basic form that is regularly used even with a double accusative, and the imperative and the imperfective forms have been spelled and vocalised accordingly. The use of *tashīn* rather than *ishān* (both are equally represented in the corpus) makes *yusahhīnu* and *musahhīn* more probable than *yushīnu* and *mushīn*, respectively.

Vocalisation is provided as a hermeneutic tool. When possible, I have adhered to the interpretation of the best sources available to me, whether contemporary scholarship or mediaeval lexicography. In cases in which more than one form is possible, a choice has been made on the basis of plausibility, but that choice is not necessarily correct and may not reflect faithfully the original form intended by the author. When no clear clue could be found, I have left the word as transmitted in the manuscripts and reserved all speculation for the apparatus or the commentary.

As discussed in the description of the manuscripts in Part I, both D and P make liberal use of textual boundary marks, but my division of the text into paragraphs is not (with the exception of *Nat* II.1) a straightforward reflection of the original format. A numeration has been added on the margins for ease of reference.

1.3 A remark on cruces and the hazards of overediting

Despite all efforts, a number of words and a few phrases have resisted all attempts to elucidation. In other loci the edited text may give an overoptimistic impression of certainty that does not quite reflect the editor's doubts about their correctness.

In adherence to the most basic principles of textual criticism, I have resorted to external evidence provided by parallel (and most especially cognate) loci in order to emend some manifest misreadings. Doing so is considered, and rightly so, a fundamental part of editing and would need no comment. There may be a problem, nonetheless, with the underlying presumption that the authors (whose knowledge we can access only through the *n*th copy of their texts) must have been always right—by our own standards of correctness. Unlike the founding pioneers of this discipline, most of us are not trying to restore the transcendental utterances of an inerrant deity but rather the humble manifestations of the limited knowledge of a human, and humans err. They misread and misunderstand, they parse wrongly their sources and abridge them in unwarranted ways. As a result, new readings and new understandings emerge, words are resignified, and a whole new remedy or even an unprecedented ailment (such as ZUHR's bladder worms) enter into circulation and gain a life of their own. Some remarks are to be found in Part III on the concept of apomorphy by which I refer to such new *meaningful* readings and reinterpretations.

All the above verbosity is just a restatement of the editor's old reality: we cannot possibly be sure that our reading and emendation of an ambiguous ductus is correct. I, for one, am not. When P transmits «رياحي», I can collect heaps of parallels in the apparatus to support my reading «رياحي» (versus «رياحي») as the more plausible one, but no statistics can assure that ALḤILBĪRĪ did not learn this word (for it is an exotic item) in a different form. Nor can it be disregarded, in view of the wide circulation of the alternative form ريّاحي (for which even an etymology could be provided by some authors), that some physicians and apothecaries must have referred to this variety of camphor by a different epithet than the one assumed to be historically correct. The same consideration applies to phytonyms, pharmaconyms, and nosonyms in general. This is not mathematics or astronomy and one cannot presume that the authors, however great their reputation, knew as much as we do.

The matter is only rendered more complex because of the unreliability, in philological terms, of some pre-modern and modern editions, most particularly those that apply silently anachronistic criteria of standardisation and pseudoevidence on the basis of a dictionary. Because of this widespread practice the vicious circle is closed and unwary editors may emend their texts on the evi-

dence of an external majority reading that may happen to be nothing more than a modern artefact.

There is, in sum, here perhaps at a higher degree than in other fields, an ever-present risk of projecting the editor's knowledge into the text. On an epistemic level the question is probably unsolvable (except in the case of an autograph copy or of an explicit spelling being provided by the author); on a practical level it needs to be solved somehow. Utter honesty would result, for instance, in a long series of unpointed and meaningless words in one of the segments within *Nat* I.4 (the one listing the shelf-life of theriacs, electuaries, and other great compound drugs) and that might be interpreted as dereliction of the editor's self-imposed task to offer the reader an accessible interpretation of the manuscript transmission of the text. Otherwise one might well stick to facsimile reproduction. Now, that particular chapter is a verbatim echo (a mere copy-and-paste) of a pre-existing text, perhaps through some mediating source. That means that the author simply copied the names of the drugs as he found them and there is not positive evidence to assume that he could have actually identify all of those names if they were already distorted in his Vorlage. Actually, some evidence to the contrary can be found in the fact that in a few cases the same drug is referred to in different forms here and elsewhere in the text: what is transmitted here as «سلبلسا» in both manuscripts (a shared reading that must be considered significant) is reasonably well preserved as «الشلثا» when drawing from a different source (namely IBN MĀSAWAYH) in *Ther* 4.3.7 and in other loci. The reflections of such source-dependence have been frequently mentioned in the survey of the different sections in Part I and a longish catalogue could be drawn listing analogous cases as well as apparent apomorphies.

One may add to that list a number of conjectural readings (the case of 'excrecences'/'fistulae', for example) for which the edited text reflects my current understanding but not necessarily the author's knowledge. Incidentally, and to break the monotony of my monologue, let me reproduce here the testimony of a direct witness on this particular point:

ABULḤASAN AṬṬABARĪ, *Buqrāṭīyyah* V.1 (B 159v 10–11)

وهذا الورم الذي تُسمّيه حدّاق الأطباء «البواسير في الأرنية»، وآخرون يُسمّونه «ناصر
الأنف».

الأرنية [الازنيه B (= «الارنية» 6ov 8).

It is actual medical knowledge that is at stake here, not mere variant readings introduced by copyists. Whether this variation sprung first in a written medium or not, it was already quite widespread by the 10th c. (and probably earlier). Such

a confusion is, moreover, of some consequence to theoretical nosology (not so much for practical treatment), as a wart-like excrescence (or haemorrhoids in the particular cases of the anus) are not the same as fistulae. Let it be noted that my interpretation of the pertinent loci in *Natāʾiǧ* is not based on my own medical knowledge (I claim none at all) but on the explicit equation of the word to *taʾālil*. And yet there is no absolute certainty that ALʾILBĪRĪ did not find *nawāsīr* in his source, but only a more or less high probability that he did not.

The aforementioned catalogue would also include some editorial hints to the possible realisation of a word that may be more reflective of etymological considerations than of the linguistic reality of the text. A typical example of the latter is جوز بوا, which has been recently and quite compellingly interpreted as representing *ǧawzbū*,¹ but the widespread presence of explicit spellings of the type جوز بوا suggests that *ǧawz buwwā* may have been a genuine variant for a no-longer transparent word.

Here and now I would like to stress that this is a problem for which I have not found a satisfactory solution yet. At the time of the submission of this text I have favoured readability, but there is a high probability that by doing so I have made the author more knowledgeable than he may have actually been. On the other hand, I have exercised a healthy dose of editorial humility and I have left open to interpretation (resorting to an unpointed ductus) those cruces for which I could not offer even an educated guess. I avoid thus projecting my current ignorance onto the text and I can only hope that this shall not detract from the text's overall readability. I have also resorted to the obelus (†), but mostly as a device to call the reader's attention and to point out that the locus can be proved to be a distortion or a significant alteration of the original reading as transmitted in the source or in parallel passages. While all detectable divergences from the original texts are recorded in the apparatus (in layer B), not all of them are marked on the text, in order to keep it as clear and readable as possible.

1.4 The critical apparatus: layers and symbols

The critical edition of the Arabic text is complemented with a multilayered apparatus in which a diversity of information is recorded, both about the text itself as extant in the two manuscript and about its contents from a diachronical and intertextual perspective. Four different layers are distinguished that correspond to different kinds of data. The number of layers available for each page depends, obviously, on the nature of the data pertinent to the loci involved, and even in

¹ Cf. BOS, KÄS, LÜBKE, and MENSCHING 2020: 637–638, where it is also suggested that it may represent a partial loan-translation of Persian *ǧūz-būy* (cf. VULLERS, *LPLE* I 538b).

the absence of any explicit marks the layers can be easily identified by their relative position and by their contents.

The essential layer (= C) contains the proper critical apparatus in which the original spelling and all significant variant readings in the manuscripts of *Natāʾiġ* are registered. Except for a few exceptional cases mentioned in the preceding section, it is a negative apparatus: only those original readings that differ from the ones established in the edition are included in it. For the sake of clarity all manuscript readings have been put within square quotation marks or guillemets («») and are invariably followed by the abbreviation of the witness. Editorial conjectures based either on internal or external evidence and which are not considered cogent enough as to be admitted into the text are noted down here.

The only information to be found underneath C are lexical explanations of some of the most obscure, less known, or simply linguistically remarkable words or phrases. All those are included in layer D, which further provides clues on the equivalences of some of the nosonyms and phytonyms in the Graeco-Arabic translations, as well as sporadic etymological indications. In order to keep the apparatus as simple as possible, abbreviations for the languages have been avoided in favour of distinctive typography. Greek, Syriac, and Sanskrit words are immediately distinguishable by the writing system, Persian is typed in a different font style, and Amazighic is transcribed in Roman characters. If no explicit reference is provided for a given word, it is to be understood that it is included in any dictionary for the language in question.

Then, the uppermost layer (= A) aims to provide a concise *Similienapparatus* where the reader shall find the sources for explicit quotations, plausible sources for otherwise unascrbed materials, and a selection of relevant parallels. Most often a mere reference is provided, but in the case of briefer passages (particularly those that are not in Arabic) a full reproduction of the pertinent locus may be offered. No exhaustiveness should be expected from these notes. Priority has been conceded to the most closely related texts within the Islamicate tradition (with an especial focus on the Qayrawānī and the Andalusī corpora), and to DIOSCORIDES and GALEN (including pseudepigraphic works) as representatives of the Greek tradition. Plausible precedents in later Byzantine authors have only been referred to when no earlier documentation could be found. In any case, these references should not be taken as an indication of necessary direct transmission. Loci from the Greek corpus are cited in Arabic translation whenever this has been accessible, then the reference to the original passage is provided. Otherwise they are quoted only in Greek, or exceptionally in Latin in the case of some pseudepigraphic texts. Texts that were never translated into Arabic have been excluded from comparison.

Layer A is complemented by B, which is reserved for textual variants transmitted by the parallels registered in the uppermost layer. The sources mentioned in A are referred to in B by their initial. A superscript indicates a particular manuscript of the text in question.

While the apparatus described above is admittedly extensive, it is by no means exhaustive. In its current form it represents, in fact, an abridgement of my own authorial version. Many data that I still consider helpful and pertinent have been excluded from the apparatus lest it should become a hinderance instead of an instrument. The criterion of pertinence is, needless to say, subjective and some may find the apparatus excessive and others insufficient. Strictly technical and typographical considerations had also a direct repercussion in the final layout of the apparatus and of the edited text in general.

Symbols used in the edited text

- [—] apparently superfluous, to be deleted.
 °—° from D, not in P.
 ⟨ — ⟩ conjectural addition.
 ⟨ — ⟩ lacuna (a higher number of dashes represents a larger lacuna).
 † — † probably synchronic corruption resulting in loss of sense.

Symbols used in the apparatus

- Ⓜ Paris, BnF MS Arabe 2961.
 Ⓧ Damascus, Maktabah Ḍāhiriyyah MS ***.
 Ⓜ[Ⓜ] marginal addition on the manuscript.
 Ⓜ[Ⓜ] emendation on the manuscript.
 Ⓜ[Ⓜ] later hand.
 ⊗ damaged or unreadable locus.
 – word(s) not included in.
 + additional text in.
 ≡ literally identical to (close cognacy).
 ≐ identical, with minimal divergences, to.
 ≈ essentially the same as (distant cognacy).
 ~ bears a basic resemblance to.
 ≠ different from.
 → deriving from with virtually no authorial changes.
 ↪ deriving from with some added material (expansion/interpolation).
 ↗ paraphrased source.
 ↘ ultimately deriving from X but through Y(Z).
 √ doubtful source.
 ⚠ dubious identification.
 † borrowed by.
 Ⓞ explicitly and literally quoted by.
 Ⓞ paraphrased quote.
 Σ when absolute: “all witnesses”; otherwise: “all other witnesses”.
 Ⓜ recipe.
 Ⓞ Andalusī feature.
 ⊕ apomorphy, meaningful innovation.

Abbreviations in the critical apparatus: Arabic sources

أبرار	Azzamaḥṣarī, <i>Abrār</i>
آثار	Alqazwīnī, <i>Atār</i>
أحجار إتاب	Pseudo-Aristotle, <i>Aḥḡār</i> ^{p t β}
أزهار	Attifāšī, <i>Azhār</i>
أسرار ت	Attifāšī, <i>Asrār</i>
أسرار ر	Arrāzī, <i>Asrār</i>
أسراري	Alyabrūdī, <i>Asrār</i>
أسطوانات	Ostanes (= ULLMANN 1974: 199)
اعتماد	Ibn Alḡazzār, <i>Istimād</i> [s]
أغذية Γ	Galen, <i>Aḡḡiyah</i>
أغذية ز	Zuhr, <i>Aḡḡiyah</i>
أغذية س	Ibn Sulaymān, <i>Aḡḡiyah</i>
أقربا ذين س	Sābūr b. Sahl, <i>Aqrābādīn ṣaḡīr</i>
الحاوي	Arrāzī, <i>Alḡawī</i>
الفلسفة الأولى	Alkindī, <i>Ulā</i>
الماء الورقي	Ibn Umayl, <i>Almāʿu lwaraqī</i>
المنتني	Almutannabī, <i>Dīwān</i>
بداية	Ibn Katīr, <i>Bidāyah</i>
بر علي	Bar ḡalī, <i>Glosses</i> II
بقراطية	Abulḡasan Aṭṭabarī, <i>Buqraṭīyyah</i> [B].
بلدان >	Alḡamawī, <i>Buldān</i>
بلدان >	Alhamaḡānī, <i>Buldān</i>
تبصر	Alḡāḡīḡ, <i>Tabaṣṣur</i>
تحف	Alqalalūsī, <i>Tuḡaf</i>
تجارة	Abulfaḡl Addimaṣḡī, <i>Tiḡārah</i> [R]
ترياق	Pseudo-Galen, <i>Tiryāq</i>
ترياق >	Ibn ḡulḡul, <i>Tiryāq</i>
تصريف (ت س)	Azzahrāwī, <i>Taṣrif</i> [s]
تصريف (ت >)	Azzahrāwī, <i>Taṣrif</i> [w]
تفسير >	Ibn ḡulḡul, <i>Tafsīr</i>
تهذيب	Alḡazharī, <i>Tahḡīb</i>
ثامنة	Ibn ḡulḡul, <i>Tāminah</i>
ثمره	Anonymous, <i>Tamrah</i>
جامع ب	Ibn Albayṭār, <i>ḡāmiʿ</i> [B]
جامع س	Ibn Samaḡūn, <i>ḡāmiʿ</i>

جغرافية	Azzuhrī, <i>Ġaġrāfiyah</i>
جواهر ب	Albīrūnī, <i>Ġawāhir</i>
جواهر م	Ibn Māsawayh, <i>Ġawāhir</i>
حسبة خ	Ibn AlḤuwwah, <i>Ḥisbah</i>
حسبة س	Assaqaṭī, <i>Ḥisbah</i>
حسبة ش	Aššayzarī, <i>Ḥisbah</i>
حشائش	Dioscorides, <i>Ḥašāʾiṣ</i> [P]
حقائق	AlḤirāqī, <i>Ḥaqāʾiq</i>
حيوان م	Alġāḥiḍ, <i>Ḥayawān</i>
حيوان ع	Ibn ʿalī, <i>Ḥayawān</i>
خواص ح	Ġābir b. Ḥayyān, <i>Ḥawāṣṣ</i> [R]
خواص ر	Arrāzī, <i>Ḥawāṣṣ</i> [I]
خواص م	Almadāzinī, <i>Ḥawāṣṣ</i>
خواص الأجر	Hermes, <i>Aḥġār</i>
دكان جادل	Ibn ʿabdirabbih, <i>Dukkān</i> [A D L]
زاد	Ibn Alġazzār, <i>Zād</i> [T]
زاد ^{BT}	Ibn Alġazzār, <i>Zād</i> [B-K]
سوق	Ibn ʿumar, <i>Sūq</i>
شرح	Maimonides, <i>Šarḥ</i>
صبح	Alqalqašandī, <i>Šubḥ</i>
صنائع	Alʿarmiyūnī, <i>Šanāʾiʿ</i>
صيدنة	Albīrūnī, <i>Šaydanah</i>
طب العرب	Ibn Ḥabīb, <i>Ṭibb</i>
طحال	Ibn Alġazzār, <i>Ṭihāl</i>
طيب ت	Attamīmī, <i>Ṭib</i>
طيب خ	Alḥāzin, <i>Muḥtaṣar</i> [P]
طيب م	Ibn Māsawayh, <i>Ṭib</i>
عجائب	Alqazwīnī, <i>ʿaġāʾib</i> [W]
عمدة	Anonymous, <i>ʿumdah</i>
عطر	Alkindī, <i>ʿiṭr</i>
عقد	Ibn ʿabdirabbih, <i>ʿiqd</i>
غريب	Ibn Qutaybah, <i>Ġarīb</i>
فردوس	Aṭṭabarī, <i>Firdaws</i>
فصول ^{Γππ}	Hippocrates, <i>Fuṣūl</i> [T]
فلاحه	Ibn Alṣawwām, <i>Filāḥah</i>
فلاحة ي	Qusṭūs, <i>Yūnāniyyah</i>

قاموس	Alfirūzābādī, <i>Qāmūs</i>
قانون	Ibn Sīnā, <i>Qānūn</i> [B]
كتاب	Aṣṣanhāgī, <i>Kuttāb</i>
كتاشك	Alkaškārī, <i>Kunnāš</i>
كنز	Baylak Alqibgāqī, <i>Kanz</i>
لآلي	Aṣṣāliḥī, <i>Laʿālī</i>
لحن	Azzubaydī, <i>Laḥn</i>
لسان	Ibn Maṣṣūr, <i>Lisān</i>
مجالس	Alhāšimī, <i>Mağālis</i>
محاسن	Ibn Bassām, <i>Daḥīrah</i>
محب	Arraffāʿ, <i>Muḥibb</i> III
محيط	Albustānī, <i>Muḥiṭ</i>
مخترع	Almalik Almuḍaffar, <i>Muḥtaraf</i>
مرشد	Attamīmī, <i>Muršid</i>
مسالك ب	Ibn Ḥawqal, <i>Masālik</i>
مسالك >	Ibn Ḥawqal, <i>Masālik</i>
مفتاح	Ibn Hindū, <i>Miftāḥu ṭṭibb</i>
مفردة >	Galen, <i>Mufradah</i> [E]
مفردة >	Ibn Wāfid, <i>Mufradah</i>
مفيد	Ibn Alḥaššāʿ, <i>Mufid</i>
مكارم	Aṭṭabarānī, <i>Makārim</i>
مكنون	Ibn Alğazzār, <i>Maknūn</i>
منهاج	Alṣaṭṭar Alhārūnī, <i>Minhāğ</i> [A]
منصوري	Arrāzī <i>Almanšūrī</i> [A]
مواضع ^Γ	Galen, <i>Mawāḍiʿ</i> (= <i>Loc. affect.</i>)
نبات	Abū Ḥanīfah, <i>Nabāt</i> III
نبلاء	Ibn Kaṭīr–Alṣaskalānī, <i>Nubalāʿ</i>
نحج	Zuhr, <i>Nuğḥ</i> [A]
نجوم	Ibn Abilḥayr Addimašqī, <i>Nuğūm</i>
نخبة	Šamsuddīn Addimašqī, <i>Nuḥbah</i>
نفتح	Almaqquarī, <i>Nafḥ</i>
نهاية ث	Ibn Alaṭīr, <i>Nihāyah</i>
نهاية >	Alğildakī, <i>Nihāyah</i> [B]
نهاية ن	Annuwayrī, <i>Nihāyah</i>
هارونية	Masīḥ, <i>Hārūniyyah</i>
هيئة	Assuyūṭī, <i>Hayʿah</i>
وساد	Ibn Wāfid, <i>Wisād</i>

Abbreviations in the critical apparatus: non-Arabic sources

<i>Collect</i>	Oribasius, <i>Collectiones</i>
Δ	Dioscorides, <i>Materia medica</i>
DAA	Corriente, DAA
Γ	Galen (K = ed. Kühn)
<i>Geop</i>	Cassianus, <i>Geoponica</i>
<i>HistAn</i>	Aristotle, <i>Historia animalium</i>
<i>Iatrica</i>	Aetius of Amida, <i>Iatrica</i>
<i>Inv</i>	Geber, <i>Liber investigationis</i>
Ἱππ	Hippocrates ed. Littré
LAPA	Corriente, LAPA
<i>Lib.sac</i>	Johanes, <i>Liber sacerdotum</i>
LX	Pseudo-Arrāzī, <i>Sexaginta</i>
ⲁ	Pseudo-Abenezra, <i>Nisyōnōt</i>
<i>Nat.hist</i>	Pliny, <i>Naturalis historia</i>
<i>Pragm</i>	Paul of Aegina, <i>Pragmateia</i>
Ⲇ	Ibn Alhayṭam Alqurṭubī, <i>Saḡullōt</i>
ⲱ	Azzahrāwī, <i>Šimūš</i>
<i>San.tu</i>	Galen, <i>San. tuenda</i> [κo]
SDA	Dozy, SDA
<i>Serap</i>	Ibn Wāfid, <i>Liber Serapionis</i> [A]
<i>Synt</i>	Simeon Seth, <i>Syntagma</i>
<i>Therap</i>	Alexander of Tralles, <i>Therapeutica</i>
<i>TherPamph</i>	Pseudo-Galen, <i>Ther. ad Pamph.</i> [κ]
<i>TherPis</i>	Pseudo-Galen, <i>Ther. ad Pis.</i> [κ]
<i>ThesSyr</i>	Payne Smith, <i>Thesaurus</i>
ψΓ <i>SecMont</i>	Pseudo-Galen, <i>Secreta ad Monteum</i>

Any other abbreviations used are self-explanatory and immediately identifiable.

2

Arabic text

كتاب النتائج العقلية

في الوصول إلى المناهج الفلسفية والقوانين الطبية

ومعرفة أمزاج الأعضاء البشرية ومنافعها

وذكر الأمراض اللاحقة بكل عضو وعلاج ذلك

وذكر الأحجار والعقاقير وأعمالها

تأليف الشيخ أبي عبد الله محمد بن أحمد الطبيب الإلبيري

﴿رحمة الله عليه﴾

٥ اللاحقة [الاحقة] پ، «الاحقة» د || ٧ الشيخ... الإلبيري [الشيخ أبي عبد الله محمد بن أحمد الطيب الأكرمي]

پ، «أبي محمد علام الدين أحمد الطيب الإلبيري» د.

رَبِّ سَهْلٍ

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

د ٣٤ ط
1

القول في كيفية العطار الذي يجب أن يبيع العطار

- يجب أن يكون العطار °الذي يبيع العطار ° شبيهاً بالطبيب في أفعاله الحسنة من كثرة احتياطه للمرضى
وبصحتهم وبذلل الاجتهاد لهم واختيار أطيب العقاقير لهم، ولا يدخل داخله بوجه من الوجوه ولا بسبب
من الأسباب.
- ويكون في تركيب الأدوية والأشربة والمعاجين في غاية من التحفظ لئلا يسقط فيها شيء؛ ويُظف أو ابنه
التي يتصرف فيها الصناعة، وتكون مَصُونَةٌ مَغْسُولَةٌ مَنْظَفَةٌ في غاية من النظافة. ولا يُسَلِّمَ عَقْدَ الْأَشْرِيَّةِ
والمعاجين والجوارشونات وتزييب المربيات واستخراج الأدهان والمياه والعصارات لأحدٍ سِوَاهِ، ولا يتكل
في ذلك على أحدٍ إلا أن يثقه أو يجلس على عملها معه.
- ولا يكون رعيياً جماعاً للمال — فإنه، إن كان على هذه الصفة، لم ينصح في عمله؛ ويجب أن النَّصِيحَةُ
والتصحيح مفتاح الأرزاق وسبب لميل الناس إليه وتغويلهم عليه.
- وأن لا يجعل من عقله شيئاً في صناعة الطب، فيكثر عيشه إن كان هنيئاً، لا سبياً في المسهلات. وإن
استغنى، فليهرب عن ذلك ويقول: «لا أعلم أكثر من بيع الأدوية».
- ويجب أن يكون رحيم القلب، حسن الخلق، ناصح مبارك مشارك مكرم ألوف، لطيف اليد، حسن
الطبع، حسن الذهن والفرجة، مترفع عن الدنئات، غير مخالط للصبيان والنساء، غير متواطئ مع
الأطباء الجهال في أكل أموال الناس من غير وجهه °عَنِيَّةٌ °.
- ويجب أن يُجيب مساكن المرضى ويهيئهم بما لا يشق عليه من ثمن العقاقير || وهي عنده. لأنه، إن
فعل ذلك، °فإن ذلك ° يستظهر على المعاني.

١ رَبِّ سَهْلٍ [«رب ارحم» د || ٢-٢] «على» د || ٧ لئلا [«لا» د || ٨ يتصرف فيها] «يتصرف فيه» پ، «تتصرف
معه فيه» د || ٩ والجوارشونات [«الجوارشات» پ || ٩ وترتيب [«وترتيب» د || ٩ واستخراج [«واخراج» د، «ج»
پ || ٩ والمياه [«المياه» د || ٩ لأحد [«د» پ || ١٠ على أحد [«د» پ || ١١ كان [«پ» * || ١١ ويجب أن [«> * ويجب
أن تكون [«لأن» * || ١١ النَّصِيحَةُ [«النصحة» پ || ١٣ هنيئاً [«هنيئاً» پ || ١٤ استغنى [«استغنى» پ || ١٥ ناصح [«ناصح» پ،
«ناصح» د || ١٥ مبارك [«مبارك» پ، — د || ١٥ مشارك... ألوف [«مشارك... ألوف» پ، «مشارك
مكرم الوف» د || ١٦ مترفع [«مرتفع» پ، «مرتفع» د || ١٦ الدنئات [«الدنأت» پ، «الدنئات» د || ١٧ وجهه [«وجهه»
پ || ١٨ ويهيئهم [«يهيئهم» پ، «يهيئهم» د || ١٩ ذلك [«پ» *.

٤ العطار [«العقار والعقاقير: كُلُّ نَبْتٍ يَنْبَتُ مِمَّا فِيهِ شِفَاءٌ يُسْتَمْتَشَى بِهِ» تهذيب I ٢٢١-٢٣٢ «أبو الهيثم»؛ خصم ||
٩ والجوارشونات [«الجوارشن: الهاضوم» مفتاح ٧٨؛ > كوارث.

- و يجب أن لا يكون جاحداً للعقاقير وهي عنده؛ لأنه، إن فعل ذلك، منع منفعة المريض. ^{٢٠}
 ولا يطبخ شيئاً من المشروبات والمأكولات في أواني النحاس البتة.
 ويُمسك في المرضى سيرة الطبيب: فإن كثيراً ما يأخذ الطبيب بأمرٍ فيضيعه ولا يُعا فيه الطبيب على
 عصيانه، بلُ يجتهد في مصالح أموره.
 وتكون ملابسه مختصرةً نظيفةً غاية النظافة. ^٥
 ولا يُعسر في شيء من أخبار الأدوية البتة — لأنه، إن سهّل على المريض، نجز لُدنياه وأُخراه: أما
 النَجْز لدنياه، فيُقصد من أجل قُربه ومُرورته وساحه؛ والأخرى، فلست أعلم شيئاً يُقرب إلى الله تعالى
 مثل هذه الصناعة (أعني الطب) ومَن انطوى إليها، إذا كانت على وجهها وجرت على سُننها. ولست
 أعلم شيئاً يُبعد من الله ويوجب || في النار (مثلاً) (أعني صناعة الطب)، إذا مشى على غير سننها ^٣
 وسلك بها غير طريقها. ^{١٠}
 ولا حيوان أفضل عند الله من الإنسان، والحيوان أفضل من النبات — فمن أثلَف هذا الحيوانَ الفاضل
 عَبَثًا وظُلماً ومُردًّا، فكيف يرجو له آخرة؟ وكذلك من أثلَفه جهلاً في صناعة الطب.
 قاد الله بنا إلى أفضل الأعمال التي تُرضي بارئنا لديه. ^٥

١ ويجب... - د || ١ إن فعل ذلك] + «ذَلِكَ يَسْتَطْهَرُ عَلَيَّ الْمَعَانِي وَحَبُّ أَنْ لَا حَاجِدًا لِلْعَقَاقِيرِ وَهِيَ عِنْدَهُ لِأَنَّهُ» پ ||
 ٧ شيئاً] «شيء» پ || ٨ انطوى] «أنصوى» پ || ٩ شيئاً يُبعد] «شيء ابتعد» پ || ١٢ يرجو] «يرجو» پ.

ذكر الآلات

2

- تكون قَدْرُ الطَّيْخِ من حجر أو ثراب أو يرام الحجر .
 مغارف التصفية : من خشب الأرز والطرفاء .
 الشُّكْرُجَات : زُجَاج والرُّبْدِيّ .
 الأزيار والقَدَر وكُوس سَفِي الشراب : من زجاج أو فضة .
 المَحْوُوس : عود البَقْص .
 الملاعق : فضة وحديد مَفْضُض ، أو عود البقص والأرز والطرفاء .
 مياه الخَلْط : عذبة حلوة .
 خَرَقُ التصفية : كَتَان أو صَوْفٌ || نَقِيٌّ ؛ وكذلك خرق الطَّرِب .
 المهارس : مغسولة في كل طرفة عين ، مجففة ، لا تُترك لئلا تترنجر .
 مناخل الشَّعْر والحريز ، لا يُنخل فيها شيءٌ فيه دُهْن .
 الأطباق : خَلْنَج مدهون بدهن يحتمل الغسل ، أو زبدِيٌّ مُلَوَّح .
 الحِجَان : زبدِيّة . جزات الشراب : زبدِيّة . بنائس الرُّبُوب : مزججة .
 أوان المراهم : النحاس والرصاص ؛ أوان الأكال : الزجاج ؛ أوان الحلول : الفخار الرقيق ؛ أوان العسل :
 مزججة .
 (الأدهان) الباردة : في الفخار الغليظة والحجارة ؛ والأدهان الحارة : في الزجاج .

٢ قَدْرٌ [«قَدْرٌ» پ || ٣ الأرز] «الأرز» پ || ٤ الشُّكْرُجَات [«الشُّكْرُجَات» پ || ٤ والرُّبْدِيّ] «الرُّبْدِيّ» پ ||
 ٥ والقَدَر [«القَدَر» پ || ٦ عود] «عُودٌ | عُودٌ» پ || ٧ والأرز [«الأرز» پ || ١٠ مجففة] پ* || ١١ يُنخل [«تُنخل»
 پ || ١١ فيها] «فيه» پ || ١٢ مُلَوَّح [«مُلَوَّح» پ || ١٣ بنائس] «تتانس» پ.

٢ يرام [«والرُّمَّةُ : قَدْرٌ من حجارة ؛ والجمع : بُرْمٌ وَبَرَامٌ وَبَرَمٌ [...] وهي في الأصل المتخذة من الحجر المعروف بالحجاز
 واليمن» لسان XII ١٤٥-١٢] «الشُّكْرُجَات [«إناءٌ صغير يؤكل فيه الشيء القليل من الأدم، وهي فارسية، وأكثر
 ما يوضع فيها الكوامخ ونحوها» لسان II ٢٩٩-٢٢٢ ؛ > سكر / سكره / ٤ والرُّبْدِيّ] SDA I ٥٧٨ زيدٌ || ٦ البَقْص [
 ٥ ؟ فلاحه٢ I ٤٢٩ | ٤٣١ | ٩ ٥٧٥ | ٢٦ (≡ بَكْس / بَقْس / بَقْسيس > «buxus» / «πύθος») || ٩ الطَّرِب [«طَّرِب
 به : لصق» قاموس ١١١ | ٩-٨ || ١٢ خَلْنَج [«επειρα» ≡ ؛ «وإنما الخلنج الغقدة من العود والخشب الموشى كخشب
 الدرادر والصنوبر وشبهه، فتخرط منه الآنية فتأتي ذات طرائق. فكل ما اتفق من العود فيه ذلك، سُتِي خَلْنَجًا» عمدة
 ١٨٠-١٤١ ؛ > تَلَب || ١٢ مُلَوَّح [«وقدحُ مُلَوَّحٌ : مُعَبَّرٌ بالتار [...] وكلُّ ما عَيْرُهُ النار ، فقد لَوَّحْتُهُ» لسان II ٣٥٨٥-٤
 || ١٣ بنائس] ٦٧ DAA * {BNS} || ١٤ أوان [٣١ DAA * {NY} .*

3.1.1

القول على المسك

المسك دَم الغزال، وقيل: نَفَجته.
وهو ثلاثة أصناف: ثُبَيْتِي، وصيني، وهندي.
وعلامة الخالص منه: أنه، متى فُتحت الناجحة وشمها محروور، فإنه يُرْعَف.
وتعقب منه رائحة التيل.
ويُدَوَّب مع الدهن.
ويُشبه دم النسر، وصمغ الحور، وزُب الورد.

٣٤ پ

3.1.2

القول على العنبر

العنبر خمسة أصناف: أبيض (وهو أجملها)، وُبُسْتَقِي، وأخضر، وأسود، وأشهب.
وعلامة الطيب منه: أنه، إذا أُلْتِي في النار، كان دُخانها لون السماء ورائحتها عِطْرِيَّةً.
ويُدَوَّب مع الأدهان، ويثير رائحته المسك وينشرها.
ويُشبه القيبر، واللآذن، والعلك.

٢ دَم الغزال [المسك، الذي هو دم عبيط حرام، ثم يجف ويُجَدِّد رائحة، فيصير حلالاً طيباً] عقد VIII ٤٨-٩، «وَأصل كل مسك هو دم مجتم في سرة الغزال» طيب^١، «فإنَّ المسكُ بَعْضُ دَمِ الْغَزَالِ» المنتبي ١٠٢٦٨، ٢ وقيل: نَفَجته [«وهو نواج ملامى من المسك تسقط من أخاذ دواب في قَد الظباء» ثامنة ١٧-٩١]؛ «والذي صح في أيدينا أنها سُرَّرُ حيوان يُشَبَّه بالغزال في خلقه ولونه (إلا أنه دونه في جسمه)» ابن عمران د جامع س II ٢٧٦-٢٧٧، «المسك هو شيء يجتمع في نواج أسافل بطون دواب نحو الأرنب وأكبر» اعتماد ٤٠-١١٠، ٣ ثلاثة... وهندي [«وأكثر ما يكون المسك بتبنت والصغد والصين والهند» ابن عمران د جامع س II ٢٧٥-١٠١١، ٤ فإنه يُرْعَف] «وما من عطار يفتق هذا المسك إلا ويرْعَف، وكذلك من حضره، لحدّة رائحته» طيب^٣ ٣-٥، ٧ دم النسر [«ويغسّون المسك بدم فزاح الحمام والنسر إذا دُبر» حسبة س ٩٦٢، ١٠ وعلامة... عِطْرِيَّةً] «واختباره بالنار، وحينئذ يؤدّي رائحته» ثامنة ١١١٨، ١٢ ويُشبه القيبر [«شبيه بالقيبر» طيب^٢ ٦١٢-٧، «وهو كالقيبر يطفو على الماء» ثامنة ١١٨-٧، ١٢ واللآذن] «وقد سُتِي [اللآذن] العنبر الرومي» مرشد ٧١٣، «ويغسّ من الجص والشمع واللآذن» قانون I ٣٩٨-٢٠١٩.

٣ ثُبَيْتِي [ثُبَيْتِي] پ ٤ وشمها [وسمها] پ ٥ التيل [التمل] پ ٧ النسر [النسر] پ ٧ الحور [الجور] پ ٩ وُبُسْتَقِي [وُبُسْتَقِي] پ ١١ وينشرها [وينسرها] پ ١٢ واللآذن [واللآذن] پ.

٢ نَفَجته [والفارة تُسقى فارة] إذا كانت ملي بالمسك؛ فإذا أفرغت منه، سُميت «ناجحة» ابن عمران د جامع س II ٢٧٦-٢١٩، «فإذا سرة الغزال، ما دامت ملا بمسكها، يقال لها فارة المسك؛ فإذا شقوها وأدرجوا مسكها، قيل لها «ناجحة»» خلف الطيبي د ابن الهيثم د مفردة ١٢٤١-١٤؛ > نُف [وصمغ الحور] «كهربا» حشائش ٢٠٠-١٥٦، «عنبر فستقي» وساد ٣١٩، محاسن IV ١٣١؛ «فستقي» ٣٩٨ DAA {FSTQ}.*

القول على الكافور

3.1.3

الكافور ثلثة أصناف: السَّرْبُزِي، والرَّبَاحِي، والفَنَسُورِي. وعلامة الخالص منه: أنه ينفد في النار، ويجذو اللسان حذوًا باردًا، ويقطع الرُعاَف. ويُشبهه المصطكى المصعّدة، والرَّزْفُت الأبيض المصعّد، والتنكار، والبازود، وملح القلي المبيّض.

القول على البان

3.1.4

البان ثلثة أنواع: بَرْمَكِي، وبان الأفاويه، وبان حبّ البان. وعلامة الطيب منه: حُسْنُ رائحته في النار وفي غير النار؛ ومتى فاحت منه في النار رائحة الزيت، فرديّ.

ويُشبهه دهن حبّ الغُصفور، ودهن حبّ القُطن، ودهن الجوز، إذا دُبرت هذه الأدهان بالأفاويه العطريّة كالصندل الأصفر والقَرْنُفُل وقشور السِّلِيخَة وغيرها.

٤ والتنكار [القول على التنكار] ٤ والبازود [القول على ملح البازود] ٤ القلي [القول على حجر القلي] ١٠ كالصندل الأصفر [القول على الصندل] ١٠ والقَرْنُفُل [القول على القَرْنُفُل].

٣ أنه... [إذا ذاب وصار دُخانًا، فهو خالص؛ وإن بقي شيء منه على النار ولم يذُب، فهو غشّ] طيب ٣ ١١-٩٠٨ [يقطع الرُعاَف] [قطع الرعاَف وجبس الدم المفرط] ابن عمران د جامع س II ١٨١٥٠ ≅ اعتماد س ١٩١٠٣ ٤ [ويُشبهه] وهذه الكوافير كلّها تُغسل وتُجفف، ثم تُصعد فيأتي منها كافور أبيض «عمدة ٢٦٣-٢٨٠-٢٩».

٢ السَّرْبُزِي [الشربزي] ٢ والرَّبَاحِي [والرباحي] ٢ والفَنَسُورِي [والفنسوري] ٣ ينفد [ينفد] ٣ ويجذو [ويجذو] ٣ والرَّزْفُت [والرث] ٤ والتنكار [والنكار] ٤ القلي [القلي] ٤.

٢ السَّرْبُزِي [سَرْبُزِي: جزيرة في أرض الهند موقعها من العارة خطّ الاستواء، يُجلب منها الكافور] بلدان III ٢٠٦-٣٠٢ ٢ والرَّبَاحِي [رباحي] طيب ١١٤، طيب ٨٠٥، عطر ٩٥٠|١٧٥٤|٧٥٥، ابن عمران د جامع س II ١٨١٤٨، اعتماد ١٠٣-١١٠٠؛ / «رباحي» / «زجاجي» ٢ والفَنَسُورِي [فنسوري] ابن عمران د جامع س II ١٩١٤٨، طيب ٥٨٠ [صنعة بان طيب [...] وإن أردته برمكيًا... دگان ل ٢٩٣، «بان برمكي» وساد ١٦، محاسن IV ١٣١، «دهن بان برمكي» وساد ٢٣؛ ٤؛ ٢ «دهن برمكي» طيب ت ١٢٨٢ (→ ابن ماسويه)، «صنعة برمكية» دگان ل ٢٧٠-٢٤٤-٤٤٤ ط ٣ ٦ وبان الأفاويه [ترتيب طبخ البان بالأفاويه] طيب ت ٢٦٢-١٥٠-١٩ ٦ وبان حبّ البان [يُعتصر منه الدهن المعروف بالبان كما يُعتصر من اللوز والجوز ونحوه، ثم يعفص ويطيب] عمدة ٢٠٥٤٠-٢١؛ «βαλάνιον» ٩ حبّ الغُصفور [القرطم هو حبّ العُصفُر «تلخيص [٨٧٦] (→ أبو حنيفة): «قرطم برّي» ≅ «ἀτρακτυλίζ».

3.1.5

القول على العود

العود ثلاثة أصناف: قَاري، وهندي، وصيني.
وعلاوة الطيب منه: صلابته، وكثرة الدهن فيه والصمغ، ووزائنه.
ويُشبهه شطيات تهبط في الأودية تؤخذ في شواطئها، وعود الإشتب، والرَّثم اليابس الغليظ — يُشبهه
في الجسم والرائحة.

3.1.6

القول على القرنفل

القرنفل صنف واحد.
وعلاوة الطيب منه: لدغ اللسان لذعًا حارًا.
ويُشبهه أكمام نُوار الريحان، وعود الأسارون.

٣ وعلاوة [وكما كان أصله، فهو أجود] تبصر ١٦٦، «وأجوده: الأزرق والأسود، الكثير الماء، الرزين الصلب الغليظ»
أبو حنيفة ٣ مفردة ٣٢٥٥، «خير: الرزين الكثير الصمغ» عمدة ١٢٤١٢، «وأجود العود: ما كان صلبًا، رزينا ظاهر
الرطوبة، كثير المائبة والدهنية» صح II ١٢٠٩-١٠، «٤ شطيات... شواطئها» [أن العود المعروف بالهندي يكون في
أودية بين جبال شواحق [...]] فيتكشر بعض ذلك الشجر على طول الأيام [...] فإذا كثرت الأمطار وجرت السيول،
أخرجته من تلك الأودية إلى البحر فتقذفه الأمواج إلى الساحل، فيجمعه الناس ويلتقطونه «محمد بن العباس ٣ نهاية XII
١٤١٤-١٥ هـ || ٤ والرَّثم [وإذا عتق، تولد في نفس خشبه لون زبيبي يُشبهه عود المحمر] عمدة ٢١٨، «ويتكوّن في
داخل خشبه لون زبيبي كعود المحمر» عمدة ٢١٨؛ «ويغشون العود الرطب بأصول الرتم الشارف إذا دُبر بالنورة وغيرها
وطيب» حسبة ١١٦٢-١١٧٧ || ٧ صنف واحد || طيب ١٦٦٢ || ٩ أكمام... الريحان [وهو ثمرة الأثني] أشبه شيء
بجذ الآس» صيدنة ١٥٣٠٢-١٦، «هذا النبات هو بمنزلة نبات الآس عندنا [...] ولهذا النبات عُقد كعقد الريحان التي
هو بمنزلة الأقحاح التي يكون فيها زهر الآس» عمدة ٤٨٣-٢٢٤٨٤.

٤ شطيات [شطيات] «تهبط» [تهبط] «٤ الأودية» [الأودية] «٤ تؤخذ في» [يؤخذ في] «٤ شطيات» [٤ شطيات]
٤ شواطئها [شواطئها] «٤ الإشتب» [الأشب] «٤ والرَّثم» [والرَّثم] «٤ يُشبهه» [يُشبهه] «٤» [٤]

٢ قاري] «أبو الحسن اللحياني ٣ جامع III ١٢٧، طيب ١٣، عطر ٢٣؛ «قَمَار (بالفتح، ويروى بالكسر): موضع
بالهند يُنسب إليه العود. هكذا تقوله العامة؛ والذي ذكره أهل المعرفة: قامرون موضع في بلاد الهند يُعرف منه العود النباية
في الجودة» بلدان IV ١٣٩٦-١٧٠١ وهندي] «أبو الحسن اللحياني ٣ جامع III ١٢٧، طيب ١٣؛ «أغالوخن:
هو العود الهندي» تفسير ١٣، «(ἀγαλον)» [٢ وصيني] «والصيني الذي يُسمى القشور» طيب ١٣، «العود
الصيني، وهو المندلي» ابن عمران ٣ جامع III ١٢٥، «خلف الطيب» جامع III ١٢٩-٩؛ «صنفي» [٤
الإشتب] «الفنح هو حطب الإشتب» تلخيص [٧٦٣]، «إشتب» عمدة ٢١٤٠-٣١٤١ (stipa) / «اشت»
«(لبلاب)» [٤ الإشتب] «(ἐλξίτην)» عمدة ٣١٦-٨، «الرَّثم» [شبرطون: وهو الرتم، ويُسمى باللطيني «يناشته» تفسير ٣
١٨٩ «(سبرطيون)» «(σπαρτίον)».

القول على جوز بوا

3.1.7

جوز بوا هو جوز الطيب، هنديّ جليل؛ وصنّف صينيّ دقيق.
وعلاّمة الطيب منه: لذع اللسان كالفلفل.
ويُشبهه القوّفل.

القول على الكبابية

3.1.8

الكبابية «حَبُّ العروس»، وهو صنّف واحد.
والطيب منه: ما كان غير مُسوّس، عطريّ الرائحة، في مذاقته حرارة وشيء من مرارة.
ويُشبهه حَبُّ البلسان.

القول على الصندل

3.1.9

الصنْدَل ثلاثة أصناف: أبيض وأحمر وأصفر.
وعلاّمة الطيب منه: ما فاحت منه رائحة البان.
ويُشبهه الأحمر منه عود البقم، ويُشبهه الأصفر منه عود الثوت، ويُشبهه الأبيض منه عود الخلنج الفتيّ.

٢ هو جوز الطيب [≡ الحاوي XXII ١٨٦ (< تلخيص [١٩٢])، اعتماد ٦٤٤، هارونيتية ١١٣|١٦١٥١| ٣ لذع
اللسان كالفلفل [«حاز الطعم» عمدة ٧١٢٣ | ٤ ويُشبهه القوّفل] «وهو ثمرة تُشبه صغير جوز بوا في قدره ولونه»
اعتماد ١٤٢-٩١٠٠ Serap [= مفردة^٢] ٢٢٩-٤٠٥ (→ ابن عمران) | ٦ حَبُّ العروس] ≡ ابن عمران د جامع
I ٢٤٢-٩١٠٠ II ٧١١٠-٨، اعتماد ١٦١٩، ثامنة ١٢١٠، تلخيص [٤٩٠] (→ ابن الجزار، كتاب البغية)؛ طيب
١٤١-٨ | ١٧٩ | ٦١٨٠ | ٧ والطيب... مُسوّس [«خيرها: الحديث منها» عمدة ٢٢٢٦٤ | ٧ عطريّ الرائحة] ≡ ثامنة
١٢١٠ | ٧ في... مرارة] «وطعمه عَفْص مائل إلى المرارة قليلاً» عمدة ٢٦٤-١٨١٩ | ١٠ ثلثة... وأصفر] «وهو ثلاثة
أصناف: أبيض وأصفر وأحمر» اعتماد ٧١٠٠، «وهو ثلاثة أصناف: منه أحمر كالدّم [...] ومنه أصفر ومنه أبيض» ثامنة
١٠-٩١٩.

٢ بُوا [«بوا» پ || ٢ هو [«هُو» پ || ٦ الكبابية] «الكبابية» پ || ١٢ البقم [«البقم» پ.

٢ جوز بُوا [> كوز بوا / كوز بوا (≡ كاهمه / ضفصه / كاهمه / ضفصه) | ٤ القوّفل] «الفوفل هو البندق الهندي»
تلخيص [٧٧٦]؛ > پ پهل (→ पृष्णल) | ٦ الكبابية] ≡ «كبابية» مفردة^٣ ١١٣-١٥٢ | ٢... ≡ «XII Γ «χαρπύσιον»
١٥-٢١٦) | ١٠ الصنْدَل [> پسل.

3.1.10

القول على الدارصينيّ

الدارصينيّ صنفان: صنف هنديّ رقيق، حازّ الطعم، يلذع اللسان؛ وصنّف أغلظ منه. وعلامة الطيبّ منه: ما لذع اللسان لذعًا شديدًا مع حلاوة؛ ورائحته عطريّة. ويُشبهه القزفة القصبية.»

3.1.11

القول على السنبل

پ ه ط

السُّنْبُل صنفين: هنديّ وروميّ — والهنديّ أطيب. وعلامة الطيبّ منه: | خضرة لونه، وذكاء رائحته، وخذؤه اللسان. ويُشبهه السنبل الموجود في جبل شلير.»

3.1.12

القول على الخولان

الخولان صنفين: هنديّ وبصريّ — والهنديّ أطيب. والطيبّ منه: له بريقّ في لونه، وطيبّ رائحته، وقبضه، وتعلوه خضرة. فإذا حُكّ، كان مَحَكّه لون الزعفران. ويُشبهه ما ينعقد من المرات والقتطوريون، وعنب الثعلب، والزّمان الصغير المسقوط، وعصارة السُّمّاق.»

٣ مع ... عطريّة [«طيبّ الرائحة، حلو الطعم جدًّا» عمدة ١٦٢٠٠ || ٤ || ويُشبهه القزفة القصبية] = حشائش ٥ ط ١٥ (≡) Δ ١٦٩-٢٢٠)، تريكاي قبصر^{١٢} د جامع س IV ٨-٧٩ || ٦ السُّنْبُل ... وروميّ] [«السنبل ضربان: هنديّ وروميّ» اعتماد ١٦١٦ || ٦ أطيب] [أفضل من الروميّ وأشرف لأنّه أعطر] اعتماد ١٧١٦-١٨ || ٨ السنبل الموجود [«وفي جبل باليرة السنبل الفائق الطيب» مسالك II ١٩٣٨٤ || ١٠ والهنديّ أطيب] مفردة ١٢٢ ط ١٠ (≡ XII Γ ١١٦٤) || ١١ والطيبّ [≈ «والجيد من الحضض [...] وما لم يكن زهًا وكان فيه قبض مع مرارة، وكان لونه مثل لون الزعفران [χρώματι κροκώδες] حشائش ٢٣-٢١^٢ || ١٣ المسقوط] = «ويُعشّ الخولان بالزّمان المحروق» حيسة س ٦٣.»

٤ القزفة [«ألقرقه» پ || ٧ وخذؤه] [«وخذوه» پ || ٨ ويُشبهه] [«وشبهه» پ || ٨ شلير] [«شكّير» پ || ١٠ الخولان] [«الخولان» پ || ١١ والطيبّ] [«والتيبّ الطيبّ» پ || ١١ وتعلوه خضرة] [«ويعلوه خضرة» پ || ١٣ والقتطوريون] [«والقتطوريون» پ || ١٣ والزّمان] [«والزّمان» پ.]

٢ الدارصينيّ [≡ «κινάμων»؛ «فعمناه: «شجر الصين» لكثرة نباته بالصين والهند» عمدة ٢٠٠؛ > «ارينيّ || ٦ هنديّ] [≡ «νάργος Ἰνδική» || ٦ وروميّ] [≡ «سنبل / ناردين إقليطيّ»] [≡ «Κελτικὴ νάρδος» || ٨ شلير] [بلدان ٨٨-٠٦٠، [بلدان III ٢٦٠-٧٠٩؛ > «Solorius mons || ١٠ الخولان] [«حضض: هو كحل خولان، الفالزهرج» مفردة ١٨٦٢؛ «عصارة الحضض»؛ ≡ «λύκιον» || ١٠ هنديّ] [≡ «τὸ Ἰνδικόν» || ١٣ والقتطوريون] [≡ «κενταύρειον».]

القول على الصبر

3.1.13

الصَّبْرُ صنفان: سُقْطَرِيٌّ وَحَضْرَمِيٌّ، وصنف ثالث أسود. وعلامة الفاضل منه: أنه يكون بَرَّاقًا، حسن الرائحة، أحمر اللون، سريع الانفراك، شديد المرارة. ومتى غُسل الحضرمي الأسود بالأفاويه الطيبة العطرية، لَجِقَ بالصبر السقطري. ويُشبهه الصبر الصمغ العربي.

القول على الحلتيت

ب 172

الحَلْتَيْتُ صنفان: صَنْفٌ أَحْمَرٌ، وصنف أسود مُنْتَنٌ. وعلامة الطيب منه: أنه، إذا حُكَّ منه في الماء، يَبِيضُ الماء. ويُشبهه الوُشْقُ، والسَّكْبِينَجُ، والجَوشِيرُ.

القول على التنكار

3.1.15

التَّنْكَارُ صنفان: معدنيّ ومصنوع. وعلامة الطيب منه: (أنه)، إذا أُلْقِيَ في النار منه زنة حبة، انتفختُ وَرَبَتْ حتى تكون في شكل القطن؛ فإذا زاد(ت) النار عليها، ذابت كما يذوب القير وَجَرَتْ كالزيت — ويُشبهه في ذلك المَهْيُ المعقود من ملح القلي ومن رماد الفول. ويُشبهه الدُّهْنِيَّةُ التي على التنكار الصابون المَجْفَفُ للشمس. ويُشبهه التنكار أيضًا المهْيُ المعقود من البورق، والمهْيُ المعقود من الشَّبِّ الياباني، والمهْيُ المعقود من اللَّخْشِيَّةِ، والمهْيُ المعقود من الأزمدة (أي رماد كان) ومن البارود.

٢ وَحَضْرَمِيٌّ [«ومعاصر الصبر بعان وحضرموت وسقطرا كثيرة» عمدة ٣٧٧، «والحضرمي [...] ومثله أيضًا من جملة حضرموت» نجية ١٨٢-٢ || ٢ أسود] «والفارسي من جملة عمان أسود ملتمع» نجية ٣٨٢ || ٣ وعلامة... المرارة] «فاختر ما [...] وله بريق إلى الحمرة ما هو كبدني، سهل الانفراك، سريع الرطب، شديد المرارة» حشائش ٥٩ ط ١٠٠٩ (II Δ ≡) ١٣٢٨-٢٢٩ (٥ || ٥ ويُشبهه... العربي] «وقد يُغش بالصمغ» حشائش ٥٩ ط ١١ (III Δ ≡) ٢٢٩ (١٧ أحمر] ≠ أبيض / أسود Δ؛ «وأجوده ما يكون منه: ما كان إلى الحمرة ما هو، صافي، شبيه بالمز» حشائش ٦٩ ط ٢١ (III Δ ≡) ١٣٩٤-١٤ || ٧ وصنف أسود مُنْتَنٌ [«والمنتن من الأنجنان الأسود» اعتماد ١١٥-٧ || ٨ إذا... الماء] «وإذا ديف، كان لونه إلى البياض» حشائش ٦٩ ط ٢١-٢٢ (III Δ ≡) ١٣٩٤-١٥ || ٩ والسَّكْبِينَجُ [«وكل أصناف الحلتيت تُغش قبل أن تجف بسكبيج يُخلط بها» حشائش ٧٠ ط ٣-٢ (III Δ ≡) ٩٥-٥ || ١١ معدنيّ ومصنوع] «منه معدني، ومنه مصنوع» قانون I ٤٤٤٤.

١١ التَّنْكَارُ [«التنكار» ب || ١٥ اللَّخْشِيَّةُ [«واللخشيته» ب || ١٦ ومن] «وَمِنْ | وَمِنْ» ب.

٧ الحَلْتَيْتُ [«حلتيت وحلتيت (وهو الأفصح): صمغ الأنجنان» عمدة ١٤٢؛ ≡ «σιλφίον» || ١٣ المَهْيُ [«والمهأة: الحجارة البيضاء التي تُبْرِقُ، وهي البلور» لسان XV ٢٩٩ || ١٥ اللَّخْشِيَّةُ [DAA ٤٧٨ {LXS}*.

3.1.16

القول على الراوند

ب 17٧

الزَّوْنُدُ: الصَّيْنِيُّ | والشَّامِيُّ، وهما صنفان. والشَّامِيُّ ينوب عن الصَّيْنِيِّ إِذَا سُقِيَ وَطَّرِيَ وَسُقِلَ ٥.

3.1.17

القول على أجساد الغالية

أجساد الغالية وأطيب الغالية: المتلثة.

وعلامة الطيب منها: أنها، إذا مُسِحَ بها على الشعر واللحية وغُسل الشعر، بقيت الرائحة في الشعر
أعطر تما كانت.

ويُشبهه جسد الغالية زُبُّ ورق الورد اليابس، والدياخلون، ورب القرفل، ورب العود، ورب
الدارصيني، ورب القرفة، ورب جوز بؤا، ورب الجوز، ورب السليخة، ورب العنب، ورب السنبل
(وهي أشرف في الغوالي من السَّادُورَانِ وأعطر)، ورب الخريق، ورب الجاوشير ٥.

3.1.18

القول على الزعفران

الرَّعْفَرَانُ صنفان: عراقيّ وجنوبيّ.

والجيد منه: ما كان أحمر، حسن اللون، رقيق الشعر أصفر، لا متعلِّك بل متناثر.
والطيب منه يُشبهه الغُضْفُورُ، والرُّشَاءَةُ، والوُزْسُ ٥.

٢ الصيئيّ [$\rho\eta\sigma\nu/\rho\alpha$] || ٢ والشَّامِيُّ [«راوند شاميّ» طحال ٧٢ | ٧٢ ط ٩، وساد ٢٠٥، عمدة ٢١٦-٢٤٩؛
«وأما الراوند المعروف بالشَّامِيِّ، فإنَّ هذا الصنف يُجلب إلينا من نواحي عَمَّانَ من أرض الشَّامِ» جامع^ب II ١٣١-٢٢٢ (→
ابن جميع، مقالة في الراوند) || ٢ والشَّامِيُّ... وسُقِلَ [«وقد يُعشَّ الراوند الصيئيّ بنبتة يُقال لها «راوند الدواب» تنبت في
الشَّامِ» حاسبة ش ٤٢-١٦٠ || ٥ واللحية [«وفي حديث عائشة: «كُنْتُ أَغْلِفُ لِحْيَةَ رَسُولِ اللَّهِ ﷺ بِالْغَالِيَةِ» نهاية III
٣٧٩ هـ || ٧ زُبُّ [«رأيت ابن عباس حين أحرم والغالية على صلته كأنها الزُّبُّ» أبرار II ٤٠٠-٧٨ || ١١ وجنوبيّ [«منه
جنوبيّ (وهو الإفرنجي)» كتاب ٣١٢٠، «ومنه من يخلط الجنوبيّ مع الكيتلانيّ ويبيعه جنوبيّ، والمعتل بالكيتلانيّ ويبيعه
جنوبيّ» حاسبة^خ ١٢٤-٥٠، «الزعفران الجنوبيّ» حقائق ٩٥ | ٩٥ ط ٥، «الزعفران الجنائويّ» صنائع ٨٢٥ || ١٢ أحمر
«الشديد الحمرة» حاسبة^خ ١٢٤ || ١٢ حسن اللون [حشائش ١١٠٨ (≡ I Δ ٢٩١).

٢ سُقِيَ [«سُمِّي» ب ٧ والدياخلون [«والدياخلون» ب ٨-٩ ورب السنبل... وأعطر [ب ٩ السَّادُورَانِ
«السَّادُورَانِ» ب ١١ وجنوبيّ [«وجنوبيّ» ب ١٢ أصفر [«أصفر» ب ١٣ الغُضْفُورِ [«الغُضْفُورِ» ب ١٣
والرُّشَاءَةُ [«والرُّشَاءَةُ» ب.

٢ الزَّوْنُدُ [«راوند / ريوند» > روه || ٢ وسُقِلَ [DAA ٢٥٥ {SQL} * || ٤ الغالية [«وهي مسك وعنبر يُعجنان باللبان»
محب ١٤٦، «هو نوع من الطيب مُركَّب من مسكٍ وعنبر وعود وُدُهْنٍ» لسان XV ١٣٤-١٧٣ || ٧ والدياخلون [
® «دياخلون» / «مرهم الدياخلون» دگان ل ٦٤ ط ٢٢-٢٧؛ > « η δία χυλῶν (ἔμπλαστρος)» (مصطلح) ® Γ
XIII Per gen ٢٩٩٥-١٠٠٥ || ٩ السَّادُورَانِ [«سادوران» كتاش ك ١٣٢ | ١٣٣]؛ ≡ «سَادُورَانِ» DAA
٢٤٧ {SDRWN} * (> سيهوران) || ١٣ والرُّشَاءَةُ [عمدة ٢١٠.

القول على الومرس

3.1.19

الوُرس صنفان: حبشيّ وروميّ.
وهو نَبَتٌ يُشبهه لون الزعفران.
وعلامه الطيب منه: ما < — — > .»

< — — — >

٥

القول على دهن < البلسان >

٦٦ پ

الطيب من دهن البلسان يُشعل الحديد. 3.1.20
وإذا قُطِر على الخلّ، ابيضّ؛ وإذا قُطِر في الماء، اختلط معه؛ وإذا قُطِر على الثوب وغُسل، خرج
بغير صابون.
وشبهه: القُطران المقطّر، ودهن القِته. ١٠

القول على النفط

3.1.21

النفط دهنٌ مصنوع من الكُنْدُر والسَّنْدُرُوس والكِبْرِيْت.
ويُشبهه الرُّقْت الأبيض المقطّر بالأنبيق.»

٢ حبشيّ] ≡ نبات ١٦٦٥-١٧، «المشهور عند عاقبة الناس أنّ ورس الطيب هو الومرس الحبشيّ [...] وهو ما يسقط
منه ببلد الحبشة ويُجلب من بلد الحبشة إلى مكة» مرشد ١٦-١٥٦-١٦، «ومنه صنف يُسقى الحبشيّ لسواد فيه،
وهو أحزّه» الأصمعيّ ٣ جامع ٣ IV ١٩١ ٨-٩ «وهو... الزعفران» وهو يُشبهه الزعفران المسحوق إذا تكثّل «الأصمعيّ
٣ عمدة ٢٥٧٤، «وهو شيء أصفر يُصبغ به كما يُصبغ بالزعفران» ثامنة ١٦٢٨-١٢٩ ٨ «وإذا... معه» «والخالص
[ὁ ἀκέραϊος]، إذا قُطِر منه على الماء [γἀλακτι ἢ ὕδατι]، انحلّ ثمّ يصير إلى قوام اللبن [γαλακτοῦται] بسرعة»
حشائش ٧-٨ (I Δ ٢٥-٢٣) ٨ «وإذا... صابون» «أنّ الخالص، إذا قُطِر منه على صوفة وغُسل من بعد،
فليس بأثر فيه [κηλίδα οὐ ποιεῖ οὐδὲ στίλον]» حشائش ٧-٦ (I Δ ٢٤-١٢٥).

٢ الوُرس] «الوُرس» پ || ١٢ التَّفْطُ [التَّفْطُ] پ || ١٢ والسَّنْدُرُوس] «السَّنْدُرُوس» پ.

٧ دهن البلسان] ≡ «ὀποβάλασμον» || ١٢ التَّفْطُ دهنٌ] ≠ «نفط» ≡ «νάφθα»؛ «التَّفْطُ وَالتَّفْطُ: دهنٌ (والكسر
أفصح)» لسان VII ١٦ ٤٨ ٨ «السَّنْدُرُوس] «فتقموا: وهو السندروس» تفسير ١٣ ٧ (κἀγκραμον ≡).

3.2

القول على الأحجار

الأحجار مختلفة، فمن ذلك:

3.2a.1

القول على الذهب

الذهب، الطيب منه: ما دخل النار أحمر وخرج أحمر. ويُشبهه الشَّبه المدبَّر.

وما طحنه: الزَّبِق — وإذا ضُرب رقيقًا وسُحق وأُلقي عليه، طحنه واختلط به. ولا يبلى في الأرض.

3.2a.2

القول في الفضة

أطيب الفضة: ما دخل النار أبيض وخرج أبيض. وطحنه: الزَّبِق.

وشبهها: الحديد المبييض، والنحاس المبييض.

٦٦ ط

٤ ما... أحمر] «فأما الذهب المغشوش، فمن ذلك الحمي في النار: فمتى كان فيه جسم آخر من النحاس أو الفضة، اسودَّ أو اخضرَّ وتغيَّرت سمته» تجارة ٤ ط ٦-٦؛ «وروى أبو أمامة عن النبي ﷺ أنه قال: "إِنَّ اللَّهَ لَيَجْرِبُ أَحَدَكُمْ بِالْبَلَاءِ كَمَا يَجْرِبُ أَحَدُكُمْ ذَهَبَهُ بِالنَّارِ؛ فَمِنْهُ مَا يَخْرُجُ كَالذَّهَبِ الْإِنْرِي"» لسان ٧ ١٣١١ ٩-١١؛ «الشيء هو خالص || ٥ الشَّبه» [شبهان] هو النحاس الأصفر المشبه بالذهب» ابن جليل ٣ جامع ٣ III ٧٥٤، «الشبه هو خالص الصفر الذي يُشبه الذهب» تلخيص [٩٤٨] (→ ابن إسحق) || ٦ وما طحنه: الزَّبِق] «*Frangitur facillime cum mercurio*» Inv ١٥ ٩-١٠ || ٦ وإذا... به] «صفة قتل الذهب للطلاء: ويؤخذ الذهب الخالص الطيب [...] فيُرق صفائح رقائقًا [...] ثم يُصب على كلِّ مثقال من الذهب المدقوق خمسة مثاقيل زئبق، وهو على النار في البودقة؛ ثم يُجرك تحريكًا شديدًا حتى يماع ويخلط» مخترع ١٢١٢-١٣ || ٧ ولا... الأرض] «ولا يبلى في التراب» عجائب ٢٠٥ ١٥، «إذا دُفن في الأرض وهو صحيح، لم يُخالطه جسم غيره، (و) لم يضره التراب» أحجار ١٥٦ ١٦-١٧ || ٩ ما... أبيض] «تدخل النار وتخرج منها مثل ما دخلت، ليس لها سواد ولا صدى» أسطانس ١٩٩، «الحمي في النار: فإن كان رديئًا، اسودَّ» تجارة ٥ ط ٢-١٠ || ١٠ وطحنه: الزَّبِق] «وإن أصاب الفضة ريح الرصاص أو ريح الزئبق، تكسرت عند التطريق» أحجار ١٥٧ ١٢-١١ || ١١ جامع ٣ III ٢٨٣ ٣-١١ || الحديد المبييض] «خمس عشرة ألف زوج باب ومئين زائدة، منها المصق بالحديد المبييض بالقزدير» فرحة ٣٠١ ١١-١٠ (→ ابن حبان).

٥ الشَّبه] «الشب» ٦ || ٦ الزَّبِق] «الذق» ٦ || ١٠ الزَّبِق] «الرسو» ٦ ط.

القول على النحاس

3.2a.3

النحاس ثلاثة أصناف: سُوسِيّ، وفارسيّ، وروميّ.
وأطيب النحاس: ما كان أحمر اللون، سريع الامتداد.
يُصنع منه «الحَرْقُوس» ، ويتصرّف في الأكحال، وفي صباغ الشعر، وفي المراهم، وفي التلوّج، وعند
أهل الكيمياء. ويُشبهه حرقوس الحديد.
ويُصنع من النحاس «الزّنجار» بأن تُعلّق الصفائح على الحلّ وتُجَرّد متى ما تزنجرت.
والزنجار يتصرّف في المراهم، وفي الأصبغة، وفي الأكحال، والتلوّج، وعند أهل الكيمياء.
وإذا خلط مع الزاج والحلّ وطلي به الحديد المصقول، كساه ثوبًا نحاسيًا — وكذلك يفعل بالآتِك.
ويُشبهه الزاج الأخضر.

٤ الحَرْقُوس [↓ القول على الروسخنج || ٦ الزّنجار] ↓ القول على الزّنجار || ٨ بالآتِك] ↓ القول على الرصاص || ٩ الزاج
الأخضر] ↓ القول على الزاج.

٢ ثلاثة أصناف [«روميّ + قبرسيّ + وسوسيّ» نجبة ٧٤٦) || ٢ سُوسِيّ] «نحاس سوسيّ» أسرار ٢٠٢١، حسبة
٢٠١٤٨؛ > «السُّوس الأقصى»، جغرافية ١٩٠-١٨١٩٠ || ٢ وفارسيّ] ≡ «نحاس فارسيّ» حبالى ٣٢٩٧ > «نحاس
فارسيّ» خواص ١٨٤٤[†] > «نحاس قبرسيّ» خواص رط ١٠٧^ط ≡ («χαλκός Κύπριος») || ٢ وروميّ] ≡ «نحاس
صهنيديس نحاس قورينثانيّ أو روميّ». بر عليّ ١٤٤٦، «صهنيديس نحاس روميّ فيه ذهب وفضة» بر بهلول ١٥١٧٥٤
(≡ Κορινθιακός χαλκός) || ٣ أحمر اللون] «والأحمر أجودها» أحجار ١٥٨؛ ≡ «χαλκός ερυθρός» || ٦ ويُصنع
... تزنجرت] «أو تؤخذ صفيحة [λεπίδα] من نحاس وتُعلّق [ἐγκρέμασον] في الإناء الذي فيه الحلّ، ولا تُنّاش الحلّ،
وفي كلّ عشرة أيام أيضًا تُخرج وتُجرّد [ἀποξύει] ما اجتمع عليها من الزنجار» حشائش ١١٩^ط ٢١-١٩ III Δ ≡ (١١-٩٤٩ III Δ) .

٤ الحَرْقُوس [«الحرقوس» ب || ٥ حرقوس] «حرقوس» ب.

٢ النحاس [≡ «χαλκός»] || ٤ الحَرْقُوس] «الحلقوس بالرومية هو النحاس المحرق» ابن عمران ٣ جامع ٢٥٠ I ٩-٨،
«النحاس المحرق المعروف بالراسنجنج (وهو الحلقوس)» اعتماد ١٣٦٣-١٤، «خالقوس روسنجنج» الحاوي XXII ٣٥٥-٧
+ «خالقوس ي نحاس محرق» الحاوي XXII ٣٥٧، «خالقوس روسنجنج» تلخيص [١٠٣٤]، «خالقوس هو النحاس
المحرق، وهو الروسخنجنج» تصريف II ٢٣-٢٤، «روسنجنج هو نحاس محرق، وهو الحرقوس عند البربر» تصريف II
١٠٤٢٥، «روسنجنج وهو النحاس المحرق الذي تُسمّيه عامة المغرب "حديد الحرقوس"» شرح ١٢٣٨، «الروسنجنج (وهو
الحديد الحرقوس)» هاروتية ٢٦١، ٣٦٥؛ > «(χακαυμένος) χαλκός» (صهنيديس).

3.2a.4

القول على الحديد

- الحديد صنفان: أنثى ومذكّر.
وأطيبه: أشدّه بياضًا والتثامًا.
- ويُصنع «الهنديّ» بأن يُذاب || بالزرنبيخ والزجاج والمغنيسيا حتى يصفّر — وهي صناعة عجيبية. ^{ب ٧}
- ويُصنع من الحديد «زَعْفَران» يتصرّف في إدمال القروح الكثيرة الرطوبية، البطيئة الإدمال، في آفات ^٥
شعر الأجناف. وهو عند أهل الكيمياء والتلوخ من الأسرار.
- ويُصنع أيضًا من الحديد «الخَبَث»، (يتصرّف) في تقوية الأعضاء وفي البواسير.
- ويُصنع منه «توبال» يتصرّف في صباغ الشعر والعود.
- وتُصنع منه «برادة» تتصرّف في الأدوية.
- ويُحمى الحديد ويُغمس في الماء، ويُستى ذلك الحديد «الأرض» ^{١٠}.
- ويُشبه الهنديّ منه ما سُبِك بالزرنبيخ والزجاج.

٥ زَعْفَران | ↓ القول على زعفران الحديد || ٧ الخَبَث | ↓ القول على خبث الحديد || ٨ توبال | ↓ القول على توبال الحديد.

٢ أنثى ومذكّر [والحديد، معدنه ينقسم إلى صنفين: أحدهما ليّن يُستى «الزماهن»، ويُلقب بالأنوثة؛ والآخر صلب يُستى «الشارقان»، ويُلقب بالذكورة لصرامته» جواهر ب ٢٤٨-٤٥ || ٥ في ... الإدمال] «وقد يُستعمل وحده إذا دُر على القروح الرطبة التي يعسر أندمالها: جفّتها بقوة» تصريف II ٢٤-٢٣٤٠٦ || ٧ ويُصنع ... البواسير] «إذا غُوخ الحديد بالنار، يحدث منه حجّز يُستى «خبث الحديد»: إذا سُحق ومُعل منه مرهم، ألم الجرائح، وأبرى النواصير، وأكل البواسير» أحجار ب ١٢٥-١١٠ (و«شدّ أعصاب المعدة وصلبها، وذهب بأوجاع البواسير» أحجار ١٦٧)، «خبثه يقوي المقعدة، ويقطع دم البواسير» تصريف II ٢٢-٢١٣٤٢ || ٩ برادة) ⑧ «صفة برادة الحديد» تصريف II ٢٩-٢٤٤٠٦ || ٩ تتصرّف في الأدوية [أحجار ١٥٤-١٠ || ١٠ ويُحمى ... الماء] «الحديد المحتى، فإنه أطفئ بالماء» حشائش ١٢٠-١١٣ || ١٢٣-١٤٠: «الدوص» >† «والدوص هو الماء الذي يُطفأ فيه الحديد المحتى حتى يغلظ ويسودّ» تلخيص [٢٤١] (→ الرازي، كتاب المعادن).

٤ والمغنيسيا [والمغنيسيا] ب ٤ وهي [وهو] ب ٥ البطيئة [البطيئة] ب ٧ الخَبَث [الحبيث] ب.

٤ الهنديّ [σίδηρος Ἰνδικός] ≡ «σίδηρος Ἰνδικός».

القول على الرصاص

3.2a.5

الرصاص نوعان: النوع الذي يُقال له «الأُسْرَب»، والنوع الثاني الذي يُقال له «الآنك» (وهو القزدير).
ويُصنع من الرصاص «إسفيداج» بأن تُعلَق الصفاخ على الخَلّ وتُجَرَد.
ب^٧ ويتصرّف هذا الإسفيداج في المراهم، | وفي الأشياف، وفي الأصباغ، وعند أهل الكيمياء وأهل التلوّج،
وعند النساء.

وإذا أخذ من الإسفيداج وسحق وأملت منه فُدُور وأدخلته في أفران الزجاج، خرج زرقونًا أحمر.
ويُشبه الإسفيداج الشاذر. ويتصرّف «الزرقون» في الأصباغ، وعند أهل الكيمياء والتلوّج. ويُشبهه
غاية الشبه الزرقون المصنوع من المَرْتَك بأن يُفعل بالمرتك مثل فعله بالإسفيداج.

وأما القزدير

فأكثر تصرّفه: في تبييض الحديد والنحاس، وفي الزديتي، والإفراغ مما يليق بصناعة العطر.

٧ الشاذر | القول على الشاذر. ٨ المَرْتَك | القول على المرتك.

٢ نوعان [«الرصاصان» أسرار ٢٤٦، هاروتية ١٠٢٠٣ | ٨٤٧ | ٢ الأُسْرَب] فأما الأُسْرَب، فهو أجود أنواعه «أحجار ٢
١٢٣-٤» (≡ «ومن الرصاص جنس الأُسْرَب، وهو أشتر أجناس الرصاص» أحجار ١١٦٠ | ٢ الآنك] «ومن
الرصاص: الأُسْرَب، وهو «الآنك» بالفارسية، وهو «القزدير» بالعربية، وهو «الرصاص قلعي» ابن عمران ٣ جامع ٥
IV ٣٢٧٩-٣٢٦١ اعتاد ٢٢٠٦١، «آنك: هو الرصاص، وهو القزدير» تصريف II ١٥٤١٧ | ٣ بأن... وتُجَرَد] «من
الرصاص الأُسْرَب، يُستخرج فيه بالخلّ» أحجار ١٢٥-٥، «ومنه يُعمل الإسفيداج بتعليق صفاخ في الخَلّ ولقها في ثفل
العنب وحجمه بعد العصر — فإن الإسفيداج يعلوه علو الزنجار على النحاس، وينتج عنها» جواهر ٢٦٠-٣٢٦٠ ≈ (R)
«عمل الإسفيداج الذي يُصنع عندنا» تصريف II ٣٧٧-١٦٣٢٠ | ٤ في المراهم] «ومرهه نافع، يُنبت اللحم وينفع من حرق
النار» أحجار ١٢٥-٦: (R) «مرهم الإسفيداج» ابن ماسويه ٣ زاد ١٣٦٥-١١٧، دكان ١٠٣٦٥-١٣٠٦ | ١٠ في تبييض
الحديد] «بالحديد المبيّض بالقزدير» فرحة ١١٣٠١ (→ ابن حيان).

٢ نوعان [«نواجات» ب | ٣ إسفيداج] «إسفيداج» ب | ١٠ تصرّفه [«صافته» ب.

٢ الرصاص [«μολυβδος/κασσίτερος» | ٢ الأُسْرَب] > αήμακ ≡ «أُسْرَب» | ٢ الآنك ≡ αήμακ | «٦٦٦»
| ٣ إسفيداج [«إسفيداج (وهو البياض)» هاروتية ٨٣١٥-٨؛ > سیدک / سید / سید (صحة:); ≡ «ψιμίθιον» | ٦ زرقونًا
«أسرخ هو الزرقون» تلخيص [٤٠] (ابن الجزار، كتاب البغية): > زركون | ٩ القزدير [«قَصْدِير / قَزْدِير» (صحة:)
صحة:ب: «رصاص قلعي: هو القصدير» تصريف II ٤٢٦-١؛ ≡ «κασσίτερος» | ١٠ تبييض] ≡ «تبييض».

3.2a.6

القول على التريبيق

أكثر تصرفه: عند أهل الكيمياء، وعند الصاغة والحلائين، ويتصرف في بعض المراهم. ويصنع منه «الزنجفور» بأن يجعل منه رطلان ومن الكبريت الأحمر رطل بعد أن يثاب في الزجاج، ويصعد في الأثال — وهي صناعة من الصناعات.

3.2a.7

القول على النشاذر

النشاذر شيء مصنوع، وصناعته: أن يؤخذ رماد أرقّة الحمام من الدخان إذا أحرق فيها الزبل، ويجمع || ويجعل في الأثال، ويبتأ له فرن ويجعل الرماد إلى نصف الأثال على الملح المسحوق. ويطين على الأثال فيبيته، ويترك في القبة ثقب صغير. ثم توقد تحته النار، ولا يزال المدبر لهذا الأمر يبل خرقة في الماء ويمسح بها قبة الأثال ولا يفتر (وتكون القبة صحيحة) حتى يصعد، ثم يترك ويؤخذ النشاذر. وعلامة الطيب منه: إذا ألقى منه في النار، خرج بأسره في الدخان ويسود الأكل. ويتصرف في الأدوية والأكحال الحادة، ويتصرف عند الصاغة. وأكثر تصرفه: عند أهل الكيمياء — وهو من الأرواح، وفيه أسرار عجيبة وأمور غريبة. وأكثر الأشياء به شبيهاً: ملح الطعام.

٣ الزنجفور | القول على الزنجفور || ١٣ ملح الطعام | القول على ملح الطعام.

٣ بأن يجعل [إرن الزئبق، إذا طبخ في الزجاج مع الكبريت واستوثق من رأسه ليلاً يطير، استحال إلى حمرة و صار زنجفراً] أحجار ٣ ١٢٤-١٧، «والأندرموس، وهو الزنجفور، ويتركب من الزواق والكبريت، وهو الكبريت الأحمر» هاروتية ٢٥٩-٨؛ ⑧ «صفة عمل الزنجفر» تصريف II ٣٨٢-٢٩٣-٣٠-٤٠٥ | ١٨-١٥٤ «صنعة الزنجفور» تحف ٢٠-٧٥٩ || ٦ وصناعته [ومنه المصنوع من دخان الحمامات والزبول] هاروتية ٢٥٣-٥؛ ⑧ «صفة عمل النشاذر» تصريف II ٣٠-٢١٤١٤.

٢ والحلائين [والحلايين] ٢ ويتصرف [ويتصرف] «ب» ٤ الأثال [الامال] ٨ فيبيته [فيبه] ٩ وتكون [ويكون] ٩ صحيفة [صحفة] ٩ صحيفة / صحيفة [صحفة] ١١ ويتصرف [وصرف] ١٣ شبيهاً [شبيهاً] ١٣ ملح [بملح] ١٣.

١ التريبيق [زئبق] / «زئبق» > *زيوك (< زيوه | ١٥١ / ١٥١)؛ ≡ «ὀδράργυρος» || ٢ والحلائين [فاجتمع لذلك خذاق كل صناعة ومهرة كل طائفة من المهندسين والصواغين والنظامين والحلائين والنقاشين...» نفع I ١٣٦١١-١٤ || ٦ النشاذر [anōšādūr * | ١١٤٥٥ / ١١٤٥٥] ≡ «ἀλλες ἀμμωνιακοί».

القول على الزرنيخ

3.2a.8

- الزُرْنِيخ نوعان: أحمر وأصفر.
 يتصرّف في المراهم، وفي الثّورة، وفي الأصباغ.
 وهو من الأرواح، وأكثر تصرّفه: عند أهل التلويح والكيمياء.
 ويصنع منه «حبّ الرمان» بأن يؤخذ منه ثلاثة أجزاء، ومن الكبريت الأحمر البركانيّ جزو؛ ويُدوّبان في
 ٨٠ ب قدر. ويصنع منه حبّ الرمان كما يصنع الحَرَز.
 ويكسي النحاس، إذا طُلي عليه، قميصًا ذهبيًا. وإذا سُبك النحاس الأحمر وأُلقي عليه، يتبضه.
 وفيه أسرار.

القول على الكبريت

3.2a.9

- الكِبْرَيْت نوعان: بُرْكَائِي ومعدنيّ.
 والكبريت يتصرّف في بعض المراهم، وفي صناعة القرايس، وفي تبييض الحديد والشعر. وأكثر
 تصرّفه: عند أهل الكيمياء والتلويح والتفوط.
 وهو من الأرواح وفيه أسرار. ويُحرق جميع الأجساد، إلا الذهب الخالص.
 ويُسود من وجه، ويُبييض من وجه، ويُصقّر من وجه.
 ١٥ ويُسرع بوقود السُرُوج والنيران.

٢ نوعان: أحمر وأصفر [«ضربان» فردوس ١٨٤٠٩، «ضربان: أحمر وأصفر» اعتماد ١٥١٩؛ «الزرنيخان» عشر ٣١٦٢
 ٣ وفي الثّورة] «وإذا أضيف إلى الكلس، حلق الشعر» أحجار ٧١١٣، «والزرنيخ يخلق الرأس إدى خلط على النار
 مع الخبز والماء» تصريف II ١٠٣٥٠ ٧ «وإذا... يتبضه» [«ومن كلس أحدها حتى يبيض، ثم سبك النحاس وألقى مع شيئًا
 من البورق، وطرح فيه من الزرنيخ المكلس: يتبضه وحسنه» أحجار ١١٣٠-١١٣١ ١٣ «ويحرق جميع الأجساد» «وإذا
 أضيف الكبريت إلى أي حجر كان وأدني من النار، أحرقه» أحجار ١١٣٠-١١٣١ ١٤ «ويُسود من وجه» «فأما الأبيض من
 الكبريت، فإنه يُسود البياض» أحجار ١١١٢، «[الفضة] والكبريت يُسودها» أحجار ٣١٢٢ ١٥ «السُرُوج» «الذين
 يتخذون عيدان الكبريت للمصاييح» مرشد ٢٦٦-٢٦٧، «الكبريت: من الحجارة المُوقَد بها» لسان II ٧٦٦-٧٦٧.

١٠ بُرْكَائِي [«ركاني» ب ١١ القرايس] «العرانس» ب ١٢ والتفوط [«والنقوط» ب.

٢ الزُرْنِيخ [«زرني / زرنق (زرنيخ) | زرنق» ٢ أحمر] «σανδαράκη»؛ «سندراخس: وتأويله «الأثني»، وهو
 الزرنيخ الأحمر» تفسير ٨١٠١ ٢ «أصفر» «ἀρσενικόν / ἀρρενικόν»؛ «أرسانيقون: ومعناه «الدّكر»، وهو
 الزرنيخ الأصفر» تفسير ٧١٠١ ٣ «الثّورة» «ψιλωθρον» (≠ «نورة» «τίτανος / ἄσβεστος») [١٠ الكبريت]
 حصص ١٠ «θεϊον» [١٠ بُرْكَائِي] «الكبريت البركانيّ» تحف ٩٦٢؛ «جبل / جزيرة البزكان» [١١ القرايس] «
 قرايس» DAA ٤٢٠ {QRBS/§}، SDA II ٣٢٤ / «عرانس» ١٢ والتفوط [SDA II ٧٠٣-٧٠٤.

3.2a.10

القول على الطلق

الطَّلَقُ هو «لُعَابُ الشَّمْسِ»، وهو «عَرَقُ العُرُوسِ». يُجَلَّ بطبيخ الفول، ويُصَغُّ بالعزروت والزعفران. ويُكْتَبُ به كما يُكْتَبُ بالذهب. ويُجَلَّ ويُعَقَدُ منه لَوْلُؤٌ عَجِيبٌ. ولا يَحْتَرِقُ فِي النَّارِ، وَلَا يَقْبَلُ التَّمَدُّدَ.

3.2a.11

القول على الزجاج

٥٩٦

الرُّجَاجُ مِنَ الجَوَاهِرِ الشَّرِيفَةِ، وَهُوَ صِنْفَانِ: صِنْفٌ || معدنيّ وصنّفٌ مصنوع. ويتصرّف المعدنيّ في الحرز والأواني المزججة؛ ويتصرّف المصنوع على وجوه كثيرة. ويقبل الأصباغ حتى يحكي الياقوت الأزرق والأصفر والأحمر، ويحكي الرُّمُزْدَ البحريّ الفائق. ويُفْتَتِ الحصى، وَيُزِيلُ الإبرية من الرأس واللحية. وَيَذَوِّبُ الحديد ويصقيّه. وتُصنع منه ثُرَيَّا. وفيه أسرار. وتركيبه: أن يؤخذ من الجنّدل الأبيض، ومن ملح القلى، ويُدَقَّان، ويُقرص قرصًا، ويُترك حتى يجف. ويُدخل في الفرن المدبّر لها في القدر، ويوقد عليها حتى يذوب — وكلّمًا زاد الوقود عليها، كان الزجاج أصفى وأشدّ بياضًا.

٢ عَرَقُ العُرُوسِ] ≡ جامع س I ٢٦١-١١٠ (→ محمد ابن عبدون)، هاروتية ٢٧٧؛ «والأندلسيّ منصفح أيضًا، غير أنّه غليظ متجسّس، ويُعرف بعرق العروس» جامع س I ٢٦١-١١٠ (→ عليّ ابن محمد) || ٣ يُجَلَّ بطبيخ الفول] [super Lib.sac «fabarum sive alorum solvitur» I ٢٠٤-١١٢ || ٣ ويكتب... بالذهب] ⑧ «دواء يُكْتَبُ على الحرير وعلى الرقوق وعلى سائر الثياب فيأبى لون الذهب لا يُنكر» طببت ٢٣٨-٢٣٩ || ٤ «ولا... النار» [«لا يَحْتَرِقُ» حشائش ١٢٩ ط ٢٠ (III Δ ١١٩-١٢٠)، «وقُهرت به النار» أجمار ١١٩ ≡ «لم يَحْتَرِقُ ولم يتكلّس بالنار» أجمار ٤٦ ط ١٩، «والطلق لا يصير جمًّا أبدًا» حيوان VI ٤٣٥-٢٠١ || ٤ «ولا يقبل التمدد» [«وهو حجّر عاصي لا يُطِيع لو دُقَّ بمطارق والأعمدة، ما اندق» أجمار ١١٩-١١٠ || ٧ ويقبل الأصباغ] ≡ أنفس ٢٣٥٠، «لأنّه يميل إلى كلّ صنّيع يصنع به» أجمار ١٤٦-١٦١ || ٩ ويُفْتَتِ الحصى] [«وإذا سحق وشرب مع الحرة الطيبة اللطيفة، فتت حصا المائة» تصريف II ٢٨٣-٢٨٤ || ٩ وَيُزِيلُ... واللحية] [«ويقلع الحزازة والإبرية من الرأس، ويبطئ شعر الرأس واللحية» تصريف II ٢٨٣-٢٨٤ || ٣ لؤلؤ] [لولوا] پ || ٦ صنفان] [صنف] پ || ٩ الحصى] [الحصا] پ || ١٠ ثُرَيَّا] [ترابا] پ || ١١ الجنّدل] [«الجنّدل»] پ || ١١ القلى] [القلى] پ || ١١ ويُقرص قرصًا] [«وقرض قرصًا»] پ.

٢ الطَّلَقُ] [«والطَّلَقُ: صَرَبٌ مِنَ الأدوية؛ وقيل: هو بَبْتٌ تُسْتَحْجُ عصارته فيتطلى به الذين يدخلون في النار» لسان X ١٢٣١-١٧؛ «وهو حجّر يقع من الهواء مثل الندى، ثم يتحجر بعضه على بعض طبقة فوق طبقة» أجمار ١٥١، ≡ «λίθος ἀμίαντος» || ٢ لعاب الشمس] [«لعاب الشمس: الذي تراه في شدة الحر يبرق ومثل نسج العنكبوت أو السراب، فيخدر من الساء» أبو حنيفة د محض VII ٢٢-١١٠ || ٦ الزجاج] [«vαλος / vελος» || ١٠ ثُرَيَّا] [«والثُرَيَّا من السرج: على التشبيه بالثُرَيَّا من الثخوم» لسان ١١٢-١٥٠٦.

القول على المغنيسيا

3.2a.12

وهي من الأحجار الحديدية. والمغنيسيا صنفان: أحمر وأسود.
وأكثر تصرّفها: في صناعة الفخار، والتلوّج، والكيمياء، وفي صباغ الزجاج والأحجار.
وفيها أسرار غريبة وأمور عجيبة.

ب^٩ ط^٩ تُعين على || سَبْك الزجاج وتبيّضه، وعلى سَبْك الحديد وتلينه.

وتتصرّف في الأكحال.

وثبّيض بماء الرّيباس.

القول على المرقشيتا

3.2a.13

المرقشيتا خمسة أصناف: ذهبية، وهي لا تتنجر؛ وفضّية، وتتنجر زنجارًا أخضر صافي اللون؛ ونحاسية،
وتتنجر زنجارًا أسمر (...). وتتنجر زنجارًا أحمر.
وأكثر تصرّف المرقشيتا: في التلوّج، وفي صناعة الكيمياء، وفي الأكحال — وفيها أسرار.

٢ الحديدية [«مغنيسيا حديدي» أسرار ٢٠١٠٦ || ٣ والكيمياء] «يدخل في الصنعة، فيه منافع كثيرة» أحجار ٣ ١١٢ ٩
|| ٣ وفي... والأحجار [«تدخل في الصبغ» لآلي ١٧-١٤٣ || ٥ تُعين... وتبيّضه] «ولا يتم عمل الزجاج إلا به» أحجار ٣
٧١١٢، «يعين على سبك الرمل وتصفيته، وصبغ الزجاج إلى أن يقبل الصبغ» نخبه ٢٠١٨٨٠ || ٩ خمسة أصناف
«المرقشيتا ألوان كثيرة، منها الذهبية والفضّية والنحاسية» أحجار ٣ ١١٢-٤؛ «أبيض فضّي، نحاسي، أصفر ذهبي،
وأسود هديدي» أسرار ٢٠١٩٣ || ١١ وفي صناعة الكيمياء [«إذا كلس وحرق حتى يصير مثل الدقيق، دخل في
الصنعة» أحجار ٣ ١١٢ ≈ خواص ٩٣-١٥٤ || ١١ وفي الأكحال] «تجلو غشاوة البصر [τῶν ἐπισκοτούντων ταῖς
χόραις] حشائش ١٢٨^ط ١٨ (III Δ ٩٣-١٥٤)، «والفرس يُسمونه «حجر الروشنا» (أي «حجر النور») للمنفعة
للبصر» قانون I ٢٦٣٦٦-٢٨.

٧ الرّيباس [«الرباش» ب || ٩ تتنجر] «نرجر» ب || ٩ وتتنجر [«وتنجر» ب || ٩ ونحاسية] «ونحاسه» ب ||
١٠ وتتنجر [«وتنجر» ب || ١٠ زنجارًا أسمر] «زنجار اسمر» ب || ١٠ وتتنجر [«وتنجر» ب || ١٠ زنجارًا أحمر] «زنجار
احمر» ب || ١١ وفيها [«فيه» ب].

٢ والمغنيسيا [«μαγνησία» (مغنيسيا) || ٩ المرقشيتا / مرقشيتا] «مارقشيتا» > <μαγνησία>؛ «πυρίτης»
«الغوريطش هو المرقشيتا» خواص ٨^ط ٢١-١٩.

3.2a.14

القول على الشاذنة

الشاذنة هو «حجر الدم»، وهو «حجر الطوري». ويتصرف في الأكحال، وبه يُدلك الذهب، وفي التلويح، وفي الكيمياء. وفيه أسرار.

3.2a.15

القول على اللازورد

اللازورد حجرٌ عجيب يتصرف في إسهال السوداء، وفي الأكحال، وفي التلويح والكيمياء. وتُصنع منه طلاسِم لدفع الذباب. ويُحتمر الأبيض، ويُحسّن الذهب. ويُشبه التيل والطورية سواءً.

ب ١٠

٢ حجر الدم [«حجر الدم (وهو الشاذنة)» مفردة^١ ١٤٧ ظ (≡ «αίματιτης» XII Γ ١٩٥)، «حجر الدم (وهو الشاذنخ الذي ليس بعدسي)» بقراطية^٢ ١٢١ ظ (≡ «حجر الطوري» [«حجر الطور هو الشاذنة» هاروتية^٣ ٣٧٩، «وحجر الطور [...]، وهو حجرٌ مخلوق في جبل طور تابور [يابون] بالأردن» ابن عمران د جامع^٤ I ٢٥٦-٢٠١، اعتقاد ٥٢-٤٥، «الأماطيوس [...]، يقال له "حجر الطور"، وذلك أنّ معدنه بطور تابور ن عمل طبرية» مرشد^٥ ١٠٥ ظ، «وهو حجر الطور» تصريف^٦ II ٣٧٢|٢٧٤٢٢|٢٤٤٠؛ «والطور: جبلٌ بعينه مُطلٌّ على طبرية الأردن، بينها أربعة فراسخ» بلان^٧ IV ١٤٧-٧ (≡ «αἰματιτης ἰαση» ηη ηβω) || ٣ في الأكحال] «وقد يعمل منه شيفات والمساق [κολλούρια και ἀκόνια] صالحة لأمراض العين» حشائش^٨ ١٢٩ (≡ III Δ ٩٤-١٠٠) || ٣ وبه يُدلك الذهب] «وبه يصقل الذهب» هاروتية^٩ ٢٧٥، «ويُستعمل في ذلك التذاهيب» فنج^{١٠} I ١٤٢-٩٠ || ٥ في إسهال السوداء] «وينفع من المالبخوليا ويُسهل المزة السوداء» أحجار^{١١} ٤٤-٨٠ || ٥ وفي الأكحال] «وطبع هذا الحجر ينفع العيون إذا جُعل في الأكحال» أحجار^{١٢} ١٢٣ || ٧ ويُحسّن الذهب] «إذا جمع إلى الذهب، ازداد كلٌّ منها حسناً في عين من يُصره» أحجار^{١٣} ١٠٧ (≡ خواض^{١٤} ١٩٠٩ ≡ هاروتية^{١٥} ١٦٥-١٩٠) || ٨ ويُشبه التيل] «وما دام صحيحاً، فإنه يضرب إلى لون النيل» جواهر^{١٦} ١٩٥، «ومعرفة غشه بالزجاج المغربي والنيل الهندي والجير الرخاوي» حسبة^{١٧} ١٢٧-٣٠.

٢ الطوري] «للطوري» ب || ٣ وفيه] «وفما» ب || ٦ وتُصنع] «ويصنع» ب || ٦ طلاسِم] «طلاسِم» ب || ٨ والطورية] «وللطوره» ب.

٢ الشاذنة] «شاذنة / شاذنخ» > شاذنخ؛ «شاذنخ» حشائش / «شاذنة» مفردة^١ (≡ «αίματιτης») || ٥ اللازورد] > لاورد؛ «ارمينون: تأويله "الذي من أرمينية"، وهو اللازورد. كيانص: وهو لازورد نحاسي» تفسير^٢ ٣١٠٠-٤؛ ≡ «ἀρμενιакόν» / «Αρμενιός λίθος» / «κύανος».

القول على الدهنج

3.2a.16

الدَّهْنَج حَجْرٌ نحاسيٌّ كاللازورد.
ويتصرّف في الأكحال، وفي التلوّج، وفي الكيمياء.
ويصنع البيضاء.
وفيه أسرار.
ويُشبه الزنجار.
ويتلوّن مع تلوّن الجوّ.

القول على التوتيا

3.2a.17

التوتيا أربعة أصناف: هنديّ، وبحريّ، ومرازيّي، وأندلسيّ.
وفي التوتيا الهندية أسرار غامضة. تنصرّف في الأكحال؛ وتصنع البيضاء، وهي أبيض تُشبه قشور
البيض. وتُشبهها التوتيا البطرزنية (وهي الأندلسية) إذا صعدت ثلاث مرّات.
ونوع أخضر يُشبه الدهنج.

٢ حَجْرٌ نحاسيٌّ [«وكيس يُصاب هذا الحجر إلّا في معادن النحاس» أحجارت ١١٦، «من حجار النحاس» نخبة ٢٨٣
|| ٦ ويُشبه الزنجار] «هو شديد الخضرة، تلوح منه زنجارية» جواهر ب (→ جابر، كتاب النخب) || ٧ ويتلوّن... الجوّ
«وهو حجر يصفو مع صفاء الجوّ ويكدر مع كدره» أحجارت ١٠٤-١٠٩ || ٩ هنديّ [«ابن عمرا د جامع س IV ١٧١٧٠ ≡
اعتماد ١٧٦-١٨١، «توتيا أخضر هنديّ» دكان ل ١٤٦٣، ٩ وبحريّ] «يؤتى به من بحر الصين» ابن عمرا د جامع س IV
١٧٠-٢٠١ || ٩٠٢ «توتيا أخضر بحريّ» كتاش ك ١٠٢ | ٩١٤ | ١٠٣ | ١٠٤ | ٨١٠٤ || ٩ ومرازيّي] «والتوتيا
المخلوقة تؤخذ في معادن النحاس بقبرس [...] يقال لها "المرازيّيّة" (ولا أدري لم سميت بذلك)، وهي صالحة لعلاج العين»
ابن جلجل د جامع س IV ١٦٩-١٧٩؛ «التوتيا المرزبيّي» بقراطية (≡ «المرزبيّي» ١٩٧ | ٢٥١ | ١٩٧ | ٢ | الموازيي
٢٢٥ | ٢٤٣ | ٩ | ١٦ | «ومرازيي» ١٢٤ | ٢١ | ٢٢ | ٢٢٦ | ٢٢ | ١٢٨ | ١٢٨ | ١٥٠)، «توتيا بحريّ اخضر مرزبيي» كتاش ك ٨١٠٤،
«التوتيا المرزبيي» دكان ل ٥٩ | ١٨، «توتيا خضراء معدنية ومرزبيي (وهي الشحري، بلغة أهل الشرق)» مباح ١٤٤-١٧١
(+ «توتيا مرزبيي» ١٣٥ | ١٣٦ | ٢ | ١٣٧ | ٢٥ | ١٣٨ | ١٣٩ | ٢٢ | ١٤٠)، «توتيا مرزبيي» وساد ٣٦٢ || ١٠ في الأكحال
«وهو من الأكحال الجلييلة الطبقة» أحجارت ١٢٠-١٢٥؛ «كحل التوتيا» دكان ل ١٤٦٤-١٤١ || ١١ البطرزنية] «ومن التوتيا
ضربٌ يكون عندنا بقرية تُدعى بطرزة من عمل البيرة، وهي قطعٌ حجازية صلبة بزاقة بيض [...] وقد جربناها فحمدناه» ابن
جلجل د جامع س IV ١٦٩-٢٣، «والتوتيا هي حجارة تُخرج من معدن في ناحية البيرة بقرية تُسمى "بطرانة"» تصريف
II ٣٨٠-٢، «كحل التوتيا البطرزنية» وساد ١٧٠-٤ || ١٢ ونوع... الدهنج [«الدهنج» بالهندية «توتيا»، لأنهم زعموا أنّه
من أنواع التوتيا» جواهر ب ١٩٦.

٩ ومرازيّي] «مرزبيّي» ب || ١١ البطرزنية] «الطره» ب.

٢ الدهنج [«حصى أخضرٌ يُحكُّ منها الفُضوض» عين IV ١١٦؛ > «(σμα)»: ≡ «μολοχίτης» || ٩ التوتيا] >
«πομφόλυξ» ≡ «(→) (→)»

والتوتيا الأندلسية تصبغ البيضاء؛ وتصبغ النحاس بأن يُطرق النحاس صفائح، ثم تُحرق التوتيا كما يُحرق الحبر، ثم يُضاف إليها فحمٌ فيُسحقان. وتُجعل منها طاقة ومن النحاس || طاقة حتى يُمتلأ الفرن، ويُنفخ عليها حتى يجري النحاس وهو قد اصفر. وزاد فيه التُّث، وزاد في ثَمَنه ثلاثة أضعافه — وهو بابٌ كبير من أبواب الكيمياء.

وهذه التوتيا تُصير جميع الأجساد من الذهب والفضة وغيرها ثرابًا.

وتصرف في التلوخ والكيمياء.

3.2a.18

القول على الإثم

الإثم نوعان: أصبائي وأندلسي.

ويُستخرج من الإثم الرصاص.

ويتصرف في الأكحال.

وفيه صناعات وغرائب.

والأصبائي أرفع في الثمن.

وإذا ذُبر هذا الإثم في النار حتى يخرج رصاصه، لحق بالأصبائي في اللون والثمن.

١ وتصبغ [«وبالأندلس يُصبغ به النحاس الأحمر أصفر» ابن عمران د جامع ص IV ١٧٠، ٢١] «ومن التوتيا ضربٌ يكون عندنا بقرية تُدعى ببطلنة من عمل البيرة [...] يُصبغ النحاس بها أصفر» ابن جلجل د جامع ص IV ١٦٩-٢٢ || ٨ أصبائي [فردوس ٢١٧٥، ابن عمران د جامع ص II ١٨٥] ≡ اعتماد ١٧٧ ٢٠ || ٨ وأندلسي [«الكحل السلوذي» بقراتية ١٣٥ ط ١٣٧/١٣٩، ١٤٩/١٤٩ ط ٢٠٧؛ «شَلُوذ (يفتح أوله، وسكون ثانيه، وواو مفتوحة، وذال معجمة): بلدة بالأندلس يُنسب إليها الكحل السلوذي، يصنعه أهل هذه المدينة من الرصاص ويُحمل إلى سائر البلاد» بلدان III ٣٦٠-٢١ ٢٤ || ٩ ويُستخرج... الرصاص] «لأنه، إن أُحرق أكثر من هذا المقدار، صار في حدّ الرصاص [μολυβδοῦται] حشائش ١٢١ ٢١٠، «وهو حجرٌ ويُخالط جسمه الرصاص» أحجار ب ١١٩-١٥ || ١٠ في الأكحال] «ولذلك صار يُخلط في الشيفات [τὰ καλούμενα κολλύρια] وفي الأدوية الأخر اليابسة النافعة للعين (وهي البرودات) [τοῖς ξηροῖς] مفردة ١٥٥ ١٥٠-١٦ (XII Γ ٢٣٦-١٢)، «ويقع في كثيرٍ من الأكحال» اعتماد ١٧٨-٢١ || ١٢ والأصبائي... الثمن] «[أصفهان] وبها معادن الإثم الفائق الذي يُجلب إلى الآفاق» اعلاك ١٥٦ ٢٢ || ١٣ «وإذا... والثمن» [«والكحل المشبه بالأصفهاني» آثار ٣٣٨ ١١ (→ العذري): «[في طرطوشة] الكحل المشبه بالأصفهاني» فتح I ٤٣١-٩، «[في طرطوشة] معدن الكحل الشبيه بالأصفهاني» نخبة ٢٤٥-١٥.

٦ وتصرف [«ويصرف» ب.

٨ الإثم [«والإثم: حجرٌ الكحل» عين VIII ٢٠، «وهو الكحل الأسود» ابن عمران د جامع ص II ١٨٥] ≡ اعتماد ١٧٧ ٢١؛ ≡ «στίβι / στίμμι» (○ «أثم» DAA ٨٥ {PMD}.*).

القول على الأحجار المجوهرية المجامدة

3.2b

القول على الياقوت

3.2b.1

- ١١٠ الباقوت أربعة أصناف: أحمر، وأصفر، وأزرق، وأبيض — وأكثر تصرّف || هذا النوع: في الزينة والحلى. والأحمر أشرفهم وأثبتهم في النار. ومتى كانت فيه نكتة حمراء في حجر الياقوت ونُفخ عليها في النار، انبسطت تلك النكتة حتى تنسب الحجر بأسره، وارتفع ثمن الحجر — وبعض الناس عاش من هذا العمل، وهي صناعة شريفة. وجميع أصناف الياقوت تمنع من السُّموم والوباء والطاعون، ومن الفرع للصبيان. ويتصرّف في المعاجين المفترحة وفي الأكلال.
- ١٠ وأشدُّ الأشياء شبيهاً بالياقوت الأحمر: البلخش؛ وبعده البلور — وهذا البلور حجر يقبل اللون الأحمر والأصفر والأزرق والأخضر، وهي صناعة عجيبة.

٤ أربعة أصناف] البصريّ د جامع ص II ٥٣١٠، نخبه ٦١٥٦١؛ جواهر ٤٣٢، «حجر ينفصل إلى أربعة ألوان: إلى أبيض وأحمر وأصفر وشفوي» ثامنة ٢٢٢-٣، جواهر ٣٢٢-٢١، أزهار ٦٧-٦٨ ٨ || ٤ وأزرق] ≡ أحجار ٢١٠٥ («كحلي» أحجار ٣ ٧٩٩)، «أكل» أحجار ٥ ١١٤، «أسانجوني» جواهر ٤٣٢؛ «أكهب» جواهر ٣٢٢ | ١٥١؛ «شفوي» ثامنة ٢٢٢ || ٥ والأحمر... النار] «والأحمر أشرفها وأفسها» أحجار ٣ ٩٩، «وأفضله: الأحمر الذي كلف مستنه النار ازداد حسناً» هاروتية ١١٢٦٧ ٦-٧ ومتى... الحجر] «وإذا كانت فيه نكتة شديدة الحمرة ونُفخ عليه في النار، انبسطت النكتة في الحجر فسنته [«سنته» ت] من تلك الحمرة وحسنه» أحجار ٣ ٩٩-١٢ || أحجار ١٠٥-٦ || ٨ من السُّموم] «وينفع من السموم القتالة» خواص الأحجار ٤٥٤ || ٨ والوباء والطاعون] «ومن تقلد بحجر منها أو تخم به من أجناس البواقيت الثلاثة التي وصفنا، وكان في بلدة قد وقع بها الطاعون، منع منه أن يصيبه ما أصاب أهل تلك البلدة» أحجار ٣ ١٠٦-٤، «يمنع الطاعون عند فساد الهواء والوباء عمن تخم به» خواص الأحجار ٣ ٥٤ || ٩ في المعاجين المفترحة] ⑧ «معجون مفترح ياقوتي» منهاج ٦٩-٢٠ (→ الكندي) || ١٠ البلخش] «البلخش والبنفش والبيجاذي من أشباه الياقوت» كثر ٤٢ ظ ٦٥؛ ↓ القول على البلخش || ١٠ وبعده البلور] «حجر البلور] وإذا نصبغ، أشبه الياقوت لولا خفته» أحجار ٣ ١١٧-١١١ || ١٠ وهذا... اللون] «حجر البلور هذا حجر كالزجاج، [...] ويصبغ فيقبل الصبغ» أحجار ٣ ١١٧-١٠، «بلور] إنه يذوب كالزجاج، ويقبل الصبغ كقبوله الألوان» خواص ٨٠ ظ ٧٨-٨ (→ «ثاوفرستس في كتابه في الحجارة»).

٤-٥ الزينة والحلى] «في الزينة والحلى» پ || ٥ أشرفهم] «أشرفهم» پ || ٦ نكتة] «نكتة» پ || ٦ النكتة] «النكتة» پ || ٦ تنسب] «نسب» پ (?) || ٨ تمنع] «تمنع» پ || ٨ الفرع] «الفرع» پ.

٤ الياقوت] > كانه (نصه / نصه) ≡ «ὄρακτιθος».

3.2b.2

القول على الزمرد

الزُّمْرُدُ صنفان: معدنيّ وبحريّ — والبحريّ أشرفُهما. وهو حجرٌ شريفٌ ينفع من الصرع وأمّ الصبيان، ومن الوباء، ومن شرب السمّ القتال. ويتصرف في الزّينة.

وإذا وقعت عينُ الأفعى عليه، سالت عينها على المقام.

ومن الزمرد ما لم تستحکم الحضرة فيه، فينصرف إلى الصناعة ويُدبّر حتى يخضّر ويزيد في ثمنه — ^{١١} ^ط وهي صناعة عجيبة.

3.2b.3

القول على اللؤلؤ

اللؤلؤ صنفان: مدربيّ وروميّ — ولا خير في الروميّ. واللؤلؤ يتصرف في الزينة، وفي الأكحال، وفي معانات السموم، وفي المعاجين المفترحة. وقد يؤخذ صغار اللؤلؤ فيحلّ ويُعقد كبارًا، ويرتفع ثمنه. ويُشبهه اللؤلؤ غاية الشبه الصدف الذي يخرج من جوفه؛ والطلق أيضًا يُشبهه.

٢ معدنيّ] ^١ «مغربيّ» جواهر ب ١٦٣-٠٦-٢ || ٢ وبحريّ] ≡ جواهر ب ١٦٦-١٠-٦٣ || ٣ ينفع من الصرع] «ومن تقلد أو تختم (به)، ذهب عنه الصرع» أحجار ١٠٤ || ٣ وأمّ الصبيان] «وينفع من أمّ الصبيان إذا غلق عليهم قبل حدوث الصرع» خواصّ الأحجار ١٥٤، «ومن خصائص الزمرد: دفع العين والتوابع والفرع وعين أمّ الصبيان عن الصبيان» نخبة ٦٦٨ || ٣ ومن... القتال] «وخاصية الزمرد: النفع من جميع أنواع السموم القاتلة المشروبة» أحجار ١٠٢-٩-٨ || ٤ في الزّينة] «وفي الحديث: وعليه تقارن الرّزّجِدِ وَالْحَلِيّ. قال: والتقارن من زينة النساء» لسان VI ٢٤١-١٨-٢٠ (→ ابن الأثير → أبو موسى) || ٥ وإذا... المقام] «وذكر جميع من ألف كتابًا في الخواصّ أن الأفاعي، إذا نظرت إلى الزمرد، سالت أعينها» أحجار ١٠٣-٥-٥، ≡ خواصّ ١٤٨١^ط || ٦ ومن... ثمنه] «وبعضه فيه كدارة، وهو القليل الحضرة الكثير الماء، [...]». ويُعالج أولًا بالسنباذج على الأسرب، ثم يُجلى على خشب العشر بالجلي العقيقيّ والملاس» جواهر ٥٥٢-٦-١٠ || وفي الأكحال] «ويخلطونه في أكحالهم» أحجار ٦٩٨ || ١٠ وفي... السموم] «وإذا سُحق وشرب بسمن بقريّ، نفع من السموم» أحجار ٣٤٦-٥-٦ || ١٠ وفي... المفترحة] «وخاصيته: النفع من خفقان القلب، ومن الفرع والخوف الذي يكون من المزة السوداء» أحجار ٢٩٨-٤-١١ || ١١ وقد... ثمنه] «لأنّ صغار اللآلي، إذا خلّلت بالماء الحادّ الذي هو خلّ الحكاء، ثم أسقيت من الماء الإلهيّ وعقدت كبارًا — فإنها تصير الجواهر الثمينة التي لا قيمة لها» نهاية ١٤٤-٩-١٢ || ١٢ الصّدف... جوفه] «أسطورس [δστρον > σσφεισ]، وهو الصدف الذي يتكوّن فيه الدرّ» أحجار ١٨٩٦ || ١٢ والطلق أيضًا يُشبهه] «من اللآلي ما يُصنع من الطلق المتبهيّ بتكرير الحلب» جواهر ١٢٦-١١-١٢.

٦ تستحکم] «يستحکم» ب || ٩ مدربيّ] «مداريّ» ب || ١١ يؤخذ] «بوخذ» ب.

٢ الزُّمْرُدُ] > uzumburd (وحي حبر / وحي حبر | «σμάραγδος / ζμάραγδος»).

القول على البلخش

3.2b.4

البلخش هذا حجرٌ يُشبهه الياقوت الأحمر في اللون والزرانة أفتح حمرةً وأجمل. وهذا الحجر و«حجر الأدرك» وكذا كذا، حجارةٌ مصنوعة من صناعة الحكماء. مثل «السليمني الأزرق» الذي لا فرق بينه وبين الياقوت في اللون، وهو مصنوع من الزجاج. وكذلك «الميناء الأخضر» الذي يُشبهه الزمرد غاية الشبه، وهو أيضًا مصنوع من الزجاج.

١٢٠٠ وجميع أصناف الأحجار قد حُكمت بالصناعة والتدبير، غير أنّ الشبيه بالشيء لا يقي قوة الشيء. والأصل في ذلك أنّ كلّ ما تدبره الطبيعة، لا يقدر على مثله الصُّنَّاع إلا بالزيادة في الشيء والتقصان منه. وصنّف من الأحجار يُقال له «الحكمان»، وهو حجر مصنوع. و«حجر الجاموص» مثل ذلك.

القول على العقيق

3.2b.5

١٠ العقيق ثلثة أصناف: أحمر مشعّ اللون بالحمرة، وأصفر، وثالث لونه كغسالة اللحم. والأحمر يدفع عن لابس الرُءاف؛ والذي على لون غسالة اللحم يغلب الطالب على المطلوب في الخصومة — هذه خواصّ فيه.

ويتصرف العقيق في السُّنُونات والزينة.

وقد يُحْمَى الحديد ويكتب به على العقيق، فيكون الكتاب أبيض كالثلج، ويتصرف في الزينة.

٢ يُشبهه [...] «يضاهي فائق الياقوت في اللون والرونق، ويتخلف عنه في الصلابة» نخب ١٥-١٤٧٥٥ (≈ جواهر ١٢٨١-١٣٠١)، «البلخش والبنفش والبيجاذي من أشباه الياقوت» كز ٤٢ ط ٦-٥ || ٤-٥ الميناء... الزجاج] «وقد شاهدت من هذه الألوان شيئًا لم يشع خضرة أخضره شبع المينا الأخضر، بل كان بالزجاج أكثر شبعًا» جواهر ٦-٤٨٦-١٠ لونه... اللحم] «لونه كلون ماء اللحم» أحجار ٣١٠٣ (≈ «لونه لون الماء الذي ينحلّ من اللحم إذا أُلقي عليه الملح» أحجار ١٣١٤) || ١١ يدفع... الرُءاف] «ومن لبس حجرًا، قطع عنه نزع الدم» أحجار ٢-١١٥ || ١١ والذي... الخصومة] «فمن لبس من أشرفها حجرًا أو تقلد به أو تحمّم به، سكنت حدته عن الخصاص» أحجار ١٤-١٣١٤ || ١٤ وقد... كالثلج] «وإذا أعيد إلى النار، فسد وشابه العظم المحرق؛ ولهذا يكتب على فصوصه ما يُراد بماء القلي والنوشادر، ويُقرب من النار فيبيض المكتوب» جواهر ١٧٣-٥٧٥؛ ® «صفة الكتابة على القيق الأحمر يعود أبيض» أسرار ١٣-٩١٧، «صفة الكتابة بالأبيض على خواتم العقيق» صنائع ١٢٣١-٢٣٢.

٢ الأحمر... والزرانة] ٧ كلّ ما [«كلما» ١١ يدفع] «يرفع» ٦٠٠٠.

٢ البلخش [(ل) برش؛ «بَدْحُشَان: [...] والعامّة يُسمونها بَلْحُشَان (باللام)، وهو الموضع الذي فيه معدن البلخش المقاوم للياقوت» بلانان I ٣٢٠-٣١ || ٣ السليمني] «فاستنبطوه بالحفر ونُسبت المعادن وما أُخرج من كلّ وهض منها نُسب إليه: كالبعباسي والسلياني والرحاني» جواهر ١٠-٩٨٣ || ١٠ العقيق] «والعقيق: حَرَزٌ أَحْمَرٌ يُنْظَمُ وَيَتَّخَذُ مِنْهُ الْفُصُوصُ» عين I ٦٤٠٥.

وزعم **أرسطاطاليس** أنه من لبس منها حجراً فائقاً، تيسرت حوائجها. ويُشبه الزجاج المصنوع في الشُّبَات في لونه.»

3.2b.6

القول على المرجان

المَرْجَان (وهو «البُسْد»)، والقول فيه أنه حجّر ينبت في البحر كما ينبت الخيزران، | ويخرج في الشُّبَاك.

ويصنع منه خَزْراً للحلي والزينة.

وينفع المعدة الفاسدة، إذا عُلق عليها، بخاصة فيه عجيبة.

ويتصرف في الأكل والسِّنونات.

ويُصنع منه طواع.»

3.2b.7

القول على حجر البجادي

حجر البجادي حجّر يُختم به، وليس فيه كبير فائدة.»

١ وزعم [> «إذا نقشت على فض عقيقٍ أحمر رومي أسد فوقه رجل وتحت رجل الأسد ط ١١٩٧، ويكون ذلك والشمس في الحمل يوم جمعة، قضيت حوائجها»] أبواب نافعة د أحجار ب ٣٥ ط ١٢-٩ ≈ حقائق ١٣٣ ط ١١-٩.

٤ وهو «البُسْد» والمرجان والبسْد حجّر واحد، غير أنّ المرجان أصل، والبسْد فرع» أحجار ٢١٥٣-٣، «المرجان (وهو البُسْد)» جواهر ٧٥٧؛ «قوراليون: وهو القرال، وهو البسْد، وهو المرجان» تفسير ١٠٣-٢ ≈ «(» $\kappa\omicron\rho\rho\acute{\alpha}\lambda\lambda\iota\omicron\nu$)» Δ؛ «المرجان (وهو حجر البُسْد)» هارونيتة ٢٧٣؛ «٤ ينبت... الخيزران» [ينبت كما ينبت الأغصان ويفرع شاخات وعصوفاً» أحجار ب ٧١٢٠، «ينبت كالشجر» مسالك ٦٥١ || ٧ وينفع... عجيبة» [إذا عُلق المرجان، نفع من وجع المعدة» هارونيتة ٢٧٣؛ ≈ أزهار ١٨٤-٢؛ † «بسْد» > «يشب» ٨ في الأكل» [تدخلان في الحال» أحجار ١٥٣ || ٨ والسِّنونات] «فإذا سُحقا واستيك بهما، قلعا الحفر من الأسنان وقويا اللثة» أحجار ١٥٣ ه || ٩ ويُصنع منه طواع [≈ «ومن الناس من يتخذ منه فصوص خواتم...» أزهار ١٨٢-٩ || ١١ يُختم به [«من تختم بوزن عشرين شعيرة منه، لم ير في منامه أحلام السوء» أحجار ب ١٦١٠٢-١٧، «يتختم به الشيعة بفارس» جواهر ب ٦٨٩-٨ (→ الكرمانتي).

٢ المصنوع [«المصنوع» ب || ٢ الشُّبَات [«الشيات» ب. ١١ البجادي [«البجادي» ب.

٢ الشُّبَات [«وشبهُ الكَار: إشتغالها» لسان I ٤٨١-١٢. ٤ البُسْد [> بد؛ ≈ « $\kappa\omicron\rho\rho\acute{\alpha}\lambda\lambda\iota\omicron\nu$ » || ١١ البجادي] ≈ «بجادي» أحجار ب ١٠٢، جواهر ٦٣٢، تبصر ٥١٥؛ «ببجادي» جواهر ب ٥٢؛ «ببجاذق» عجائب ١١٥؛ «وبها معادن البجادي العتيق، وهو جنس من الفصوص تسميه العامة البزادي» عقد VII ٢٨١-٧؛ © «بجادي / ببجادي» DAA ٣٧ {BJD/Đ}؛ > يير.»

القول على حجر الزهريّ

3.2b.8

حجر الزهريّ هو حجرٌ يُقال له «الصافي» من البجادي، وهو أشرفٌ منه وأجمل. ويُشبهه غاية الشبه الزجاج المحمريّ الطيب المحكم، والزرنِيخ الأحمر المذاب.

القول على حجر السبأذج

3.2b.9

حجر السُّبأذج لا يوجد فيه حجرٌ من درهين، ولا تُفسده النار. ويجذب إلى نفسه الهباء.

القول على حجر الأَبسط

3.2b.10

حجر الأَبسط حجرٌ مصنوعٌ يترن به النصارى وينقشون فيه صورًا كثيرةً.

القول على حجر الجَزَع

3.2b.11

حجر الجَزَع هو حجرٌ صُلْب غاية الصلابة. إذا عُلق على الصبيان، أو رثمهم أمّ الصبيان، والفزع، والصرع، وأسأل لعبيهم. وأكثُر ما تستعمله الروم، || وكانت ملوك الهند لا تُعلّقها على بنينا حَدَرًا عليهم من الصرع. ١٣ د

٦ ويجذب... الهباء] ⊕ → «[البجادي] وإذا مُسح بشعر الرأس أو اللحية، ثم وُضع على الأرض، التقط من الأرض الهباء الذي يكون على وجهها مثل عيدان التبن وما أشبه ذلك» أحجار ١١٤-٦٧ + «وإذا أدني من عود التبن وورق القصب وهباء الأرض، لقطهم من الأرض — وهو حجر البجادي» أحجار ١٠٩-١٠ || ١٠ صُلْب غاية الصلابة] «وهو حجر ليس في الحجارة أصلب منه» أحجار ١١٦-٣ || ١١ وأسأل لعبيهم] «ومن عُلق حجرًا منه على طفل، سال لعابه» أحجار ١٠٣ ||

٦ الهباء] + «ونقشون فيه صور كثيرة» پ || ٨ الأَبسط] «الأبسط» پ || ٨ صُورًا] «صور» پ || ١١ والفزع] «الفزع» پ.

٥ السُّبأذج] > سَبَاه / سَبَاهه || ٨ الأَبسط] ≙ «alabaster/«ἀλάβαστρος»

3.2b.12

القول على حجر السبج

حجر السَّبِج حَجْرٌ أَسْوَدٌ حَلَكُوكٌ يُقَوِّي البصرَ الضعيفَ، إذا أَدْمَنَ النظرَ إليه، بِمُحْصِيَّتِهِ. وفيه الشيفاء الذي يُقَطَّرُ في العين فيُنْتَفَعُ به نَفْعًا بَيِّنًا.

3.2b.13

القول على حجر المغنيطس

حجر المغنيطس فيه قُوَّةٌ وروحانية يجذب بها الحديد إذا سُحِقَ وسُقِيَ. وإذا أُحْرِقَ هذا الحجر كما أُحْرِقَ الجير وأُلْقِيَ عليه الماء، خرج منه نَارٌ أُحْرِقَ ما حوَالَيْهِ. تُسْتَخْرَجُ (منه) صُورَةٌ يُلْقَى عليها الماء، فتتعدَّدُ وتُسْتَعْمَلُ. وهذا الحجر، إن مسَّته النار، بطل عمله. وإذا أُلْقِيَ في ماء الثوم، زالت عنه خاصَّته؛ وإذا أُلْقِيَ في دم تيس، رجعت إليه. ويتصرَّفُه المُشْعَوِّذُونَ في التخيُّلِ على الناس وحَدِّعَهُمْ. ويُخْرَجُ | بُرَادَةُ الحديد من جميع برادة الذهب والفضة والنحاس وغيرها من الأجساد.

ب ١٣ ط

٢ يُقَوِّي... بِمُحْصِيَّتِهِ] «ويُحَدِّدُ البصرَ الضعيفَ إذا نُظِرَ فيه» أحجار ب ١٥١٠٧-١٦، «إذا أَدْمَنَ النظرَ إليه، أَحَدَ البصر» عجائب ١٤-١٣٢٢٨ || ٥ فيه... الحديد] «روحانية حجر المغنيطس التي تجذب الحديد بقوتها ونفاذها، وهي محتجبة في المغنيطس» الماء الورقي ١٠٣-٢٠١ || ٥ إذا... وسُقِيَ] «وإن سُقِيَ الإنسان برادة حديد أو جُرِحَ بحديد مسموم، وسُقِيَ هذا الحجر وسُقِيَ منه، ينفعه» أحجار ب ١٠٩-٢، «لمن ابتلع إبرة: يُسْقَى نصف درهم برادة حجر المغنيطس» وساد ١٣٩-٤ || ٦ وإذا... حوَالَيْهِ] «فإذا صُبِرَ هذا الحجر [...] وكُلِّسَ [...]، ثم رُسِّسَ عليه الماء من زرافة فيزيد، تخرج نار ملتهبة تطلع نحو عشرة أذرع لا تمر بشيء إلا أحرقت» أحجار ب ١٠٨-٩١٦ || ٨-٩ وإذا... إليه] «وإذا أُنْفَعَ هذا الحجر في ماء الثوم والبصل، بطل عمله» أحجار ب ١٠٨-١٦، «وإن أراد مُرِيدٌ أن يردَّه إلى قُوَّتِهِ وحَدِّتِهِ، فليبتعه في دم تيس طري أَيْامًا، يُجَدِّدُ له كلَّ يوم دَمًا طريًّا، فإتَه يعود إلى حالته وإلى ما كان عليه من قُوَّةِ الجذب» أحجار ب ١٢٧-٦ || ١١ ويُخْرَجُ] ≡ «مغنيطس الذهب» / «مغنيطس الفضة» / «مغنيطس الصفر والمِس» أحجار ب ١٠٩-٤١١٠-٥.

٢ حجر] «حرا» ب || ٥ المغنيطس] «المغنيطس» ب || ٦ ناز] «نارا» ب || ٧ تُسْتَخْرَجُ] «القول على حجر الماس حمر الماس ستخرج» ب، «أظنه تتمة القول في حجر المغنيطس» ب || ٨ مسَّته] «مسه» ب || ١٠ ويتصرَّفه] «بضره» ب.

٢ السَّبِج] «وَالسَّبِجُ: حَرَزٌ أَسْوَدٌ — دَخِيلٌ مُعَرَّبٌ، وَأَضْلُهُ "سَبَه" لسان II ٣٢٩٤-٤؛ > ث ب || ٢ أسود حَلَكُوكٌ] «وَأَسْوَدٌ حَالِكٌ وَخَائِكٌ وَمُحَلَّوْلٌ وَحَلَكُوكٌ بِمَعْنَى [...] وَالْحَلَكُوكُ (بِالتَّحْرِيكِ): الشَّدِيدُ السَّوَادُ» لسان X ١٥-٩١٣؛ ≡ «وهو أسود شديد السواد» أحجار ب ١٠٧، «وهو حجر أسود حالك صقيل» جواهر ب ١٢١٩٩ || ٥ المغنيطس] «المغنيطس / المغنيطس» > «μαγνήτης λίθος» (مغنيطس).

3.2c

القول على الشُّبوب والأملاح

3.2c.1

القول على الزجاج

الزجاج ثمانية أصناف: الخَلْقَطَار، والسُّورِي، والشَّجِيرَة، والقَلْقَطَار، والقَلْقَدِيس، وزجاج الأَسَاكِفَة، والقَلْقَنْت، والنَّسَب اليَمَانِي (هو الزجاج الأبيض، وشبب التآليه^٥) — وهذه الأصناف يستحيل بعضها إلى بعض بالصناعة.

فالزجاج الأخضر يُشَبَّب الذهب ويُسَوِّد المداد؛ والزجاج الأبيض (الذي هو الزجاج اليَمَانِي) يُشَبَّب الفِضَّة والثياب.

وهذه الأصناف كُلُّها تنفع من القروح الحبيثة، لا ستيًا من الأكلة في الفم، واللثة المتآكلة. وأكثر تصرُّف الزجاج: عند الصاغ(ة)، وفي دُور ضَرْب الذهب والفضة، وعند أهل الكيمياء والتلويح، وفي المداد.

٤ والسُّورِي [سوري/صوري] («سورين» أحجار ١٥٠. ٩١١)؛ «σῶρι» ٤ والشَّجِيرَة [وزجاج الحبر الذي يُسَمَّى «شجيرة»] قانون I ٣٠٤؛ «αδερπε» ٤ والقَلْقَطَار [«χαλκίτις» ٤ والقَلْقَدِيس [أحجار ١٥٠ ٤ وزجاج الأَسَاكِفَة [بالزجاج الذي تستعمله الأَسَاكِفَة مركبة ١٦٩ ٨ («η τῆ μελανθηρία, ἢ οἱ σκυτεῖς χρῶνται» XII Γ ٩٨٤)؛ «ماليطيريا باليونانية هو الزجاج الترابي [...]، وهو المسقى "زجاج الأَسَاكِفَة" ابن جلجل د جامع I ١٦٠-١٧٠، «الزجاج الأصفر هو زجاج الأَسَاكِفَة» تلخيص [٣١٤] (→ ابن إسحق)؛ «وشبب الأَسَاكِفَة [...] وهو قَلْقَدِيس» تياذوق د اعتماد ١٧٤-٩ ٥ والقَلْقَنْت [«فلقند» أسرار ٦١ ٢٤، قانون I ٣٠٣، جواهر ١٦٩-١٣ «χαλκωνθές» ٧ فالزجاج الأخضر [«والفلقند (وهو زجاج أخضر)» أسرار ١٥ ٨ والثياب [«وهو يُدخله الصباغون في أكثر صنعهم للثياب» أحجار ١٥١-٦ ١٠ عند الصاغ(ة) [«والصباغون يستعينون به على صبغ الأحمر والأخضر وغير ذلك» أحجار ١١٩-٦.

٥ التآليه [«للمالية» پ ١٠ الصاغ(ة)] «الساغ».

٤ الزجاج [> زك (١ / ١٤١)] «ميسو».

القول على حجر القلي

3.2c.2

حجر القلي حجرٌ مصنوع من الأسنان، ويُقال له) «الغاسول».
 وهو ملحٌ يُسبك به الزجاج؛ ويُستخرج منه بلورٌ يُصنع منه التنكار بأن يُجلى في الماء، ويُروَّق برواقٍ
 من لبِّد، ويُترك الماء حتى ينعقد بلورًا. وهذا ملحٌ يُذيب الأحجار والأجساد، ويحلُّ أكثر الأشياء.
 ويُشبهه العصفور.

وهو عجيبٌ في أفعاله. فيصْرَف في صناعة الكيمياء. ويُصنع منه صابونٌ — ولذلك سُمِّي «الغاسول».

القول على ملح البورق

3.2c.3

ملح البورق ملحٌ يُجمع على الرحا(—) القرن، وهو قد(—) يُشبه الماء. فإذا خرج إلى الهواء، انعقد
 حجرًا.

- وهو يُعين على سَبِك الفضة. ويُصنع منه تنكار كما يُصنع من ملح القلي، والصناعة واحدة.
 ويتصْرَف في السنونات. وإن عدم الملح، استعمل عوضًا منه.
 ويُبيّض النحاس، ويغسل الفضة، ويُذيب الحديد.

٢ مصنوع من الأسنان] «حجرٌ يُتخذ من الأسنان بأن يُحرق حتى يصير رمادًا» عجائب ١٦٢٣٣-١٧؛ «القلي الأسنان»
 بقراطية ٢٥٣ ٢ || ٢ «الغاسول» «الغاسول هو القلي، وهو شت العصفور. قال المؤلف: إنه يجب أن يكون الغاسول النبات
 الذي يُتخذ منه القلي الذي يُغسل به الرؤوس والشياب، وذلك النبات هو الأسنان» تلخيص [١٠٨٤] (→ ابن إسحق)،
 «الأسنان العصافيري (وهو الغاسول)» نجوم ١١٢، «قلي (وهو شت الغاسول)» تحف ١١٤٢ || ٣ يُسبك به الزجاج
 «ويُسمى «ملح الزجاجين» و «ملح الصباغين» [...] وبه يُسئل الحجر فيصير زجاجًا» مفيد [١٠٣٤] || ٥ ويُشبهه العصفور
 «القلي هو شت العصفور» تلخيص [٨٢٩]، «شت الأساكفة، وهو شت العصفور، وهو القلي» تلخيص [٩٧٩]، «أسنان
 القصارين هو شت العصفور» تلخيص [٧] (→ ابن إسحق)، «حَبُّ يُشَبَّبُ به العَصْفُرُ» لسان XV ١٩٩ ٧ || ٦ ويُصنع
 منه صابونٌ [بماء الصابون (أعني الماء الحاذ المعمول من القلي والنورة)» تقريب ٥٧٦-٧؛ (R) تلخيص [٨٠٣] (→ أبو
 الفتوح) || ٨-٩ فإذا... حجرًا] «ومنه ما يكون ماءً جاريًا يتحجر» أحجار ١١٨ ١١٢-١١٣ || «[ملح] ومنه ما يكون في فران
 نطف، يخرج من عيون في بطون الأرض؛ فإذا خرج الماء وانلفظ، خلص النفط منه وبقي الماء. فإذا أصابه الهواء، تحجر
 وصار ملحًا» أحجار ١٤٨ ١١١-١١٣ || ١٠ وهو... الفضة] «وخاصيته: يُذيب الأجسام جميعها ويُسرّع انحلالها ويُعين على
 سبكها» أحجار ١١٨ ١١٢-١١٣ || ١١ وإن... منه] «بدل البورق، إذا عدم، وزنه ونصف من الملح» بديغورس ١٧٣ ٥-٦.

١ القلي] «القلي» پ || ٣ يُسبك به] «به | يسبك به» پ || ٣ بلور] «بلور» پ || ٨ يُجمع... قد(—) پ || ٥ پ || ٨
 الهواء] «الهوي» پ || ١١ عوضًا پ.

٢ القلي] «قلي/ قلى»: «يقال لهذا الذي يُغسل به الثياب قلي»، وهو رماد الغضى والزَمْث يُحْرَق زَطْبًا وَيُرْشُ بالماء فينعقد
 قَلِيًا» لسان XV ١٩٩ ٧-١٣ (→ الليث): «ملح» پ || ٣ بلور] «بلور» ≡ ἰσῆς ≡ βηρύλλος «(→ वैद्य)» پ || ٦ صابون] ≡
 «sapo»/«σάπων».

3.2c.4

القول على النطرون

النَطْرُونُ فعلُهُ وفعل البورق سواء، غير أنّ النطرون معدنيّ (ومعدنه أرمينية) وهو أحمر اللون.

3.2c.5

القول على ملح الطعام

ملح الطعام يُبيض النحاس، ويحترق الفضة، ويُسبب الكف كما يفعل النشادر. ويصلب الجلود.

ويمنع الأسنان من التغيير والفساد.

ب ١٥

ويطيب المأكول. ويسهل الأخطا الغليظة — وكذلك يفعل الملح الهندي والدراتي.

3.2c.6

القول على ملح البامرد

ملح البازود هو ملح يُجمع على الصُخور والخشبة التي تقارب المياه.

يتصرف في الأكحال، ويشتعل في النار، ويسود اللسان.

وأكثر تصرفه: عند المشعوذين.

و«ملح الشجر» و«ملح البول» ليس فيه للطب منفعة، وإنما ينتفع به أهل الكيمياء — وكذلك «ملح الأزودة».

٢ فعله... سواء] «والنطرون فعلٌ مثل فعل البورق» اعتماد ١٧٣٣-٤ || ٧ ويطيب المأكول] «وبه تصلح الأجسام وأطعمة الناس» أجمارت ١٤١٤٧ || ١٢ ملح الشجر] «ملح شعر» لآي ٣٠٣ || ١٠ ملح البول] «كالملاح المستخرج من البول (وهو الذي يُسمى "نشادر الصناعة")» ثمة ١٢٠٣-١١٧.

٢ أرمينية] «ارمينيه» ب ٢ اللون] ب* ٧ والدراتي] «وا | لداراتي» ب ٨ البامرد] «النارود» ب ٩ البازود] «النارود» ب.

٢ النَطْرُونُ] «والنطرون هو البورق المصري» فلاحه ١٩٦٩، «بورق الخبز هو النطرون» تلخيص [١٢٧] (→ ابن جلجل): > «νίτρον» (مبلة هـ): «نطرون إفريقي» ≡ «ἀφρόνιτρον» || ٢ النطرون... اللون] ≡ «بورق أرمني» || ٧ والدراتي] ≡ فردوس ٢٤٨٧، اعتماد ١٦٦٩، «الملح الفارسي يدخل مدخل الدراتي» تلخيص [٥٦٨] / «وزعم بعض الناس أنّ المعدني هو الأندراتي» حشائش ١٢٥١٣ ≡ «τὸ ὀρυκτόν» III Δ (١٤٧٩): «من الملح الأندراتي» حشائش ١٢١٣١١ ≡ «ἀλὼν ὀρυκτῶν» (٧١٣٥٩): «من الملح الأندراتي الصافي» حشائش ١١٩٣-١٤ ≡ «καὶ ἀλὸς διαφανοῦς» (٢٥١): «ومنه الملح الأندراتي نُسب إلى قرية بالشام يُقال لها أندرا، ولونه أبيض شديد البياض، وله بريق [...] والملح الذي يُخرج من المعادن هو الأندراتي» ابن عمران د جامع ٣٢٤ II ١٥-١٢: «ملحه» ١٢٣٤: «أندرين: [...] اسم قرية في جنوبي حلب» بلان I ٢٦٠-٢٢٦١-١١ || ٩ ملح البازود] «بارود» بقراطية ٢٦٢، هاروتية ١١٢٥٩، «ليثو اسبيوس: هو حجر الابرده» تفسير ١٠٣٥-٦، «بارود: وهو حجر أسبيوس، ويُسميه أهل مصر ثلج الصين» + «حجر الابرده: هو البارود. حجر أسبيوس: هو البارود أيضًا» مفردة ٩٦٩٦ + ٢١١٣-٨: «Asstios λίθος» ≡

القول على الأحجار المتكوّنة من الأجساد بالصناعة

3.2.d

الإقليميا

3.2.d.1

الإقليميا نوعان: إقليميا الذهب وإقليميا الفضة.
 وإقليميا الذهب هو خبث الذهب عن تصفيته، ويتصرّف في الأكحال.
 وإقليميا الفضة هو خبثها عند التصفية، ويتصرّف أيضًا في الأكحال.

القول على الزنجار

3.2.d.2

الزنجار يُصنع من النحاس والخلّ.
 ويتصرّف في المراهم.
 ويصبغ الفضة صفراء، ويصبغ الزئبدّي أخضر.
 وفيه أسرار عجيبة قد ذكّرت بعضها.
 ويصلح في الأكحال الحادة.

٥ وإقليميا الذهب... تصفيته] «إقليميا الذهب: إذا خلط بغيره من الأحجار ثم أدخل إلى الخلاص، خلص جسمه، ثم علاه حجر مشرب بسواد وبعضه على لون الزجاج» أحجار ١٦٣-٧-٨، «وزعم غيره أنّ إقليميا الذهب هو خبث الذهب إذا شبك في أول ما يُعمل إذا أخرج من المعدن» اعتماد ١٥-٦-١٠ || ٦ وإقليميا الفضة... التصفية] «إنّ الفضة، إذا دخلت أيضًا إلى الخلاص لتخلص من الأجساد التي قد خالطها، لمس عليها قبص من فوفه، وهو حجر متحجر» أحجار ١٦٣-١٦٤-١٦٤، «إذا خلصت الفضة، تولد منه خبث يُسمى "إقليميا الفضة"» هاروتية ٢٥٧-٧، «إقليميا الفضة هو حجر، وهو خبثها أول ما يُعمل إذا أخرجت من المعدن» ابن عمران ٣ جامع ١٤ IV ٢١٤-١٣-١٤؛ «وقد يتكون أيضًا من الفضة [ἐκ τῶν ἀργυρείων] إقليميا» حشائش ١١٧-١٩ (III Δ ٢٣٩-١٤٠) || ٦ في الأكحال] «فإنها يصلحان لأن يُستعملتا في أدوية العين» حشائش ١١٧-٢-١١٧ (III Δ ٣٨-٨) || ٨ يُصنع... والخلّ] ↑ القول على النحاس؛ «ومن الزنجار الذي يُعمل برش الخلّ على النحاس» بقراطية ١٤٥-١٥-٩ || ٩ في المراهم] «وهو كثير التصرف في العلل والمراهم» تصريف II ٣٥٠-١٨؛ ① «مرهم الزنجار» دكان ل ٦٥-٨-١٠، هاروتية ٣١٧-١٦-١٩.

٤ الإقليميا] ≡ ملصحه / مدحه > «xαδμεία»؛ «يقال إنّ إقليميا هو خبث كلّ جسد ذائب» تلخيص [٣٠] (> ابن جلجل → أرسطاطاليس) || ٨ الزنجار] > زجر (١٦٤١)؛ «tós».

3.2d.3

القول على الروسختنج

ب ١٥ ط

الرُّوسَخْتَنج وهو «الحرقوص»، وهذا الحجر هو النحاس المحرق في أفران الزجاجين. يُسَوِّد الشعر. وإذا دُبِّر، صبغ الفضة؛ ويصبغ الزجاج الرُّبديّ. ويُسهل الماء الأصفر. ٥

3.2d.4

القول على توبال النحاس

توبال النحاس هو الذي في الماء إذا طُنِيَ فيه النحاس المحتق. يتصرف في التلوخ، وفي صباغ الشعر، وفي الشيف. و«برادة النحاس» تتصرف عند أهل الكيمياء. ٥

3.2d.5

القول على زعفران الحديد

زعفران الحديد هو أن تأخذ البرادة وتُجعل في مغرفة حديدٍ وتُحمى وتترك، وهي محمية، في محراس حديد، وتُسحق وتعاد إلى النار حتى تخرج لون الزعفران. يُلصق به الشعر. وفيه شيءٌ عجيب. ١٠

٣ يُسَوِّد الشعر [«صبغ الشعر» تصريف II ٢٥٣٤٨ || ٥ ويُسهل الماء الأصفر] ≡ تصريف II ٢٦-٢٥٣٤٨ || ٧ توبال... المحتق [«توبال النحاس (وهو الورق الذي يسقط منه إذا ضرب بالمطرقة وهو يحيى» مكنون ١٢ ط ١١-١٢، «لايس: وهو توبال النحاس» تفسير ٩٩ هـ (≡ «λεπίς» Δ) || ١١-١٢ هو... الزعفران] ≡ «صفة عمل زعفران الحديد» تصريف II ٢١-١٨٤٠٦ || ١٣ يُلصق به الشعر [«إذا تنف الشعر الزائد في شُعر العين، ثم لصق عليه من هذا الحديد المدبّر مرات، منع الشعر أن ينبت فيه» تصريف I ٢٢-٢٣٤٠٦.

١ الروسختنج [«الروسختنج» ب || ٧ طُنِيَ [«طفي» ب || ٧ المحتق] «الحمي» ب || ٩ تتصرف [«ينصرف» ب.

٢ الرُّوسَخْتَنج [«روسختنج» > روى تحت || ١١ زعفران الحديد] «زنجار الحديد هو زعفران الحديد» الرازي (كتاب علل المعادن) جامع ب II ١٣-١٤١٥، «ايوس سيديروا: وهو زعفران الحديد» تفسير ٩٩ هـ (≡ «زنجار الحديد» حشائش ١٢٠ ٨ ≡ «δὸς σιδήρου» III Δ ١٧٥٢)، «زعفران الحديد (وهو صدأه)» جواهر ب ٢٢٥-٩-١٠.

القول على خبث الحديد

3.2d.6

خبث الحديد هو «الأشكورية».
ينفع من ضعف الكبد، ومن البواسير في المعدة.
وفيه لأهل الكيمياء منفعة.

القول على صدأ الحديد

3.2d.7

صدأ الحديد هو أن تأخذ البرادة فتبل بالخلّ، وتصرّ في صرة كتان، وتترك في مكان نديّ حتى تحمرّ.
ففيها منافع لأهل الكيمياء والأطباء.

القول على توبال الحديد

3.2d.8

توبال الحديد هو القشور التي تطير عن الضرب والتطريق (وهو التوبال).
يُصنع منه زنجار ولازورد.
وفيه آيات معجزات.

القول على المرتك

3.2d.9

المرتك صنفان: ذهبيّ (وهي الكومة التي تبقى من تصفية الذهب ومن تصفية الفضة)، ومن المرتك
صنّف معدنيّ يقال له «المسارب» تُسود به الأظفار.
وللمرتك خواصّ عجيبة: إنه، إذا أُلقي في الحلّ، صير الحلّ حلواً؛ وإن سُحق مع الزجاج وسُبك، خرج
الزجاج أصفر لون الياقوت الأصفر.

١١ آيات معجزات [≡ ﴿ءاثوني زير الحديد حتى إذا ساوى بين الصدفين قال انخروا حتى إذا جعله نارا قال ءاثوني أفرغ عليه قطرا﴾ القرآن ١٨ : ٩٦] ≡ «תודבל קין» تكوين ٤ : ٢٢.

٢ خبث الحديد [«وأن الحديد، إذا أدخل النار، خرج منه حجر فرديون [«بردسون» پ]، وهو خبث الحديد» أحجار
١٠٨ ≡ أحجار ٣ ≡ ١٢-١١ ١٠٠ : «σχωρία του σιδήρου» ٩ هو... والتطريق] «وهي قشوره التي ترمي منه
بالطرق» جواهر ٢٥١ : ١٩.

١٠ زنجار [«زنجار» پ || ١٤ تُسود [«يسود» پ || ١٦ الياقوت الأصفر] «لالياقوت اصفر» پ.

٢ الأشكورية [> «σχωρία»/ «scoria» || ١٣ المرتك] ≡ «λιθάργυρος» (κακία) || ١٤ المسارب] ≡ «سارب»
ابن بكلارش (Kās 2010:975).

د ٣٥

القول على الزنجفور

3.2d.10

الرُّجْفُورُ قد قُلْتُ كيف يُصنع من الزبيق والكبريت.
وهو يتصرف في الأصباغ، وفي التلويع، وفيه أسرار كريمة ووجوه حسنة ٥

3.2d.11

القول على الجير

الجير هو حجرٌ تُستخرج منه مائة تحلّ الأجساد المعدنية والشعور والعظام.
ويتصرف في صناعة الكيمياء كثيرًا.
وإذا سُحق وعُجن بالعسل، جُمِد العسل وصار حجرًا.
وإذا سُحق وعُجن ببياض البيض وألصقت به الأواني، التصقت ولم تنحلّ أبدًا ٥

3.2d.12

القول على الجبس

ب ١٦ ط

الجبس، إذا صنع منه آنية وشُرب بها الخمر، لم يسكر شاربه.
وخاصة الجبس: يُرقق الخمر الغليظ المكثّر والمحدث، ويجعل طعمها سواء، ويُعجله للشرب إن كان
مُضطرًا ٥

3.2d.13

القول على الرخام

الرّخام، يُصنع منه جيرٌ لا تُطاق حدّته، وهو «جير الحكماء» ٥

3.2d.14

القول على قشور البيض

١٥

قشور البيض: كلّما أُحرقت، زادت حُسْنًا وبياضًا وليانَةً.
وهو ضربٌ من الجير، وهو «أرض الحكماء».
ويقلع البياض من العين بعد التدبير ٥

٢ الرُّجْفُورُ... يُصنع [قد فلت كيف يصنع الزنجفور] د || ٢ قد [قد قد] ب || ٣ يتصرف [صرف] د. ٥ الجير
هو حجرٌ [هذا حجر] د || ٥ تُستخرج [مستخرج] ب، [يستخرج] د || ٥ مائة [مباة] د || ٦ الكيمياء [الكيا] د ||
١٠ الجبس... منه [ادا صنع من الجبس] د || ١١ ويُعجله [وخلعه] د || ١٤ جيرٌ [جيرا] ب || ١٤ تُطاق [تطاف]
د || ١٦ قشور البيض] - د.

٢ الرُّجْفُورُ [قيناباري: وهو الزنجفور] تفسير = ١٠٠ γ (≡ «xivvβαρι») || ١٢ مُضطرًا [DAA ٥٠٢ {MSTR}*
(mustarium >).

القول على التنكار

3.2d.15

التنكار شيء يُصنع، لولاه لم يُقدر على سَبْك الذهب والفضة — ويسبك جميع الأجساد المعدنية
ويحمل النار عنها حتى لا تُحرقها، ويجري في إصااق الأجساد.
ولولا أنه يصنع الأجساد حمراء، لكان هو الشيء المطلوب، لأنه يجري ويغوص في الأجساد ولا يدخن
— وإلى هذه الدرجة يبلغ حجر الكيمياء على زعمهم، إن شاء الله.

ولا بُدَّ للعطار الذي يبيع العقار أن يكون مميزًا للجيد والردّي من العقاقير من [الحرارة]، || والجيد^{د ٣٥٥}
والحديث من القديم؛ ويكون عارفاً بدرجات العقاقير من الحرارة والرطوبة.^{١٧٧}
فأما معرفة درجات العقاقير من الحرارة والرطوبة واليبوسة، فيكون ذلك من الكتب المرسومة في الأدوية
المفردة — وأنا أذكر منها في هذا الكتاب على حسب ما يليق به وما يحتاج إليه العطار.

١ القول على التنكار [↑ القول على التنكار].

٢-٣ لولاه... تُحرقها [وهو يُعين على سَبْك الذهب ويُليّنه ويسبكه في رفق؛ ولا يحمل النار على جسم الذهب إذا كان
معه التنكار، ولأن التنكار يمنع حدة النار أن تأكل من الذهب شيئاً] أحجارت ١٦٢-١٤٠.

٣ تُحرقها [«تحرقها» ب، «يحرقها» د || ٤ ولولا] «ولا» د، «ولولا» د* || ٤ حمراء [«حمرا» ب د || ٥ وإلى] «إلى» ب ||
٥ الكيمياء [«الكيمياء» د || ٦ ولا] - د || ٦ الذي [«ان» ب || ٦ مميزًا للجيد والردّي] «مميز الجيد وللردّي» ب، «مميز للردّي»
د || ٨ فأما [«واما» د || ٨ واليبوسة] «واليباس» د || ٨ الكتب [«الكتاب» ب د].

4

باب ذكر أعمار العقاقير المفردة والأدوية المركبة وما أشبه ذلك

فصل

٥ الأدوية المفردة ثلثة أجناس: معدنيّة، وحيوانيّة، ونباتيّة.

4.1

فالمعدنيّة

تختلف أعمارها بحسب شرفها، كالياقوت والذهب وحجر الماس والزمرّد. فهذه تبقى ولا تفسد في المئين من السنين والألوف.

١٠ وأما الفضة والنحاس والحديد، فيستحيلان ويفسدان في المدّة اليسيرة من الزمان، لا سيّما ما ممس منها التراب | والماء. وما كان مصانًا لا يمسّه تراب ولا ماء، فإنّه يبقى السنين الكثيرة، إلّا أنّ بقاءها أقلّ من الذهب والياقوت بكثير.

وأما الأملاح

فإنّها منعقدة من الماء المالح في البحيرات. فإنّها أقلّ بقاء من المحتفرات في المعادن تحت الأرض. وقد بقي عندي ملح معدنيّ السنين الكثيرة، نحو الخمس عشرة سنة، ولم آر فيه تغييرًا البتّة.

١ باب] ≡ ت س II ٤٥٤-١٩٤٥٦-٢٩ ≡ ت و ٦٥-١٣٦٩-١٧ ≡ ش م و ٢٠٠-١٢٠١-٢١٠.

٩ فيستحيلان ويفسدان [«فيستحيل ويفسد» ت || ١٠ منها] [«منها» ت || ١٠ منها] [«منها» ت || ١٠ مصانًا] [«مصانًا» ت س || ١١ بكثير] [«كثيرًا» ت || ١٣ المحتفرات في المعادن] [«المحتفرة من المعادن» ت س، «المنحسب في المعادن التي» ت و.

١ باب] - د || ٢ والأدوية] [«الأدوية» د || ٤ فصل] - د || ٧ شرفها] [«شى فيها» ب || ١٠ منها] [«منها» د || ١٠ مصانًا] [«مضافًا» ب، «مضافًا» د || ١٠ تراب ولا ماء] [«ترابا ولا ماء» ب، «ترابا ولا ماء» د || ١٠ يبقى] [«يقا» د || ١١ بقاءها] [«بقاها» ب د || ١٤ آر] [«ارا» د || ١٤ تغييرًا] [«تغير» د.

فأما الشبوب

فتختلف أعمارها لاختلافها في أجناسها. وأكثر (ها) بقاءً: الشَّبُّ المصَوَّفُ الأبيض: فقد يبقى العشرين سنةً والثلاثين، ولا يفسد.

وأما الكباريت

- فأكثر بقاءً من الشبوب والأملاح. ولقد رأينا من بقي عنده الكباريت العشرين سنةً والأكثر، ولم يتغير.

وأما الزرنبيخ

فبقي عندي فوق الخمسين سنةً والأكثر، لا يتغير ولا يفسد. وقد رأينا من بقي في مخزنه هذا العدد ولم يتغير.

وأما الزرنحمر

١٠

فتنقص قوته في أقل من عام، وقد جرَّبه.

وأيضاً || الإسفيداج يبقى ستة أعوام، ثم يستحيل إلى الترابية.
المرتك يبقى السنين الكثيرة. وقد بقي عندي أكثر من عشرين سنةً، ولم يحدث فيه حادث؛ ولست أشك أنه يبقى أكثر.

٢ وأكثر (ها) [«وأكثرها» ت || ٢ المصوَّف] «السبب المصون» ت^س، «فشب ابيض للصوق» ت^د، «המגביא הלבנה המצרי» ش || ٥ والأملاح + «كثيرا» ت^د، «הרבה» ش || ٥ رأينا [«رايت» ت^د، «ראיתי» ش || ٥-٦ ولم يتغير] «فلم يحدث فيه تغيير البتة» ت || ٧ الزرنبيخ [«الزرنبيخ» ت || ٨ عندي] - ت || ٨ هذا العدد [«هذه العدة» ت || ١٢ وأيضاً [«واما» ت^د، - ت^س || ١٢ ستة] «ثلاثة [...] وخمسة» ت.

٢ المصوَّف [«المصرف» پد، «المصري اظنه» پ^د || ٢ العشرين] «العشرون» د || ٣ والثلاثين [«والثلاثون» د || ١١ فتنقص] «فينقص» د || ١١ في أقل [«اقل» د، «في اقل» د^د || ١٢ وأيضاً] - د || ١٢ يبقى [«يقا» د || ١٣ المرتك [«المرتق» د || ١٣ يبقى [«يقا» د || ١٤ يبقى [«يقا» د.

٢ الشَّبُّ المصَوَّف [«شب مصوَّف: هو شب يؤق به أيضاً من سجلاسة، وهو المقصب» تصريف II ٤٣٩ (→ ابن جلجل): «ومنه نوع آخر يقال له "المصوَّف"، وهو شبه أنابيب بيض؛ إذا كسرتة، تشطى إلى شطايا براقية فيما بينها شيء كالصوف» جامع^س IV ٢٦٢-٥ (→ ابن جلجل): «الشعري» ≡ «الشعري» Δ.

الرصاص يبقى السنين الكثيرة، حتى أنهم قالوا: «يبقى بقاء الذهب»^٥.
الإقليميا والمرقشيثا والشاذنة والتوتيا ونحو هذا من الأحجار، فقد بقيت عندي السنين الكثيرة،^٦ حتى أنهم قالوا: «تبقى بقاء الذهب»^٦.

4.2

وأما الأدوية النباتية

٥ فمنها أصماغ، وعُصارات، وألبان، وأدهان.

فأما الأصماغ

فبقاؤها أكثر من جميع البزور والأصول بكثير. وقد بقيت عندي أصماغٌ مثل الصمغ العربيّ وصمغ اللوز والكثيراء وشبهها نحو الثلاثين سنة، فما رأيها تغيرت عن حالها إلا ما مس منها ندوة^٧ أو ماء^٨ أو تراب.

وأما العصارات

١٠ فبقاؤها أقل من بقاء الأصماغ بكثير. وأكثر ما بقيت | عصارة: عشر سنين؛ ثم يقع فيها السوس. وقد بقي عندي من عصارة البرباريس نحو من عشرة أعوام، فدُقْتُها ذات يوم فوجدتها بقوتها على أنها قد تسوّست.

١ بقاء [«كقاء» ت || ٢ من الأحجار] + «والداهج والمغطينس وحجر الدم» ت^١ || ٢-٣ حتى... الذهب] «فما تبين لي فيها من التغيير البتة» ت^٢، «ولم يتبين لي فيها شي من التغيير البتة» ت^٣، «ولأنا نتحارب لي بهم ماومما من هسنوي دلل» ٥ || ٥ وأدهان] + «وبزور وأصول [— ت^٤] وقشور وقفاح وأرهار» ت || ٧ بكثير] «كثيرا» ت^٥، — ت^٦ || ٧ الصمغ العربيّ] «الكهربا والصمغ العربي» ت || ٨ والكثيراء] «والكمثرى» ت^٦ || ٨ أو ماء] ت || ١١ بكثير] «كثيرا» ت || ١١ وأكثر... [«لأن أكثرها يسرع إليها التسويس [«السوس» ت^٧] وأكثر ما بقيت عندي [— ت^٨] عصارة عشرة أعوام وقد دخلها السوس وذكر الذي اشتريتها منه [«الذي اشتراها» ت^٨] أنها كانت عنده زمانا منذ اشتراها من الذي جلبها [«منذ اشتريتها» ت^٩] وقطعتها يوماً [«ولقد تطعمتها انا اياما» ت^٩] ووجدت فيها أكثر قوتها على أنها قد تسوّست» ت.

١ يبقى [«يبقا» پد || ١ يبقى] «يبقا» د || ٢ والشاذنة] «والشاذنه» پد || ٣ تبقى] «يبقا» د || ٧ فبقاؤها] «فبقاوها» پ، «فبقاؤها» د || ١١ يقع] «وقع» د.

وأما الألبان كالسقمونيا والفريون وشبههما

فتبقى لا تستحيل أكثر من عشرين سنة؛ إلا أن السقمونيا أكثر بقاءً من الفريون والأفيون، لأن الأفيون تضعف قوته في ثلاثة أعوام، وقد رأيت سقمونيا بقيت نحو من عشرين سنة ولم ينقص من قوتها شيئاً البتة.

وأما الأدهان

فتروح وتفسد في أقل من عامين، إلا القليل منها. وما استعمل منها بعد عامين أو ثلاثة، فلا خير فيه، إلا ستيماً مثل دهن الورد، ودهن البنفسج، والأدهان الباردة: فإنها تتعفن وتجف.

وأما البنزور

د ٣٦ ط

فمختلفة في البقاء، لأن ما كان منها كثير الدهن (مثل دهن التمسيم واللوز والجوز وبزر القثاء والقرع، ونحوها)، فإنها تسرع الفساد. وأكثر بقاءها: نحو العام، ثم لا ينبغي أن تستعمل. وأما البزور مثل الحلباء والحرف والخردل والشونيز والرازيانج والكرويا، ونحوها: فتبقى السنين والثلاثة والأكثر، على حسب منابتها، ولا تنقص قواها. وقد جربت من هذه البزور كثيراً، فبقيت عندي سنين كثيرة فما تغير بعضها، وهم بعضها بالتغير.

وأما الأصول والقشوم

فمختلفة في بقاءها على حسب جواهرها، كالقسط، والراوند والبهج والبهمن — فإنها تبقى العشرة سنين والأكثر. وقد بقي عندي بهمنان أبيض وأحمر نحو العشرين سنة، ولم يذهب من قوته شيء — ولست أشك في أنهما يبقيا أكثر من هذه المدة.

٢ فتبقى [«على حالها الباطن» ت ٢ || ٢ إلا أن [«لأن» ت ٦ فتروح [«فترج» ت ٣، «فترتاح» ت ٧ || تتعفن وتجف [«تعنق وتجف» ت ٣، «عفن وتفسد وتبلي» ت ٢، «يثشور ويطنن» ش ١٠ || فإنها... الفساد [«فإنه يسرع إليها الفساد» ت ١٠ || البزور] + «اليابسة غير الدهنة» ت ١٢ منابتها [«صياتها» ت، «لانيوتام» ش ١٣ || وهم بعضها [«هم» ت ٣، «لقد هم» ت ١٥ || الراوند... والبهمن [«الزراوند والوخ والبهمن والدرابج» ت ٣، «الزراوند والوخ والبهج والسرغت والبهمن والدرابج» ت ١٦ || بهمنان [«بهمن» ت ١٦ || العشرين [«العشر» ت ١٦ || قوته [«قواها» ت ٢.]

٢ فتبقى [«فتبقا» د ٣ || ينقص [«ينقص» پ، «ينقص» د ٧ || فإنها [«بأنها» د ٩-١٠ || فمختلفة... البزور] پ ٥ || ١٠ بقاءها [«بقاؤها» پ، «بقاؤها» د ١١ || فتبقى [«قد تبقا» د ١٤ || والقشوم] - د ١٥ || والبهج [«والبهج» پ د ١٥ || تبقي [«تبقا» د ١٦ || بهمنان [«بهمنان» پ، «بها» د ١٦ || شيء [«شيء» پ ١٧ || يبقيا [«يبقيا» پ د.]

وأما الزنجبيل والتمرنباد

فهذه التي فيها رطوبة، يدخلها السوس من عام ومن عامين أيضًا.

وأما اللحاء

فهي مُسهلةٌ وغير مسهلة. فأما المسهلة كالتريد والشبرم وشبهها، فرأيها تنقص قوتها من بعد مدتها نقصانًا
بيئًا.

وأما غير المسهلة، مثل الدارصيني والقزفة والسليخة وشبهها، فإن جالينوس ذكر عن بعض الأوائل أن
الدارصيني لا يتغير أبدًا، وقال: «إني استعملت الدارصيني كان في بعض خزائن ملك رومة، كان قد
أتى عليه نحو من ثلاثين سنة». فذكر أنه وجدته قد نقصت قوتها، إلا أنه اتخذها في الترياق ولم يجد
غيره. وأما أنا، فبقيت عندي قرفة قرنفلية أزيد من عشرة أعوام، وأطعمتها فوجدتها باقية القوة.

ب ٢٠
د ٣٧

وأما فقاح الإذخر والأنزها

فهي أقل بقاءً من الأصول والحشيش.
وقد بقي عندي نواز بنفسج نحو العام، فنقصت قوتها نقصانًا بيئًا. والورد كذلك، وفقاح الإذخر كذلك.
والأسطوخودس والسذاب وشبهها، فإنها تنقص قوتها بعد العام.

٦ جالينوس] XIV Γ ١٧٦٣-٧٦٥.

٢ يدخلها السوس] «فيُسرع إليها السوس» ت || ٤ مدتها] «ثلاثة أعوام» ت || ٧ يتغير] «يرهم» ت || ٧ رومة] «زمانه»
ت س، «زمانه وعمره» ت د، «כוזמנו» ש || ٨ ولم يجد] «لما لم يجد» ت || ٩ وأطعمتها] «وطعمتها» ت س، «וטלמנו» ש،
- ت د || ١٢ نحو... قوتها] «فبدت تنقص قوتها» ت د [«قوتها تنقص» ت د] بعد عام] ت || ١٢ الإذخر كذلك] + «والأفسنتين
كذلك» ت || ١٣ والسذاب] «والسيحات والسعاتر» ت س، «والسحات» ت د، «ומיני הסנטונייה» ש.

٢ فيها] «فهي» د || ٤ كالتريد] «كالتريد» پ د، «كالريد» د || ٤ والشبرم] «والسبرم» د || ٤ وشبهها] «وشبهها» د ||
٤ فرأيها] «ورأيها» د || ٦ والقزفة] «والقزفا» د || ٧ إني] «إني» د || ٨ أتى] «أنا» پ د || ٨ نحو من] «من نحو» د ||
٨-٩ إلا غيره] «إلا أنا حده في الترياق ان لم يجد غيره» د || ٩ القوة] «قوتها فيها» د (≡ ت د) || ١٠ فقاح الإذخر]
«الفقاح الإذخر» پ د.

وأما الترياق وسائر المعاجين والأقراص

4.3

فالترياق يبقى من ستة أشهر إلى ثلاثين سنة، ثم يأخذ في التَّقْصَان إلى ستين (سنة) لم يبطل فعله. واللُّوْغَادِيَا وإِيَارِحِ أَرْكَاغَانِسِ وإِيَارِحِ جَالِينُوسِ والمَثْرُودِيَطُوسِ، هذه كُلُّهَا تبقى من ستة أشهر إلى خمسة أعوام.

- ٥ أُنَا نَاسِيَا يبقى من ستة أشهر إلى سنتين.
شِيلْتَا يبقى من ستة إلى سبع سنين.
سِجْزَانِيَا يبقى من ستة أشهر إلى ثلاثة أعوام.
مِعْجُونِ أَرْ(س)طُونِ يبقى من ستة أشهر إلى ثلاثة أعوام.
٢٠ فِلُونِيَا فالر(ر)سِيَّة مثله. و**جَالِينُوسِ** يقول في الفلُونِيَا إِيَّة، إن أُخِذَ بعد سنتين أو ثلاثة أو أربعة، فهو
١٠ أَنْفَعُ. وَيَنْفَعُ أَيضًا فِيمَا بَعْدَ ذَلِكَ إِلَى بَعْدِ عَشْرَةِ سِنِينَ، وَبَعْدَ ذَلِكَ تَنْقُصُ قُوَّتُهُ وَيَضْعُفُ فِعْلُهُ.

١ وأما [ابن سريون كتاش ٢٤٠ ظ ١٤-١٠٤١ د ١٠؛ كامل II.2 ٣١٣-٢٤١-١٣١٥ م] || ٢ فالترياق ... فعله [وقوة هذا المعجون إلى ثلاثين سنة [ἔως ἑτῶν τριάκοντα]، ومن بعد ثلاثين سنة تضعف قوته إلى ستين سنة، فحتم لا ينفع به في شيء مما كان ينفع به قبل ذلك] ترياق ١٢٣-٨١٠ (TherPis ١٢٧٠) || ٩ و**جَالِينُوسِ** [XI Glauc Γ ≠ ١١٤-١٥١٧]

٢ إلى ... يبطل [الي ستين سنه ولم يبطل] ت، «الي ستين سنة ثم ينتقل فعله» ت س || ٣ واللُّوْغَادِيَا [واللُّوْغَادِيَا] ك || ٣ وإِيَارِحِ أَرْكَاغَانِسِ [والأركاغانس] ك || ٣ والمَثْرُودِيَطُوسِ [ونسختا التياذريطوس] ك (≡ ὁ μολυσματικός > «θεοδώρατος») || ٥ أُنَا نَاسِيَا [أُنَا نَاسِيَا] ك || ٦ شِيلْتَا [شيلتا] كس، «شيلتا» ت، «هشيلتا» و || ٧ سِجْزَانِيَا [سكرنيا] ك || ٨ مِعْجُونِ أَرْ(س)طُونِ [معجون أرسطون] ك ت س، «أركاغانس» و || ٩ الفلُونِيَا [دواء فيلون] ك || ١٠ قُوَّتُهُ [راحته ويصير ثقها] ك.

٢ يبقى [يبقا] د || ٢ ستين [سنين] پ د || ٣ واللُّوْغَادِيَا [واللُّوْغَادِيَا] پ، «واللُّوْغَادِيَا» د || ٣ وإِيَارِحِ أَرْكَاغَانِسِ [وإيارح لوغالس] د * || ٣ أَرْكَاغَانِسِ [أركاغالس] پ || ٣ والمَثْرُودِيَطُوسِ [والمَثْرُودِيَطُوسِ] پ، «والمَثْرُودِيَطُوسِ» د || ٣ تَبْقَى [تبقا] د || ٥ أُنَا نَاسِيَا [اباباسيا] پ د || ٥ يَبْقَى [يبقا] د || ٦ شِيلْتَا [سلبلسا] پ د || ٦ يَبْقَى [ببقى] پ، «يبقا» د || ٧ سِجْزَانِيَا [سجزانانا] پ، «سجزانانا» د || ٧ يَبْقَى [تبقا] پ، «يبقا» د || ٨ مِعْجُونِ أَرْ(س)طُونِ [معجول ارسطول] د || ٩ فالر(ر)سِيَّة [فاسسه] پ، «فاسيه» د || ٩ أُخِذَ + «منها» پ * || ١٠ بَعْدَ - د.

٣ واللُّوْغَادِيَا [[ἐρά] Λογαδίου] ≡ (ἐρά) Λογαδίου] ≡ ٣ وإِيَارِحِ أَرْكَاغَانِسِ [[ἐρά] Αρχιγένου] ≡ ٣ وإِيَارِحِ جَالِينُوسِ [[ἐρά] Γαληνού] ≡ ٣ والمَثْرُودِيَطُوسِ [[ἐρά] Μιθριδάτειος] > ὁ μολυσματικός > «انτίδοτος ή /ή Μιθριδάτειος» || ٥ أُنَا نَاسِيَا [ἀθανασία] ≡ (ἀθανασία) || ٦ شِيلْتَا [θηλά] > ὁ μολυσματικός > «انτίδοτος ή Φιλωνος» || ٨ مِعْجُونِ أَرْ(س)طُونِ [ἄριστον] ≡ ٩ فِلُونِيَا [φιλώνιον (φάρμακον)] ≡ «انτίδοτος».

- معجون دياروطين^٥ يبقى^٥ من ستة أشهر إلى سنتين.
 معجون الكبريت يبقى من ستة أشهر إلى سنتين.
 دواء الكرم يبقى من شهرين إلى سبع سنين.
 معجون المسك يبقى من ستة أشهر إلى سنة. معجون البلادر يبقى من سنة إلى ثلاث سنين.
 سائر المعاجين التي تُدرّ البول، تبقى من ستة أشهر إلى ثلاث سنين.
 أقرص اللك وأقرص الإشقييل تبقى من شهرين إلى سنتين.
 السّفوفات التي تؤخذ بالماء البارد والحارّ، تُستعمل من وقتها إلى شهرين، وبعد ذلك إلى سنة ويكون فعلها ضعيفًا. سائر الحبوب تبقى من شهرين إلى ستة أشهر.
 سّفوف المقلّيات وسفوف حبّ الرمان^٥ تفعل^٥ من وقتها إلى شهرين فعلاً قويًا، وإلى سنة تضعف.
 والأقرص كلّها النافعة من الحمّيات، تفعل من يومها إلى ستة أشهر.
 وأقرص الكوكب وأقرص السريدوس تفعل من شهرين إلى سنتين.
 الإطريفل الأكبر والأصغر والسفيراريون والجوارشونات.

١ دياروطين [دياروط يتي] ت^٥، «סם הטירא מאריטא» ש، «دراو» ت^٥؛ «دياروطيقي» ك || ٣ دواء الكرم [دواء الملك «اللك» ت^٥] يبقى [— ك] من ستة أشهر إلى ثلاث سنين. دواء الكرم» كت، «دوا الكرم واللك» م || ٣ سبع سنين [> «تسعة عشر شهرًا، وأكثره سنة ونصف. أمروسيا، من شهرين إلى سنتين. أصطمخيقون، من ثلاثة أشهر إلى ثلاث سنين [...] قوتي، من شهرين وإلى سبع سنين» ك، «سنة ونصف. أمروسيا [...] اصطمخيقون [...] قوفا [...] الي سبع سنين» ت^٥ || ٤ البلادر] «البلادري» ت؛ «الأقرديا (وهو البلاذر)» ك || ٤ سنة «ستة اشهر» كت || ٥ سائر [دواء المسك يبقى من شهرين إلى سنتين. سائر] ت || ٦ أقرص اللك [قنجوس] «أقرص بنخدس» ت^٥ يبقى من شهرين إلى ثلاث سنين. أقرص الملك [أقرص اللك] ت^٥ || ٦ الإشقييل [الإشقييل] ك || ٧ تُستعمل [تعمل] ت، — ك || ٧-٨ سنة... ضعيفًا «ستة اشهر» ت^٥، «سنة يضعف فعلها» ت^٥ || ٨ تبقى [على الحقيقة] ك || ٨ أشهر] + «وبسهولة بعد ذلك» ك || ٩ المقلّيات [المعلّيات] ت^٥، «المقلّيات وقيل الفضليانا» ت^٥، «המקליתא» ש || ٩ وسفوف حبّ الرمان [والحبّ رمان والكرمازك] ك || ٩ تفعل [≡ كت || ٩ من وقتها] «في قوتها» ت^٥ || ١١ السريدوس [السوليدوس] ك، «السوسدوس» ت^٥، «السونيدوس» ت^٥، — س || ١١ شهرين [شهر] ت^٥ || ١٢ والسفيراريون [وقنداديقون]، «والصدادوقون» ت^٥، «والقندايقون» ت^٥، — س || ١٢ والجوارشونات [كالجوارشونات] ك.

١ دياروطين [دياروطين] د || ٦ الإشقييل [الانشقييل] ب، «الاشقل» د || ٦ تبقى [يقي] د || ٨ ضعيفًا [ضعيف] ب || ٩ المقلّيات [المقلّيات] ب، «المقلّيات» د، «المقلّيات» د* || ٩ تضعف [يضعف] د || ١١ السريدوس [السريدوس] ب، «السريدوس» د || ١٢ والسفيراريون [والسفيداريون] ب، «والسفيداريون» د.

١ معجون دياروطين [δισορητικόν] || ٩ المقلّيات [> حملها || ١١ السريدوس] ≡ «أقرص فسولودوس» أقراباذين س ١٢٦-١٣ > «φυσαλλίδος» > «σολιδوس».

والأدهان كلها، فعلها باقي حتى تَزْنَحْ — فإذا ابتدأتْ تَزْنَحْ، فلا تَصْلُحْ لشيء. دهن البلسان والكافور والمراهم كلها تفعل من وقتها إلى سنة. وأنا أقول إنه ليس كل المراهم يبطل فعلها، إلا هذا المرهم التَّخْلِجِ — فقد حبسته أكثر من عام ونصف، وما تغير عن حاله؛ وقد بقي أكثر من (ذلك) المرهم الأسود، فإنه بقي عندي أكثر من هذه المدة وما استحال.

الأشربة كلها

تبقى من وقتها إلى سنتين. وأنا أقول إنها تبقى أكثر من هذه المدة، ولا سيما إن تُحْفَظَ بها عن الهواء الحار والندوة الموضع الذي تكون فيه: فإنها تبقى السنين الكثيرة — من خمس إلى أكثر.

والمرتبات

تبقى أكثر من الأشربة. وقد ذكر جالينوس أنه بقي عنده زُبُّ السفرجل سبع سنين، ولا ضعفت قوته ولا طعمه.

٩ ذكر جالينوس [Alim Γ ٢٩٣-٨-١١].

١ تَزْنَحْ [تزيح] ت، «تتغير روايها» م || ١ تَزْنَحْ [تزيح] ت س، «اراحت» ت ٢ || ٢ والكافور... سنة [وماء الكافور كلها يعتق، كان فعله أقوى؛ وكذلك دهن الإذخر والضادات والمراهم كلها تفعل من وقتها إلى سنة] ت (→ ك)، «وماء الكافور وكلها عنتت كانت أجود. وأما الضادات والمراهم فإنها تعمل من يومها إلى ستة أشهر» م || ٢ وأنا... [كـم || ٣ إلا] «لا» ت، «لان» ت س. «وهراياها عل זה כי» ش || ٣-٤ من (ذلك) [من ذلك] ت || ٦ من... سنين [من يومها إلى سنتين وإلى أربع] م || ٦ وأنا... [كـم || ٦ بها] «بادخارها وهفظت» ت س، «בגניזתם» ش، — ت ٧ والندوة... [ونداواة الموضع] ت س، «ומלחות המקומות» ش، «المواضع الندية» ت ٨ والمرتبات [وربويات] ت || ٩ زُبُّ السفرجل [ماء السفرجل] م || ٩-١٠ ولا... طعمه [من غير أن ينقص من قوته ولا طعمه] ت س، «فلم ينقص طعمه ولا قوته» ت.

١ باقي [باقي] ب د || ٢ إته [ان] د || ٢ يبطل [تبطل] ب || ٧ تبقى [تبقا] د.

والأكحال والأشيافات

أبقى من الذُّوريات، ولا سيبا ما لم !! تُواقعها الأصاغ. وقد بقيت عندي السنين الكثيرة وما تغيرت
ولا ضعفت قوتها.

وأما الذروريات

مثل كحل الباسليقون وشبهه، التي تُواقعها العقاقير النباتية، فإنها تضعف بعد عام ضعفاً يَبْتًا.
وأما التي تُواقعها الأحجار المعدنية مثل التوتيا والإثمدا والإقليميا وشبهها، فإنها تبقى السنين ولا تفسد.

٥ التي... [«... التي...»] «... التي...» τούς μέν οὖν διὰ χυλῶν εὐθὺς δεῖ χρῆσθαι, τὰ δὲ διὰ τῶν μεταλλικῶν παλαιούμενα κρείσσω ≈ (Anτυλλος →) ٣٣-٣٠. ٦٥ II Collect «γίνεται»
٥-٤-٣٣٥ II Pragm

١ والأكحال... [«...»] - ك || ٢ ما لم [«التي يواقعها» ت. س. «التي تواقعها» ت. و || ٤ وأما...] - ك || ٦ والإقليميا [«المركشيتا» ت. و.] +

٢ تُواقعها [«يواقعها» د، «تواقعها» پ || ٥ تُواقعها [«ب. واقفه» پ، «تواقفه» د || ٥ النباتية [«النباتيه» د، «الثابته» پ || ٦ تُواقعها [«بواقفه» پ.]

وأما الأدوية الحيوانية
كالشحوم والمرامات والإنفحة
والزبول والحواضر والأظلاف والدماء

4.4

أما الشحوم

٥ فإن اختزنت على ما ينبغي ومُلحت، فتنقى السنة والأكثر، ويُنتفع بها في العلاج.

وأما المرامات

فتبقى أكثر من الشحوم إذا جُففت واختزنت لا يمسها الهواء، فإنها تبقى السنين الكثيرة — وقد جرّتها.

وأما الزبول والبومر

١٠ فتبقى نحو العام (خرو الذئب وخرو الكلب، وزبل الحمام، ويعر الماعز) ثم تنقص قوتها.

وأما الدماء

٢١ ط فتبقى، إذا اختزنت | وتُحفظ بها: نحو العام.

وأما القرون والحواضر والأظلاف

فتبقى السنين الكثيرة. وقد بقيت عندي مُدَّة، فوجدتها لم تستجِل.

وأما الجندبادستر

١٥ فبقي عندي نحو الخمس عشرة سنة، ولم تُبَد منه استحالة. ولست أشك أنه يبقى أكثر من هذا العدد — وبالله التوفيق والعون.

٣ والزبول] «والبعر والزبول» ت || ٧ واختزنت] + «بظرف» ت || ١٠ خرو الذئب وخرو الكلب] «كخرو الذئب وخرو الكلب» ت || ١٣ والحواضر] ≡ ت || ١٤ مُدَّة] «وجربتها» ت || ١٦ نحو] «السنين الكثيرة نحو» ت || ١٦ يبقى... العدد] «بقائه أكثر» ت س، «بقاؤه أكثر من ذلك والله اعلم» ت د.

٥ اختزنت] «احترت» پ || ٧ الهواء] «الهوى» د || ١٠ فتبقى] «فيبقا» د || ١٠ خرو الذئب وخرو الكلب] «خرو الذئب وخرو الكلب» پ، «خرو الذئب وخرو الكلب» د || ١٣ والحواضر] «والحافر» پ د || ١٤ تستجِل] «تستحيل» پ || ١٦ تُبَد] «يبد» پ || ١٦ هنا] «بهذه» د || ١٧ وبالله... والعون] «ان شا الله» د.

بسم الله الرحمن الرحيم

وصلّى الله على محمد نبيّه وآله وسلّم

ب ٢١ ط

د ٤٠ ط

قال أبو محمد عبد الله بن أحمد الطيب الإلبيري

﴿ رحمه الله ﴾

- ٥ نفعك الله، يا سيدي، برفيع الفضائل ومَنَحَكَ عِزَّ الوسائل، وخصك بجميل الذِّكْرِ وطيب النَّشْرِ، وَرَيَّنَ فِي عَيْنِكَ الثَّبِيثَ، وَحَبَّبَ إِلَيْكَ الْإِنصَافَ وَكَسَاكَ بِهَجَّةِ الْعِفَافِ، وَأَشْعَرَ قَلْبَكَ عِزَّ الْحَقِّ، وَأَوْدَعَ صَدْرَكَ بَرْدَ الْيَقِينِ، وَكَسَاكَ نَوْرَ الْعِلْمِ وَسَرَبَلَكَ مَحْمُودَ الْأَقْسَامِ، وَجَعَلَ بَيْنَكَ وَبَيْنَ الْحِكْمَةِ نَسَبًا وَإِلَى الْمَعْرِفَةِ سَبِيلًا.
- ١٠ وصل كتابك، جُعِلْتُ فِدَاكَ، بِالَّذِي رَغِبْتَهُ وَذَهَبْتَ إِلَيْهِ مِنْ تَأْلِيفِ هَذَا الْكِتَابِ || الشَّرِيفِ الَّذِي هُوَ الْمُدْخِلُ إِلَى صِلَاحِ جِسْمِكَ وَحِفْظِ صِحَّتِكَ. فَأَنْبَهُ قَوَائِمِي وَضَمِيرِي، وَنَتِجْ فِي ذِكَاةٍ وَفِطْنَةٍ وَإِيضَاحًا وَبَيَانًا وَإِنصَاحًا. وَأَعْقِبْ لِي بِالْعِزِّ قُوَّةً، وَبِالسُّكُونِ حَرَكَةً، وَبِالْكَسْلِ حِدَّةً، وَبِالثَّقَلِ نِبَاهَةً، وَفَهْمًا مَا ذَكَرْتَهُ مِنْ تَطَّلُعِ نَفْسِكَ الشَّرِيفَةِ إِلَى الْمَنَاحِجِ الطَّبِيبِيَّةِ وَالْقَوَانِينِ الْفَلَسَفِيَّةِ وَالْبَرَاهِينِ الْعَقْلِيَّةِ وَالنَّتَائِجِ الْفِكْرِيَّةِ وَالْآثَارِ الْغُلُوبِيَّةِ وَالْأَنْبَاءِ الْحَقِيقِيَّةِ وَالْأَصُولِ الْبَرَاهِينِيَّةِ. وَقَدْ صِرْتُ إِلَى إِرَادَتِكَ فِي الَّذِي رَغِبْتَهُ وَكُنْتُ عِنْدَ ظَنَّتِكَ الَّذِي طَنَّنْتَهُ، بِاللَّهِ التَّوْفِيقِ وَالتَّأْيِيدِ وَعَوْنِي، وَهُوَ الْمَوْفِقُ لِلصَّوَابِ.
- ١٥ إغْلَمْ، جُعِلْتُ فِدَاكَ، أَنْ جَمِيعَ الْحِكَمَاءِ الْمَاضِينَ وَالْفَلَسَافَةِ الْمُبْرِزِينَ لَمْ يَخْتَلَفُوا فِيهَا أَلْفَا، وَقَدْ اتَّفَقُوا عَلَى مَا حَدَّدْتُ لَكَ عَنْ غَيْرِ مَخَالَفَةٍ وَلَا مَعَانِدَةٍ. وَذَلِكَ أَنْ جَمِيعَ مَا خَلَقَ اللَّهُ، تَبْرَكَ وَتَعَالَى، مِنَ الْمَخْلُوقَاتِ وَالْمَبْدُوعَاتِ، صُبِّرَ بَعْضُهُ لِبَعْضٍ عِلْلًا — وَالْعَلَّةُ | تَوَثَّرَ || فِي مَعْلُولِهَا آثَارٌ مَا هِيَ لَهُ عِلَّةٌ، وَلَيْسَتْ تَوَثَّرَ الْعِلْلُ الْبَسِيطَةُ الَّتِي هِيَ عِلْلٌ لِمَا تَحْتَهَا فِيهَا هُوَ عِلَّةٌ لَهَا. وَذَلِكَ أَنْ لَيْسَ بَعْدَهَا إِلَّا الْمَبْدُوعُ الْمُخْتَرَعُ سَبْحَانَهُ، الَّذِي لَا تَوَثَّرَ فِيهِ الْأَعْرَاضُ وَلَا تُصَارَعُهُ الْأَمْرَاضُ، وَلَا يُقَاوِمُهُ الْحَدَثَانُ وَلَا يُعَارِضُهُ الْجَدِيدَانُ وَلَا تُغَيِّرُهُ

٦-٨ ورَيْنَ... سَبِيلًا] ≈ «جَنَّبَكَ اللَّهُ الشُّبُهَةَ [...] وَجَعَلَ بَيْنَكَ وَبَيْنَ الْمَعْرِفَةِ نَسَبًا وَبَيْنَ الصِّدْقِ سَبِيلًا، وَحَبَّبَ إِلَيْكَ الثَّبِيثَ، وَزَيَّنَ فِي عَيْنِكَ الْإِنصَافَ [...] وَأَشْعَرَ قَلْبَكَ عِزَّ الْحَقِّ، وَأَوْدَعَ صَدْرَكَ بَرْدَ الْيَقِينِ» حيوان I ٣٣-٦.

٢ وصلّى... وسلّم] - د ٥ [نفعك] «ممتعك» د ٥ [الوسائل] «الرسائل» ب ٦ [عزّ] «عن» ب ١٠ [ذكاء] «دكاء» ب، «دكا» د ١٠-١١ [إيضاحًا... وإيضاحًا] «واصاحا وبيانا وإيضاحا» د ١١ [بالتثقل] «وبالقل» ب، «وبالعمل» د ١٢ [الشريف] «الشرف» د ١٣ [البراهينية] «البراهينيه» د ١٤ [التوفيق والتأييد] «توفيق وتأييدي» د ١٥ [الماضين] «الماضين» ب، «الماضين» د ١٦ [تترك] «تترك» ب د ١٦ [وتعالى] «وتعلّى» د.

الأزمان، ولا تجده الأبصار ولا تحويه الأفكار — بل هو المحيط بالجميع والمبدع لكل بلا معين، والمدير له بلا وزير، والمذلل له بالتسخير، والمرتب له بلا قُدرة تُمثل ذلك، رب العالمين.

- 2.2 واعلم، جعلت فداك، أن الباري عز ذكره، لما أراد خلق العالم وإخراج ما في القوة إلى الفعل (أعني ما سبق في علمه وسلف في مكنون غيبه إلى الوجود والمشاهدة)، قسمه قسمين. فجعل منه روحانيًا (وجسمانيًا)، وعلةً ومعلولًا، وحسًا ومحسوسًا، وناطقًا وصامتًا، ومتحركًا وساكثًا، وحادًا وناميًا، وبسيطًا ومركبًا، ورأسبًا منسفلًا وساميًا مرتفعًا، وفاعلاً ومنفعلاً. || وبني جسدانية العالم على التضاد ٢٣٠
- والاختلاف، وروحانيته على التجانس والائتلاف.

- وكل شيء تُدرکه بجواستك من العناصر والحيوان والنبات والأقطار والبروج والكواكب والرياح والأزمان المختلفة، فإنها هي متضادة مختلفة. وذلك أن كل ما دار عليه الزمان، فهو مبني على التضاد؛ وما كان فوق الزمان، فهو جواهرٌ بسيطةٌ روحانية متفقتة غير متضادة — كالأفلاك المضية الروحانية، وأجسام الملائكة التي هي أنوار وأرواح غير مُدركة ولا ممثلة. وكل ما كان فوق الزمان وقرب من عالم الإبداع وكان في جوار المبدع، فإنها هي مُضية لا يدخلها التضاد ولا يشوبها شيء من ما يشوب الأشخاص الكدرة الأرضية الغليظة المحسوسة الواقعة تحت الزمان من التضاد والآلام والأوصاب والآفات. ٤١٥
- وذلك أن الباري، عز ذكره وعظمت مُنته وجلت قُدْرته، لما أراد من استعبادنا ومحنة الجميع منّا، بنى أشخاصنا من أشياء متضادة مختلفة، وجعل قرار هذه الأجسام في الأرض التي هي نُقل العالم وأسفلها. ثم جعل الأضداد محيطًا بنا وموجودةً فينا وعندنا بالزيادة والتقصان، والغلو والانخفاض، والعز والذل، والصحة والسقم، والحر والبرد، والحدائة والاكتهال، وشبه ذلك من الأعراض. وجعل العلل المحيطة بنا والمؤثرة فينا على هذه الصفة من الترتيب، وخلق الموت والحياة ليبتلونا أيًا أحسن عملًا — ﴿ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ﴾.

١ ولا تجده الأبصار] ≡ ﴿لَا تُدْرِكُهُ الْأَبْصَارُ﴾ القرآن ٦: ١٠٣ || ١ المحيط بالجميع] ≡ ﴿وَكَانَ اللَّهُ بِكُلِّ شَيْءٍ مُّحِيطًا﴾ القرآن ٤: ١٢٦، ﴿أَلَا إِنَّهُ بِكُلِّ شَيْءٍ مُّحِيطٌ﴾ ٤١: ٥٤ || ٣ وإخراج... الفعل] «فالكون هو خروج الشيء من العدم إلى الوجود، أو من القوة إلى الفعل» رسائل XV ٣١-٨-٩ || ١٨ وخلق...] ≡ ﴿الَّذِي خَلَقَ الْمَوْتَ وَالْحَيَاةَ لِيَبْلُوَكُمْ أَيُّكُمْ أَحْسَنُ عَمَلًا﴾ القرآن ٦٧: ٢ || ١٨-١٩ ذلك... العليم] → القرآن ٦: ٩٦ ≡ ٣٦: ٣٨ ≡ ٤١: ١٢.

٢ تُمثل] «تمثيل» د ٣ الفعل] «العقل» پ د ٥ وعلة] «علة» د ٦ منسفلًا] «منفسلا» پ ٦ وبني] «بنا» پ د ٧ وروحانيته] «وروحانية» پ د ٧ والائتلاف] «والائتلاف» پ د ١٠ فهو] «فهى» د ١٠ كالأفلاك] «كافلاك» د ١٠ المضية] «المضيه» پ د ١١ وكل ما] «وكلما» پ د ١١ من عالم] — د ١٢ في جوار] «جوار» د ١٢ مضية] «مضيه» پ د ١٢ التضاد] «التضاد» د ١٢ من ما يشوب] «من تشوب» د ١٣ التضاد] «التضاد» پ ١٤ بني] «بنا» پ د ١٥ نُقل] «نقل» پ، «نقل» د ١٦ بالزيادة] «كالزيادة» د ١٦ والذل] «الذل» د ١٧ الأعراض] «الأغراض» پ ١٨ الترتيب] «الترتيب» د ١٨ عملًا] «عمل» د ١٩ العليم] «العزيز الحكيم العزيز» د.

- 2.3 ثم ساس الجميع بالقضاء والقدر لما في ذلك من صلاح للكل. فجعل القدر تابعاً للقدرة، والقدرة منقاداً للعلم، والعلم أنساً لها. فالقدر والقدرة خارجان من علمه، تابعان لما جرى من مكنون غيبه. والإرادة مُيَمَّةُ التكوين: إذ لا يكون شيء من المكوّنات إلا بإرادته وإذنه. والإرادة || مخرجةٌ لما في العلم والقدر؛ وذلك قوله، عزّ ذكره: ﴿إِنَّمَا أَمْرُهُ إِذَا أَرَادَ شَيْئًا أَنْ يَقُولَ لَهُ، كُنْ فَيَكُونُ ۖ فَسُبْحَانَ الَّذِي بِيَدِهِ مَلَكُوتُ كُلِّ شَيْءٍ وَإِلَيْهِ تُرْجَعُونَ﴾.
- 5 ثم جعل، عزّ ذكره، المخلوقات كلّها بأسرها محسوساتٍ ومُدْرَكَاتٍ ومحدوداتٍ ومتجانساتٍ ومتضاداتٍ. وجعل لها طبائعٍ وعناصرٍ وعوالمٍ وابتداءً وانتهاءً وهبوطاً. وفصل صفاته عن مخلوقاته. فسبحان المبدع القدير، عزّ ذكره وتعالى جدّه، ﴿لَا تُدْرِكُهُ الْأَبْصَارُ وَهُوَ يُدْرِكُ الْأَبْصَارَ وَهُوَ ۖ أَلْلَطِيفُ الْخَيْرِ﴾.
- د ٤٢٤ وذلك أنك، متى ما فكرت بضيء عقليك ولباب فكرك، وجدت العالم ينقسم قسمين: عالم كبير وعالم صغير، وبسيط ومركب. فأما العالم البسيط، فهو العالم الكبير، وهي الدنيا المحيطة بالإنسان؛ وأما العالم الصغير المركب، هو الإنسان المحصور في هذه الدنيا.
- 10 ثم، إذا فكرت في الجميع، وجدته مسوساً بالقضاء والقدر، مزموماً بالعلم والقدرة، محصوراً في قبضة البري، عزّ ذكره، منقاداً بالتدبير والإحكام | — ﴿ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ﴾.
- ط ٢٤٤ ثم، إذا فكرت في حواسك وانطباعاتها على ضروب المحسوسات المختلفة والألوان والصُور، ثم نظرت نظراً بفكرٍ واعتبار، وجدت العالم الكبير بما فيه وما تحته مسخراً مدبّراً مُحَكِّماً مرتباً، ظاهرة فيه دلائل الحكمة والتدبير، والصنعة والتكوين، والاتفاق والتركيب والتأليف، والتسخير. فالحكمة دالّة على حكم حكاها، والصنعة دالّة على صانع صنعها، والخلق دالٌّ على خالق خلقهم. فمتى وجدت المركب بحواسك، فله مركبٌ غيره؛ ومتى وجدت المسخّر، فله مسخّرٌ غيره؛ ومتى وجدت علامة التدبير، فلها مدبّر؛ ومتى وجدت المصنوع، دلّ على صانعٍ غيره اضطراراً — وهذه من أيّن الدلائل البرهانية الدالّة على الوجدانية.
- ٢٠

١ ثم... للكل [اعلم أنّ العالم كلّهُ مسوسٌ بالقضاء والقدر — أعني بالقضاء ما قسم لكلّ معلول مما هو أصلح وأحكم وأتقن في بنية الكل] عقد II ١٩٥-١٥-١٦ (→ الكندي، التوحيد) || ٤-٥-٥... إنّما... تُرْجَعُونَ [القرآن ٨٢-٨٣ || ٨ لا تُدْرِكُهُ...] ≡ القرآن ٦: ١٠٢-١٠٣.

١ منقاداً [منقاداً] ب ٢ للعلم [للعالم] ب د ٢ والعلم [والعالم] ب ٢ خارجان [خارجاً] ب د ٢ تابعان [تابعاً] ب ٣ مُيَمَّةُ التكوين [ب ٣ المكوّنات] ب ٣ المكوّنات [ب ٣ المكوّنات] ب ٣ لها [لها] ب ٧ وابتداءً [ب ٧ وفصل] ب ٨ وتعالى [تعلّي] د ٨ جدّه [حده] د ٩ ولباب [وتيات] د ١٠ وأما [و] د ١٢ محصوراً [مُحْصُورًا] ب ١٣ منقاداً [منقاداً] ب ١٤-١٥ نظرت نظراً [نظرت نظر] د ١٥ مدبّراً [مدبّراً] ب ١٧ والصنعة [والصنعة] ب ١٩ وهذه [وهذا] د.

2.4 واعلم أن الوجود ثلاث وجودات: أحدها وجود الحواس الخمس، كالسمع والبصر والشم والذوق
 ب ٢٥ وهذا وجود الممثلات والمحسوسات والمدركات والمتكونات || من كل شيء.

والوجود الثاني هو وجود العقل، وهو وجود الجواهر الروحانية، والعلوم العالية، والمعاني المرتفعة، التي
 د ٤٢ لا تتجسم ولا تُدرِكها الحواس لا بلمس ولا بلون، بل إنا نُدرِكها بالعقل الذي هو جسُّها وشكلها.

والوجود الثالث هو وجود البرهان، كالأثر يدل على مؤثره، وكالحايط يدل على بان، وكالثمرة تدل على
 شجرة. وهذا وجود الصانع بالصنعة والخالق ببدائع الخلق. فافهم ذلك: يُفدك علماً واضحاً ونوراً ساطعاً
 وأدباً نافعاً إن شاء الله.

2.5 واعلم، جعلت فداك، أنه من أراد تأليف شيء من هذه الحكمة النفيسة والتعبير عن هذه الصنعة الرفيعة
 والعلم البارِع المرتفع النفيس، فلا بد له من لزوم الفكرة والاعتبار. فإذا فعل ذلك، اجتمعت له قوى

ب ٢٥ فكره ونور فهمه — فعند ذلك يستمد العقل بعنصره الأعلى، فتبتدر إليه المعاني، وينتظم له الكلام،
 وتُجيبه الألفاظ، وتُزاحمه الشواهد العقلية والنتائج البرهانية بمقدار تصرفه في ذلك ورياضته فيه وارتباطه
 وتدريته عليه — إذ من شأن المتفقات والمجانسات أن تأتلف.

ومن كان بهذه الصفة، لم يستطع أن يرسم في مذهبه باباً مختصراً قريباً حتى تقدم بين يديه إشارات
 عالية ومعاني غريبة، وحكم نفيسة، ومقدمات رفيعة واضحة بيّنة؛ ويجعل لكلامه فُرْشاً ومنهجاً وعنصراً
 تحنُّ إليه النفس، ويقبله العقل، ويصق في الوهم، ويستضيء فيه الفكر فيرق عند ذلك ويصفو وينتشر
 ب ١٥ ويسمو، وينجلي عنه العمى، ويُفارقة الصدى، فيكون مُضياً نيراً صقيلاً، قابلاً لما يرد عليه من المعاني
 الرفيعة.

١ الوجود ثلاث وجودات] ≅ «وجود الحواس / الوجود الحسي» | «وجود العقل / الوجود العقلي» | «الوجود البرهاني»
 الفلسفة الأولى ١٩-٤١٢١ + ١٢٥-١١٢٦.

٢ وهذا] «وهاذا» د || ٢ والمتكونات] «المتلونات» ب د || ٤ تُدرِكها] «يدرِكها» ب || ٤ إنا نُدرِكها] «انما يدرِكها» د ||
 ٥ يدل] «تدل» ب || ٦ شجرة] «الشجرة» ب || ٦ يُفدك] «يُفدك» ب || ٦ واضحاً] «واضحاً» د || ٨ والتعبير] «والتعبير»
 د || ١٠ يستمد] «يستمد» د || ١١ وتُجيبه] «وتُجيبه» ب، «وتجيبه» د || ١١ الألفاظ] «الألفاظ» د || ١١ فيه] «في ذلك»
 فيه» د || ١٢ وتدريته] «تدريته» د || ١٣ يستطع] «يستطيع» د || ١٣ يرسم] «يرسمه» د || ١٣ تقدم] «يقدم» ب ||
 ١٣ إشارات] «إشارات» د || ١٤ غريبة] «غريبه» ب || ١٤ بيّنة] «بيّنه» د || ١٤ ويجعل] «ويجعل» ب، «وتجعل» د ||
 ١٤ ومنهجاً] «منهجاً» د || ١٥ ويقبله العقل] «ويقبله القلب» د || ١٥ ويصق] «ويصقني» ب، «وجعل» د || ١٥ ويصفو]
 «ويصفوا» ب د || ١٦ ويسمو] «ويسموا» ب د || ١٦ الصدى] «الصدى» ب، «الصداء» د || ١٦ مُضياً] «مضياً» ب د ||
 ١٦ نيراً] «نيراً» ب.

ولولا أن رَغِبْتِكَ والمستولي على إرادتك ومَذْهَبِكَ تَرْكُ التطويل والإكثار واختيارُ الإيضاح والاختصار،
 لرسمتُ لك من تركيب العالمين وتصنيفها وقسمتها وترتيبها وعللها وتديريها وخواصَّ الحيوان وطبائعها
 ولواجبتها ومنافعها ومضارها ما كُنْتُ عليه شاكرًا || وبه مكنفيًا قانعًا. ٢٦٦ ب

وهذا حين نصير إلى رغبتك من وصف الأزمان الأربعة وطبائعها وتديريها، وما يجوز فيها من التدبير
 والمداواة والرياضة. ونذكر قسمتها على النواحي الأرضية، والرياح الزمانية، والطبائع الأربع البشرية
 الجسائية، وما يصلح لكل طبيعة منها وكلّ فصلٍ إن شاء الله تعالى. ٥

١ ولولا [«ولولا» د || ٤ نصير] «نصير» د، «نصير» ب || ٥ والرياضة [«والرياضة» د || ٦ وكلّ] «ولكل» د.

صفة الفصول الأربعة

3

— وهي الأزمان —

وقسمتها على البروج الاثني عشر والعناصر والرياح والأركان

ومشاكلتها لطباع الإنسان وما لا يجوز فيها من الأغذية والأشربة والرياضة والمداواة

- 3.1 اعلم، جعلت فداك، أن جميع الحكماء الماضين والفلاسفة المبرزين أجمعوا على أن السنة اثنا عشر شهرًا مقسومةً على بروج الفلك الاثني عشر التي هي أقدم من السنة والزمان. وذلك أن الأيام والجمعات والأزمان نتيجةً تابعةً يجزي الشمس والقمر وسائر الكواكب في البروج الاثني عشر المرتبة | في أعنان السماء وأرباع الفلك. منها: الكبش، والثور، والتوءمان، والسرطان، والأسد، والعذراء، والميزان، والعقرب، والقوس، والجدي، والدلو، والحوت.
- 3.2 فأول هذه البروج: الكبش، وهو منقسم لرأس الفلك ورأس الإنسان. ومنه ابتدأت الشمس بالجري في أول الحلقة. وإذا حلت الشمس به، كان الربيع، وهو أول الأزمان. وآخر هذه البروج: الحوت، وهو منقسم لآخر الفلك ودبره وطرفه؛ وكذلك هو منقسم أيضًا لرجلي الإنسان. وإذا حلت الشمس به في شهر مارس، كان آخر السنة والشتاء. فإذا قطعته وحلت برأس الكبش (وهو أول البروج ورأس الفلك)، كان زمان الربيع، وهو أول الأزمان وأبجها عند النفس وألدها عند الطبيعة. وذلك أن الشهور الاثني عشر منقسمة على هذه البروج الاثني عشر، وهي أصلها وعصرها — إذ هي أقدم منها، لأن عصر الشيء أقدم من ذلك الشيء، وعلته موجودة قبل ذلك الشيء المعلول.
- وهذه البروج الاثنا عشر التي هي علة الزمان وعصره مرتبة في الفلك الكبير، وهي مقسومة على أقطار الأرض ونواحيها الأربعة ورياحها وعناصرها والأزمان وطباع الإنسان. لأن طباع الإنسان الأربع (التي هي المراتان والبلغم والدم) خلقت من العناصر الأربع، وهي أصلها. وخلقت هذه العناصر الأربع، والبروج الاثنا عشر والمنازل والكواكب السبعة وسائر الأجرام الفلكية والتيران المثيرة المضية الكائنة في الفلك، من الطبائع البسيطة. وخلقت هذه الجهات الأربع والرياح الأربعة الهابطة منها والبروج الاثنا عشر مقويةً لهذه العناصر الأربع التي هي أصل المخلوقات وعصرها — وهي الأرض والماء والهواء والنار. وهذه العناصر الأربع هي عناصر الحيوان وأمهاث الإنسان وأصول الطبائع الأربع الجسائية.

٥ الماضين] «الماضين» پ د || ٥ السنة] السنة» پ || ٥ اثنا عشر] «اثني عشر» پ، «اتني عشر» د || ٨ الكبش] + «الحمل» د^٢ || ٨ والتوءمان] + «الجوزا» د^٢ || ٨ والعذراء] + «السنبله» د^٢ || ١٢ آخر... منقسم] د^٥ || ١٧ الاثنا] «الاثني» پ، «الاثني» د || ٢٠ الاثنا] «الاثني» پ، «الاثني» د || ٢٠ المضية] «المضيه» پ د || ٢١ الاثنا] «الاثني» پ، «الاثني» د.

وذلك أن المزة السوداء خلقت من عنصر الأرض؛ والبلغم خلق من عنصر الماء، | وهو أصله وجنسه؛^{٢٧٧} ب
والدم خلق من عنصر الهواء (هو) أصله (و) جنسه؛ والصفراء خلقت من عنصر النار، والنار أصلها
وجنسها.

واعلم أن كل طبيعة من هذه الطبائع الإنسانية || شبيهة بطبيعة عنصرها الذي منه خلقت. وذلك أن
السوداء باردة يابسة غليظة ثقيلة عكرة أرضية، خلقت من عنصر الأرض التي هي باردة يابسة أيضًا،^{٣.3}
ثقيلة عكرة — وهي أغلظ العناصر وأكثرها وأثقلها، ولذلك صارت ثقُل العالم وجعلها الباري، عزّ ذكره،^{٤٤٤} د
كذلك لتكون قرارًا للحيوان.

والبلغم بارد رطب ماوي سيال، خلق من الماء الذي هو بارد رطب، وهو عنصره وأصله.^{١٠}
والدم حار رطب، خلق من الهواء الذي هو حار رطب معتدل لطيف. وذلك أن الهواء (الذي هو حار
رطب)، حياة الحيوان بالتنفس، كما أن الدم هو حياة الإنسان. وكما أن الإنسان، لو عدم الهواء، مات
— وكذلك أيضًا السراج، لو عدم الدُّهن بالكثيَّة، لأنظفًا، كما أن الإنسان، || لو عدم الدم، مات. لأن
الدم للروح كالدهن الصافي للسراج، والهواء للروح كالريح التي تُحيي النار وهي تشتعل وتنسبط.

والصفراء حارة يابسة نارية، خلقت من النار التي هي حارة يابسة نارية، وهي أصلها وعنصرها. وكما أن
الشمس تُلطِّف الجوِّ وتُسخِّنه وتُنوره، كذلك الصفراء في زمن الشتاء تُسخِّن البدن، وتُلطِّف الفضول
الغليظة، وتمنع الكيموسات البلغمية من الاستحكام والهيج. ولولا ذلك، لآستحكمت الكيموسات البلغمية
في الشتاء مع البرد الذي يُقويها. لكنَّ الباري، عزّ ذكره، جعل الصفراء في الشتاء مُناظرةً للبلغم، مُنازعةً
له بحرّها ويسبها. وجعل البلغم في الصيف أيضًا مُناظرًا لحرارة الصفراء ويسبها وحرارة الزمان، مطلقًا لحرّه
والوجه برده ورطوبته لما في ذلك من منافع الإنسان. ثم جعل الدم في الخريف؛ (وهو زمن السوداء)^{٤٤٤} د
(مناظرًا) للسوداء ومُقاومًا لها بحرّه ورطوبته. وجعل السوداء في الربيع مُناظرةً للدم ومقاومةً | له ببردها^{٢٨} ب

٦ وجعلها...] ≈ «اللَّهُ الَّذِي جَعَلَ لَكُمْ الْأَرْضَ قَرَارًا» القرآن ٤٠: ٥٤، «وَأَمَّنْ جَعَلَ الْأَرْضَ قَرَارًا» ٢٧: ٦١.

٢ الهواء [«الهوى» ب، «الهوي» د || ٢ (هو) أصله (و) جنسه [«واصله جنسه» ب د || ٢ والنار] ب* || ٥ أيضًا [«ايضى» د || ٦ ثقُل [«فل» د، «قل» ب || ٨ ماوي... وهو] د* || ٩ الهواء [«الهوي» ب د || ٩ الهواء [«الهوي» ب د || ١١ أيضًا [«ايضى» د || ١١ لو] «ذا» ب || ١١ كما أن [«كما لي ل» د || ١١ لو] «ذا» ب || ١١ لأن [«لأن» ب || ١٢ الهواء [«الهوى» ب د || ١٣ وهي] «وهو» ب د || ١٥ من الاستحكام [«في الشتاء مع من الاستحكام» د || ١٥ ولولا [«لولا» د || ١٦ يقويها [«فقويها» ب || ١٧ أيضًا [«ايضى» د || ١٧ مُناظرًا [«مناظر» ب، «مناظرة» د || ١٧ ويسبها] - د || ١٧ مطلقًا [«مطني» ب د || ١٨-١٩-٥٣٩ وهو... للسوداء [«وهو زمن السوداء» ب د || ١ للدم [«للبلغم» ب د.

١٥ الكيموسات [«والكيموش في عبارة الأطباء: هو الطعام إذا انضغ في المعدة قبل أن ينصرف عنها ويصير دمًا» لسان
VI ١٩٧^٣ ١٦-١٨؛ > «χυμός» (مصححه).

وببسها. فالسوداء مُقاومةٌ للدم في الربيع كما هو مُقاومٌ لها في الخريف، والصفراء مُقاومةٌ مُناظرةٌ للبلغم في الشتاء بحرّها وببسها كما هو مُقاومٌ لها في الصيف ببرده ورطوبته. وكذلك الحكم في العناصر الأربع والجهات والرياح — ﴿ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ﴾^٥.

- 3.4 ثم جعل البارئ، سبحانه، هذه العناصر الأربع والجهات الأربع والرياح الأربع مُناظرةً مُناسبةً لطبائع الإنسان، مُقويةً لها. فكلُّ طبيعة من طبائع العالم وجهاته ورياحه تُقوي جِسْمها ونظيرها من طبائع الإنسان الأربعة. وقُسمت أيضًا طبائع الإنسان الأربعة على البروج الاثني عشر المذكورة والأزمنة الأربعة التابعة لها. فالبروج الرجّية وناحية الشّرق وريح الصّبا والهواء وزمن الربيع منقسمةٌ للدم ونظيرةٌ له. والبروج النارية وناحية القبلة وريح الجنوب وعنصر النار وزمان الصيف، الّذي هو حارٌّ يابس، مُناظرةٌ مُناسبة
- ٢٩ ب ١٠ منقسمةٌ للصفراء، الّتي هي حارةٌ يابسة. والبروج الماوية وناحية الجنوب || وريح الشّمال وعنصر الماء وزمن الشتاء مُناسبةٌ مُناظرةٌ منقسمةٌ للبلغم، الّذي هو بارد رطب ماويٌّ لَرَج سَيَال. والبروج الترابية وجانب العَرَب وريح الدُّبور وعنصر الأرض، الّذي هو بارد يابس، وزمان الخريف، الّذي هو كذلك، مُناسبةٌ مُناظرةٌ منقسمةٌ للسوداء، الّتي هي باردةٌ يابسة.^٥

- 3.5 ثم قُسم الفلك أيضًا على الإنسان نظير قِسْمته على الجهات الأربع والنواحي الأربع. وذلك أنّهم جَزَوْا فلك البروج على الجهات الأربع والرياح، فجعلوا || رأس الفلك (وهو الكبش) والثور^٦ والثورمان^٧ شرقيًا ١٥ قَبوليًا (ومنه تهبّ القبول)، وقرنوه برأس الإنسان. ثم جعلوا القسم الجنوبيّ (وهو القَبليّ، ومنه تهبّ الجنوب) صَدْرَ الفلك، وقرنوه بصدر الإنسان. ثم جعلوا القسم الشماليّ (وهو الجوفيّ، ومنه تهبّ ربح الشمال) جَوْفَ الفلك (ومنه سُميّ «جوفًا»)، وقرنوه بجوف الإنسان. ثم جعلوا القسم الدُّبوريّ (وهو الغربيّ، ومنه تهبّ ربح الدبور، وهو دُبُر الفلك || وآخره) لِرِجْلَي الإنسان، وقرنوه بهما — ولذلك سُمّوا
- ٢٩ ط ٢٠ هذه الريح الّتي تهبّ من آخر الفلك «دبورًا»، لأنّها انقسمت لدبر الفلك وآخره وآخر الإنسان.
- 3.6 وبرهان ذلك وتحقيقه أنّ الإنسان، إذا استقبل الشرق بوجهه، كان وجهه قِبَالَ رأس الفلك، ومنه تهبّ القبول. ويكون جانبه الأيمن بِلِزَاءِ القبلة، ومنها تهبّ الجنوب (ولذلك سُمّيت «جنوبًا»). ويكون شماله بِلِزَاءِ الجوف، ومنه تهبّ الشمال (ولذلك سُمّيت «شمالًا»). ويكون مؤخّره وعجزه وآخره (المستوى «دبره») لآخر الفلك وعجزه ودبره الّذي منه تهبّ ربح الدبور، وهو الغرب. فهذه القسمة الفلسفية

٤ ذلِكَ... الْعَلِيمِ [القرآن ٩٦: ٦، ٣٦: ٣٨، ٤١: ١٢].

٢ فالسوداء... الخريف] د^٥ || ٧ التابعة] «المتابعة» د || ٩ مُناسبة] د^٥ || ١٠ الّتي] «الذي» پ || ١٠ الجنوب] «الجوف» د || ١٤ أيضًا] «ايضًا» د || ١٤ جزوا] «جزؤ» پ، «جزوا» د || ١٤ فلك] «فلك» د، «ذلك» پ || ١٦ القسم] «الغم» د || ١٧ القسم] «الغم» د || ١٨ القسم] «الغم» د || ١٨ الدُّبوريّ] «الدبور» پ، «الدبور» د || ١٩ بها] «بها» پ د || ١٩ ولذلك] «وكذلك» د || ٢٠ هذه] «هذا» د || ٢٠ دبورًا] «دبور» پ || ٢١ قِبَالَ] «قبالي» د || ٢٢ بِلِزَاءِ] «بار» د || ٢-١ وآخره... ودبره] د^٥.

- الحقيقتية البرهانية التي تؤدي إلى الحقائق الثابتة والبراهين الصادقة، وبالله التوفيق .
- 3.7 ثم نرجع إلى السبق الأول الذي ابتدأناه من وصف الأيام والأزمان. فنقول إن الأيام مقسومة على درجات الفلك الكبير (وهو عنصرها وعلتها) بنزول الشمس فيها، كما أن شهور السنة مقسومة على البروج الاثني عشر.
- ٥
- والجمعة مقسومة على الكواكب السبعة التي هي الشمس، والقمر، والأحمر، والكاتب، والمشتري، والزهرة، والمقاتل. وهذه الكواكب مقسومة عليها الأيام السبعة، وهي آلات الطبيعة الخادمة لها (لها) تحتها ولما فوقها. وكذلك خلفها بارئها وزيتها في الفلك لما فيها من مصالح الإنسان العالم ومنافع الإنسان.
- ١٠ وليالي الشهر أيضًا مقسومة على منازل البروج، كما أن أيام الشهر مقسومة على درجات البروج التي تحل بها الشمس. وذلك أن المنازل ثمانية وعشرون منزلة مقسومة على بروج الفلك، فيقع منها لكل برج منزلتان وثلاث. ودرجات الفلك ثلاثمائة وستون درجة، وهي منازل الشمس. فيقع منها لكل برج ثلاثون درجة، كما أن الشهر ثلاثون يومًا. فإذا حلت الشمس بروج الشهر وقطعت منه درجة، كان يومًا؛ فإذا كملت درجات البرج، كمل الشهر — وذلك أن البرج ثلاثون درجة كما أن الشهر ثلاثون يومًا. | فإما يكون الشهر (شهرًا) بقطع الشمس لدرجات ذلك البرج المنتقسم للشهر، وتكون الليلة ليلة بقطع القمر لمنزلة من منازل الفلك — فالقمر يقطع الثمانية وعشرين منزلة في ثمانية وعشرين ليلة، ثم يكون في قرب الشمس وقبضته ليلة، فيذهب قرضه، ويضمحل جسمه، ويكسيف نوره بالإضافة إلى نور الشمس الذي هو أقوى وأبسط. فإن زال عن الشمس وكان بينها بؤن صالح في تمام الثلاثين ليلة، أطلع الهلال رقيقًا؛ ثم لا يزال يجري في فلكه ويحل بالمنازل المذكورة ليلة بعد ليلة، فيقوى نوره ويكمل جسمه بمقدار اضمحلاله حتى يكون بذرًا كاملًا إذا كان في المنزلة الرابعة عشرة، ثم ينحط بمقدار ما كمل — ﴿ذَلِكَ ۖ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ﴾.
- ١٥
- ٢٠
- ٢٤٦ د
- 3.8 فتكمل ليالي الشهر بقطعه لمنازل الفلك؛ وتكمل أيام الشهر بقطع الشمس لدرجات البرج الذي تحل به؛ وتكمل السنة بقطع الشمس لجميع بروج الفلك. وذلك أن الشمس، إذا حلت برأس الكبش || في أول نيسان (وهو أبريل)، كان زمان الربيع، وهو ثلث شهور: أبريل ومايه ويونيه. وله من

٩ وكذلك... الفلك] ≈ ﴿إِنَّا زَيْنَّا السَّمَاءَ الدُّنْيَا بِرَبِينَةِ الْكَوَاكِبِ﴾ القرآن ٣٧:٦.

٣ وبالله التوفيق [ان شا الله» د || ٤ نرجع] «جعلل» د، «نرجع» د || ٥ وعلتها] «وعليها» پ د || ٥ بنزول] «نزل» د، «نزل» پ || ٧ والأحمر] + «المرخ» د || ٧ والكاتب] + «الطارد» د || ١١ بها] «به» پ د || ١١ وعشرون] «وعشرين» پ || ١٢ ثلاثمائة] «لثلاثمائة» پ، «ثلاث مائه» د || ١٢ وستون] «وستون» پ || ١٢ منها] «فمنها» پ || ١٦ لمنزلة] «المنزلة» پ || ١٧ قرضه] «قرضه» د، «فرضه» پ || ١٧ ويكسيف] «ويكشف» د || ١٨ فإن] «فإذا» د || ٢٠ الرابعة... ينحط] «الرابع وعشره ثم ينحط»، ⊗ د || ٢ وهو] «هو» د || ٢ ثلث] «ثلث» پ، «ثلث» د.

البروج: الكبش والثور والتوءمان. وإذا حلت برأس السرطان، كان صيفًا، وهو ثلاث شهور: يُوليه وأغشت وشتنبر. فإذا قطعت السرطان والأسد والعذراء وكانت في رأس الميزان (وذلك في أول أكتوبر)، كان خريفًا، وهو ثلاث شهور: أكتوبر ونونبر ودجنبر. فإذا حلت برأس الجدي (وذلك في أول يّتير)، كان فصل الشتاء، وذلك ثلاث شهور: يّتير وفبرير ومارس.

فإذا كانت في أربع وعشرين درجة من الحوت، كمل فصل الشتاء وبدأ الربيع — وذلك في أربعة وعشرين يومًا من مارس. ثم تتعلّق برأس الكبش فينقرض الشتاء برده وكسليه، ويطيب الزمان، ويتهيّج الربيع بنوره وأزهاره وروضه وتوّاره. وذلك بفضل الله، سبحانه، وجميل صنّعه ورأفته على خلقه، ﴿لَا إِلَهَ إِلَّا هُوَ الْعَزِيزُ الْحَكِيمُ﴾^{١٠}.

وقد استبان بما قلناه أنّ الأزمان الأربعة (من الربيع والصيف والخريف والشتاء) نتيجة تابعة تجري ٣١ ط 3.9 الشمس في البروج، وأنّ الشهور الاثني عشر مقسومة على البروج الاثني عشر، وأنّ الجمعة سبعة أيام مقسومة على الكواكب السبعة، وأنّ ليالي الشهر مقسومة على المنازل وأيامه مقسومة على درج البرج الذي تحلّ به الشمس. وأنّ الطبائع الأربعة، والعناصر الأربعة، والرياح الأربعة، والأزمان الأربعة. وأنّ الربيع أول الأزمان مجلول الشمس في أول الكبش، كما أنّ الأحد أول الأيام؛ وذلك أنّ الأحد كان أول أيام الدنيا، كما أنّ الربيع أول أزمان الدنيا؛ ولذلك سُمّي «أحدًا»: لأنّه آخر أيام الدنيا وأولها.

وذلك أنّ البارئ، عزّ ذكره وتعالى جدّه، لما أراد إظهار الساعات والأيام والشهور والأزمان، خلق هذه البروج والمنازل والكواكب والشمس والقمر، وجعلها وسائط في الحقّ وآلة للفلك وعلة لما تحتها من الساعات والأيام والشهور والأزمان وغير ذلك. فجعل القمر علة لليل، والشمس علة للنهار؛ وركب ٢٠ ط ٣٢ الشمس من نارٍ ونور، فجعل القُرص نارًا والضيء نورًا، وخصّها بالزّونق والضيء والهجة والبهاء، وجعلها ملطفة للجوّ، جالية للغيم، مُرقة لجانبي الهواء، دافعة للغلظ والعفونات الأرضية. وخلقها في رأس الفلك (وهو الكبش)، فكان أول مبتدأ جزئها من الكبش، فصار ذلك أول الزمان، وهو الربيع.

١٠-٩... الْحَكِيمُ] ≡ القرآن ٣: ١٨ | ١٥ كان أول... [«أول الأيام: الأحد؛ وهو أول أيام الدنيا يبتدئ الله فيه خلق الأشياء» عجائب ٦٥-١٤-١٦؛ «ابتدأ الله الخلق يوم الأحد» تاريخ ١٣١٤ (→ ابن عباس).

٣ والتوءمان] «الثومان» پ [٣ ثلاث] [ثلث] پ، «تلت» د [٥ ثلاث] [ثلث] پ، «تلت» د [٦ كان... يّتير] پ [٦ ثلاث] [ثلاثة] پ* [٧ أربع] [أربعه] د [٨ تتعلّق] [يتعلّق] د [٩ سبحانه] [سبحانه] پ، - د [١١ تما] «ما» پ [١١ من] [مثل] پ [١٤ البرج] [البروج] پ [١٥ أول... الأحد] پ* [١٦ أيام... أزمان] [أزمان] پ [١٦ آخر] [أحد] د [١٦ الدنيا] [الدني] د [١٧ وتعالى] [وتعلّوا] د [١٧ جدّه] [حده] د [١٩ علة لليل] [علة للليل] پ، «علة الليل» د [١٩ علة للنهار] [علة النهار] د [٢٠ الشمس] - د [٢٠ القُرص] [العرض] د [٢٠ نارًا] [نار] د [١ الهواء] [الهوي] د [٢ فكان] [وكان] پ.

ثم خلق القمر في الثور، وجعله علةً لليل. وذلك أن الليل يكون بظهور القمر في الجوّ ووقوع شعاعه على وجه الأرض، كما أن النهار يكون بظهور الشمس في الجوّ ووقوع شعاعها على الأرض.

فلما جرت الشمس في الكبش والقمر في الثور، كان ذلك أول أيام الدنيا ولياليها. وكان ذلك النهار الذي ظهرت فيه الشمس، وجرت يوم الأحد أول البرج الذي جرت فيه برج الكبش. وكان أول أزمان الدنيا الربيع، كما أول أسنان الإنسان بين الصبا، وأول طبائعه الدم، وهما منقسمان مناسبان مجانسان لأول أزمان الدنيا، وهو | الربيع. وكما أن الشتاء آخر أزمان السنة، وهو منقسم لآخر البروج ودبر الفلك؛ فكذلك انقسم له من الطبائع البلغم، ومن الأسنان سن الشيخ، الذي هو آخر الأسنان.

فلما كان أول أيام الدنيا الأحد (وهو يوم الشمس، وهو أول يوم الدنيا وآخرها)، كانت ليلة الاثنين (الذي هو ثاني العدد) للقمر. فصار النهار نهارًا، وهو واحد أيام الدنيا بظهور الشمس على وجه الأرض وقطعها درجةً من برج الكبش؛ وصار الليل ليلاً، وهو الاثنين، التي كانت أول ليالي الدنيا بقطع القمر لمنزلةً من الثور، وهي الثريا.

ثم كان الاثنين، وهو ثاني العدد، لأنه اليوم الثاني من الدنيا (ولذلك سُمي «اثنين»). وهو منقسم للقمر، الذي هو ثاني الكواكب.

ثم الثلاثاء، وهو اليوم الثالث من الدنيا؛ وهو منقسم للأحمر، الذي هو ثالث الكواكب.

ثم الأربعاء، وهو اليوم الرابع من الدنيا؛ وهو منقسم للكاتب.

ثم الخميس، وهو الخامس من الدنيا؛ وهو منقسم للمشتري، الذي هو خامس الكواكب.

ثم الجمعة، وإِنما سُميت بجمعة لاجتماع المكوّنات || والمخلوقات فيها؛ وهو يوم الزهرة.

ثم السبت، وهو اليوم السابع من الدنيا؛ وفيه أصبحت المخلوقات والمكوّنات كاملةً مستويةً، واعتدل الزمان، وكملت خلقة الدنيا وترتيبها ونظامها؛ ولذلك اتخذته أحرار اليهود عيدًا يسكنون فيه — واتخذت النصارى يوم الأحد عيدًا لأنه أول أيام الدنيا؛ وأشار الأحرار من المسلمين إلى تعظيم الجمعة لاجتماع المخلوقات وتكاملها فيها، سببًا ما أتى فيها من الفضل عن الأنبياء، صلوات الله عليهم أجمعين.

١٧ وإِنما... فيها] «فلذلك سُمي "يوم الجمعة" لأن الله ﷻ جمع فيه خلق السموات والأرض» تأريخ ١٥-١٥ ≅ نبلاء ٩٦١ (→ «عن ابن عباس وناس من الصحابة») ≡ هيئة ١٠-٩١٠ (→ «عن ابن مسعود وناس من الصحابة»).

١ علةً لليل] «علة الليل» د || ١ شعاعه] «شعاع الشمس» د، «شعاع الشمس» د || ٣ وكان] «فكان» د || ٥ بين] «من» بد || ٥ وهما] «وهو» بد || ١٧ بجمعة] «جمعه» د || ١٨ واعتدل] «واعتدل» بد || ١٩ اتخذته] «التخذوه» د || ٢٠ النصارى] «النصارا» د || ٢٠ وأشار] «واسار الي» بد || ٢١ فيها] «فيه» بد || ٢١ فيها] «فيه» بد || ٢١ الفضل] «التفضيل» د || ٢١ أجمعين] - د.

3.11 والآن إذ قدّمنا من النتائج الفكرية والمقدمات العقلية والشواهد البرهانية والقوانين الطبيعية بعض ما يكفي به لمن فكّر فيها وتدبّر معانيها — فلننصف الآن الطبائع الأربعة، وأمراضها، وما يؤثر منها، وعلاج تلك الأمراض. ولننصف، إن شاء الله، أزمان السنة الأربع وما يجوز فيها من الأغذية والمداواة وسائر التدبير الذي يُحيط بالإنسان، باختصارٍ وإيجاز. ثم نتبع ذلك بالعلاج | النافع الموجز على أحسن وجوهه^{٣٣} ٥ وأفضل مناهجه،^٤ إن شاء الله عزّ وجلّ، وهو الموفق للصواب^٥.

١ والآن إذ قدّمنا [«ولان ما قدّمنا» پ || ٢ يكفي] «كفا» د || ٤ الموجز [«الموجد» د || ٥ مناهجه] «منهاجه» د،
«مناهجه» د^٥.

4

باب ذكر الفصول الأربعة الزمانية

والطبائع الأربعة البشرية وأمراضها ومداواتها
وما يوافق كل زمان منها من التدبير والأغذية والأدوية

اعلم، وفقك الله، أن طبائع الإنسان، التي هي قوائم جسمه وعماد بدنه، أربع طبائع مقسومة على أقطار الأرض ونواحيها وعناصرها وأرياحها وأزمانها — وكل ذلك مقسوم على بروج الفلك الكبير وأجزائه. ثم وجدناها أيضًا على أسنان الإنسان الأربعة من الصبا والحداثة والاكتحال والشيخ.

4.1

فأول هذه الطبائع

الدم

وهو حار رطب هوائي، خلق من الهواء، وهو أصله وعنصره. وبيئته: الكبد والعروق. وسلطانه: في مقدم الرأس وسطح البدن. ومذاقه حلو. وهو نسيب الروح، وحليف الطبيعة، وشقيق النفس. وقالت الفلاسفة إن الدم الجيد النقي للروح مثل الدهن الصافي للسراج.

وهو يُشبه من الرياح: الصبا (وهي || القبول)؛ ومن النواحي: الشرق، الذي منه تهبّ القبول (وهي الريح الشرقية)؛ ومن البروج: الربيعية؛ ومن العناصر الأربعة: الهواء. وله من الأسنان: بين الصبا؛ ومن الأزمان: الربيع.

وكل ما كان طعمه حلوًا وهو في طبعه حار رطب، فهو يُنميه ويزيد فيه: كالتين والعنب والزبيب والحمص، ولحم الكباش والوز، والشراب الحلو الأحمر الغليظ القوام، ومخ البيض، والحص والجوز. وينفع من هيجته كل ما كان باردًا يابسًا؛ وكل ما كان في مذاقه مرًا أو حامضًا، فهو نافع لصاحب الدم وموافق في زمان الربيع: كالرمانين والتفاحين والإجاص والكمثرى المرّة والغتاب، ومص ماء السفرجل، والرغزور والتبق، وخبز الشعير وحشوه، وثمر الثوت، والبقلة الحمقاء والبانينة، ولحم الجداء والفراريج، والباقل، والكبر المنقوع في الخل، وحسو الخل، والأطعمة المخللة، والشراب المرّ الرقيق، ونقيع الزبيب الأحمر — صالح في الربيع، وموافق لأصحاب الدم المحترق.

٥ وأزمانها] «وزمانها» پ د || ٩ وسلطانه] «سلطانه» د || ١٠ نسيب] «نسيب» پ || ١٠ وشقيق] «شقيق» د || ١٢ يُشبهه] «شبه» پ د || ١٥ وكل ما] «وكلمًا» پ د || ١٥ حلوا] «حلو» پ، «حلو» د || ١٥ وهو] «وهي» پ || ١٥ طبعه] «طعمه» پ د || ١٦ الكباش] «الكبد» د || ١٦ والوز] «والوز» د، «والوز والوز» پ || ١٦ ومخ] «مخ» پ || ١٧ كل ما] «كلمًا» پ د || ١٧ وكل ما] «وكلمًا» پ د || ١٧ مر] «مر» د || ١٨ والكمثرى] «والكمثرى» د || ١٩ الحمقاء] «الحمتى» پ، «الحمقا» د || ١٩ الجداء] «الجدي» پ، «الجدي» د || ٢٠ والباقل] «الباقلا» د || ٢٠ المر] «المر» د.

٢٠ والشراب المرّ] «وشراب مرّ بين الخلو والحامض» لسان ٧ ٤٠٩ ١٦-١٧ (→ الليث).

ب^{٣٤} ط وشراب الرمانين || والتفاحيتافع لمن هاج عليه الدم واحترق مزاجه، وصالح للأحداث في زمان الربيع، وللناقيين من الأمراض، ولمن ضعفت قوته ولم يستطع على إخراج الدم. ولمن استحرَّ كبدُه من التعب وانتشر الحرُّ في بدنه وعَلَّتْ طبائعه من قِبَل الكيفيّة الصفراويّة: السكّنَجيين الأُصوليّ المعمول بالإذخر والورد من أحسن الأشياء لذلك، ^٥ إن شاء الله ^٥.

وهذا حين نصف لك

4.1.2

تركيب صاحب الدم وخلقته

يكون معتدل الشَّعر في السواد، مائلًا إلى الحمرة والسَّباطة؛ أحمر اللون، لجم البدن، رطب الأعضاء، قويّ التركيب، كثير الشَّعر، حسن الخلق، كثير الطَّرب والضحك، شديد الشهوة في النساء والجماع، كثير الإنشاط، قليل الصَّجَر، حسن النوم، زهُود في الأكل (وربما كان أكْله معتدلًا)، ويشتهي من الأطعمة الحامض والحلو والمز.

وتكون أمراضه في زمانه وقسمه (أعني الربيع) — وقد يمرض أيضًا في الخريف، لأنَّ الخريف يُعفن الدم ويُفسده. ^{٣٥} ب || وتكون أمراض صاحبه ما أرسَم لك، وهي هذه الدلائل الموصوفة. فمن وجد منها شيئًا، فليفصد إن ساعدته القوَّة والزمان والعادة؛ فإن لم تُساعد، فليبتدأ بما أنا واصفُه لك في المستأنف ^٥ إن شاء الله ^٥.

٢ يستطع] «يستطيع» د || ٢ استحرَّ] «استخن» ب || ٣ السكّنَجيين] «السكّنَجيين» ب || ٣ بالإذخر] «بالاذخر» ب د || ٤ من] «في» ب || ٧ مائلًا] «مايلي» د، «مايل» ب || ٧ والسَّباطة] «وسلمسابتة» د || ٧ لجم] «لجم» د || ٩ الإنشاط] «الانساط» د || ٩ معتدلًا] «معتدل» ب د || ١٠ والمز] «المرز» ب، «المز» د || ١٣ فليفصد] «فليفتصد» د || ١٣ فليبتدأ] «فليبتدأوا» ب.

٩ زهُود] «وَالزُّهُودُ: الكَثِيرُ الزُّهُدِ» تئليث I ٢٨٤ .

4.1.3

وهذا حين نصف الدلائل والأمراض الدموية

- من ذلك ثَقَلُ الجبهة، وَضَرْبَانُ الصُّدْغَيْنِ، والحمرة في الوجه، والبَثْرُ والتَنْفُطُ، والرَّمَدُ الحَارُّ بحرقَةٍ وقذى
وَيَقْلُ ونَفْحُ وضربان، والغشاوات الحارّة على البدن، والحمى المطبقة، والثقل !! في الأعضاء، والاعتماد
على القلب، وقلة الأكل، وزَعَقُ الفم، والجوف المنتفخ، والأنبات المتعقنة الآخذة بالحزّ والوَعَكُ،
وَزَحِيرُ الدم، والحنازير في العنق، وقرحة البشر، والقَوَائِي، والإكلة الحمراء، والداحس، والشَّوْصَة اليميني،
والرُّعَافُ، وداء الأسد (وهو الجذام الأحمر المتجدد، الآخذ بالوَعَكُ ونَثْفُ الشعر وتجعد السخنة)،
وكثرة النوم ورؤية التفجير في النوم والدماء والقُتْلَاءُ والألوان الحمر، وحمرة البول وغلظه، وقوة ضربان
العزق وثقله وامتلأته.
وقد تبيح هذه الأمراض والأعراض من الدم غالبًا أو مغلوبًا — ومعرفة الغالب من المغلوب: بالنظر
من البول ومجسته العروق.

فصل

- ويكون صاحب أمراض الدم طيب النفس، واسع الصدر، قليل الضَجْر، كثير الهديان في مرضه. ويجد
غمًا على فؤاده وليثًا في لسانه. ويقلّ عطشه، ويندا فوه، ويكثر عرقه؛ ويجد في فمه طعم الحلاوة. وتدمع
عيناه ويحمرّ لونه. ويشتهي المحوضة والعذوية والبرودة والملوحة — فهذه صفة (صاحب) أمراض الدم.
فإذا رأيت ذلك، فأخرج من الدم على قدر القوة، واعتمد على الغذاء اللطيف المعتدل المائل إلى البارد،
وجتّب الأغذية المحرقة والأشربة الحارّة المحرقة المائلة إلى التعفّن.
وكذلك يجب لصاحب ! الدم (لمن كان حدثًا قويًا، وكان جسمه غليظًا ممتلئًا، وكان حارّ المزاج كثير
الاحتراقات) أن يفعل في زمن الربيع مثل الذي ذكرناه، ويعتمد على الأغذية المائلة إلى البارد، ويشرب

١ نصف] - د [٣ وقذى] «وقدى» پ، «وقدى» د [٤ والغشاوات] «والعشاواه» پ [٥ وزَعَقُ] «وزعف» پ،
«وعى» د [٥ والجوف] «والجرب» د [٥ والأنبات] «الابيات» پ [٦ البشر] «السر» پ، «السر» د (؟) [٦
والداحس] «والداحسه» د [٦ اليميني] «المننا» پ [٨ التفجير] «المجير» پ، «التعجير» د [١٤ فوه] «فوته» د،
«فه» پ.

٣ والتنفط] «فأما التنفط، فإنه يخرج في البدن فإخات فيها ماء رقيق شبيه ما يحدث من حرق النار» تقاسم ٥٩٦-٦
[٥ والوَعَكُ] «وهو الحمى، وقيل: ألثها [...] وقيل: أذى الحمى ووجعها في البدن [...] الألم يجده الإنسان من شدة
الثعب» لسان X ١٥١٤-٢٠١٥؛ الموطن [٢٣٠٦، ٣٤٥٩] [٦ وزحير] «الرَّحِيرُ: تَطْيِيعُ فِي البطن يُمَشِي دَمًا» لسان IV
٢٣٣٢٠.

من الأشربة كالسكنجيين والرمانيين؛ ويُفَجَّر (إن ساعدته القوة مع سائر الدلائل)، ويكون شربه قبل
 ٣٦٦ ب التفجير بخمسة أيام: شراب || الإحاص المسهل، أو شراب الشَّهْتَرَج، أو شراب الأفسنتين المسهل،
 أو شراب السكنجيين المسهل، أو البُحْتَج الصغير، أو حب البنفسج، أو حب المرجان، أو حب
 الأيسون الأوسط.

- ٥ فإن كان مع الدم كيموس غليظ بلغائياً أو سوداوي، فلا يُفَجَّر حتى يتعرق في الحمام. ويشرب وزن درهم
 من ترياق الفأزوق أو ترياق العزيز أو الشُّكْرَانَايا، أو الفُلُونِيَا مَزُوجًا بشراب الأفسنتين أو السكنجيين
 أو شراب الأصول أو الشراب الطيب.

وكذلك لا ينبغي للمشايخ، ولا للسوداويين ولا للمكتهين ولا للبلغميين ولا للمبرودين ولا للمتودعين
 ولا لأصحاب الطحال وأصحاب الشُّدِّد والبهر والرياح، أن يفتصدوا حتى يتعرقوا في الحمام ويشربوا من
 ١٠ الترياق على ما وصفناه، ويلزموا هذا التدبير المحكم على ما حدناه^{١٠} إن شاء الله.

وينبغي للمكتهين والمشايخ^{٥٠ د} || وكل من كانت في جسمه كيموسات سوداوية وعفونات | بلغمية وفصول
 ٣٦٦ ب غليظة ألا يُخْرَج الدم حتى يُنْقِي جسمه من العفونات والكيموسات الرديئة قبل ذلك بسبعة أيام أو ستة
 بمثل حب التريدي أو حب الجوهرى أو الأصطاخيقونات أو معجون الغاريقون أو مطبوخ الأفتيمون
 باللوغاد^{١٠} إن شاء الله.

- ١٥ ودلائل البلغم والسوداء لا تخفى على كل ذي تمييز بالعروق والماء وسائر الأحوال والدلائل البرهانية.
 وأما ما يصلح الدم إذا لم يمكن إخراجها، فمن ذلك أن يؤخذ الهليلج الهندي والبلبلج والأملج: من كل
 واحد نصف أوقية. ومن التمر الهندي وورق الورد ونوار الشاهترج والهندياء ولسان الثور: من كل
 واحد ثلث أوقية. ومن الإحاص والعُتَاب: من كل واحد عشرون حبة. ومن الزبيب الأحمر المنزوع
 الحب: ثلث أواقي. يُطْبَخ الجميع في ما يغمره من الماء حتى يذهب الرُّبْع، ويُصْفَى ويشرب منه جزآن
 بجزء من شراب السكنجيين الشُّكْرِيَّ أو جُلَّاب أو رمانين، إن شاء الله.

١ ويفجر [يعجر] د || ٢ التفجير [التعجير] د || ٢ الشَّهْتَرَج [الشهرج] پ || ٣ المرجان [المرجان] پ || ٥ كيموس
 ... سوداوي [كيموسا غليظا بلغائيا او سوداويا] پ، «كيموسا غليظا بلغائيا او سوداويا» د || ٥ يفجر [يعجر]
 د || ٦ ترياق ... العزيز [ترياق العرف] د، «الفاروق او ترياق العرر» د* || ٦ الشُّكْرَانَايا [الشكرنايا] پ ||
 ٨ للسوداويين [السوداويين] پ، «السوداوي» د || ٨ للمكتهين [المكتهين] د || ٨ للبلغميين [للمبلغمين] د ||
 ١٠ حدناه [جرناه] پ، «حرناه» د || ١١ للمكتهين [للمتكتهين] د || ١١ وعفونات [ع] د || ١٢ ألاً [ان لا]
 پ || ١٢ العفونات [العفونه] پ، «العفونات» پ* || ١٣ التريدي [التريدي] پ، «التريدي» د || ١٣ الأفتيمون
 [الاختيمون] پ، «الاختيمون» د || ١٤ باللوغاد^{١٠} [باللوغايه] پ، «باللوغايه» د || ١٥ لا [لا] پ || ١٥ تمييز
 «تميز» د || ١٧ التمر الهندي [للمر هدي] پ || ١٧ الشاهترج [الشهترج] د || ١٧ كل [كل] - د || ١٩ ثلث أواقي [من
 كل واحد ثلث اواقي] پ، «ثلث اواقي» د || ١٩ في ما [فيما] پ، «في ماء» پ* || ١٩ جزآن [جزان] پ، «جزان»
 د || ١ بجزء [بجزو] پ، «بجز» د.

فصل

4.1.5 ومَن أراد أن يستشفي بهذا الدواء، إذا وجد في بدنه احتراقات وحرّ ماءٍ وحدّة صفراء، فليأخذ على هذه الصفة: فإته || يُلصَح الدم الفاسد، ويُسكّن الهائج، ويُخرج الصفراء المحترقة. وذلك أن يؤخذ من هذا المطبوخ ستة أواقي^٤ ويُضاف إليها أوقية من شراب بنفسج سكّريّ أو رمانين. يُجَلّ فيه وزن نصف درهم سقمونية، ويشربه على استيحاءش، إن شاء الله.:

ب ٣٧
د ٥٠ ط
٥

٢ وحرّ ماءٍ [«وحرماً»^٥، «وحرماً»^٤ أواقي] «أواقي»^٥ ب د || إن شاء الله] - د.

فصل

ثمة الطبيعة التي تلي الدم

4.2

وهي الصفراء

4.2.1 والمرة الصفراء هي الطبيعة الثانية من طبائع الإنسان: هي حارة يابسة نارية، خلقت من النار، وهو
 ٥ عنصرها. ومسكنها: في المرارة. ومذاقها مُرّ. وسلطانها: في اليافوخ والجانب الأيمن من البدن. ولها من
 النواحي: القبلية؛ ومن الرياح: الجنوب؛ ومن البروج: النارية؛ ومن أسنان الإنسان: الحدائث. وزمانها: زمان
 القَيْظ (وهو الصيف)، وفيه هيئتها.

وكل شيء حارّ يابس أو حادّ أو محرق أو مالح، فهو يهيجها. وينفعها كلُّ بارد أو عذب أو حامض
 أو مُرّ، كالنقّاح المرّ، والإجاص، والقُرْع، والرمّانين، وكشك الشعير وخبزه، والبقلة الحمقاء واليمانية،
 والإجاص، والعنب المرّ، والخبيز، وبقلة الزيباس، ولحم الجدي؛ ولا بأس في التهرّي من الحوت^{٣٧}
 الثابت على الرضراض والرمل.

وينفعها من الأشربة: شراب القرع والإجاص، والسكنجين السكرّي، والبنفسج، إن كان في الطبيعة
 يُئس. وإن كان فيها انطلائاً مع ضعف القوة والكبد والمعدة، فشراب التفاحين أحسن عند ذلك،
 والجلاب، وشراب السفرجل وزّته، والرمّانين، وشبه ذلك من الأشربة التي فيها مع التبريد قبض
 ١٥ وعفوصة ودبغ للمعدة.

فصل

4.2.2

٥١ د والذي يُوافقها من الأقراص: مثل أقراص الكافور والطباشير وأقراص الورد وأقراص البنفسج وأقراص
 الصندل. ومن الأدوية المسهلة: البُخنج الأصغر والأوسط، والأينسون الأوسط، وحبّ الذهب
 الأصغر، وحبّ المرجان، وحبّ البنفسج. وبالجملة: فإنّ الأدوية التي تنفع للصفراء من المسهلة وغيرها،
 ٢٠ فكلُّ ما كان بارداً رطباً — وكذلك الدم أيضاً تنفعه الأشياء الباردة اليابسة والمرة.
 ٣٨ ب وقالت الحكماء إنّ كلّ ما نفع من الدم، نفع من المرة الصفراء؛ وكلّ ما نفع || من المرة الصفراء، نفع من

٢١-٥٥٣.١ وقال... البلغم] زاد BK ١٠٦-٥١٦ (→ جالينوس).

٦ زمان] «ومن» ب || ٨ أو محرق] «محرق» ب، «او» ب* || ٩ الحمقاء] «الحقّي» ب، «الحمقا» د || ١٠ الزيباس
 «الرباس» ب، «الرباس» د || ١٠ الجدي] «الجدي» ب || ١٥ للمعدة] «المعدة» د || ١٦ فصل] - د || ١٨ البُخنج
 «كالبخنج» د || ١٩ الأصغر] «الأصغر» ب || ٢٠ فكلُّ ما] «فكلما» ب د || ٢٠ أيضاً] «أيضاً» د || ٢٠ تنفعه] «نفعه»
 ب، «ينفعه» د || ٢٠ والمرة] «المرة» د.

١٠ والخبيز] © خبيز / خبيزة DAA ١٤٩ {XBZ}.*

الدم؛ وكلّ ما نفع من البلغم، نفع من المرّة السوداء؛ وكلّ ما نفع من المرّة السوداء، نفع من البلغم — لأجل المناسبة الكائنة بينها في الطبيعة والمزاج.

4.2.3

وهذه صفة أمراض صاحب المرّة الصفراء وما يهيج منها

- ٥ من ذلك حمى الغبّ، والبُرسام الحارّ، والقَلَق والتخير في الرأس، والصُّدَاع في اليافوخ في الجانب الأيمن من الرأس، والعلّة المعروفة بالحمرة، والأكّال اليابس، والرمد اليابس مع حدّة الضربان والوجع، وحرقة البول وعسرته، والقولنج المعطّش، ومرارة الفم، والعطش القويّ والغثيان والشُّقَاق، والبُرسام الحارّ، والسَّغْفَة، والنَّهَق الأغر (يعني !! الحكّة)، والبطن الدَّرِيع، والماء الأصفر والحزّ، وداء الكلب، والسُّعال^{٥١٥}، اليابس يطرح منه بلغمًا لونه إلى الغبرة، والطحال، والسُّلاق، ووجع الخاصرة اليمنى، والأكلة السوداء، وفساد المعدة، وقلة الأكل، واليرقان.
- ١٠ ويكون صاحب هذه الأمراض يتأذى بالحزّ ويتنفع بالبرد: والبارد كلّهُ | نافع له من الأغذية والأشربة وسائر التدبير، ^٥إن شاء الله.
- ١٥ ويكون صاحب هذه الأمراض كثير الضحك في مرضه، سريع الغضب والضجر والبكاء والقلق. ويأخذه غمٌّ شديدٌ وحرٌّ وعطشٌ وبيسٌ في فيه، وخشونةٌ في لسانه وحلقه، ويبس بطنه وخياشمه. ويجد طعامه فيه مُرًا، ويجد احتراقًا؛ وتقلّ شهوته للأغذية، وبشتمه الملوحة والحوضة والعدوبة والبرودة. ويتقيأ مرّةً صفراء، ويجمّر لونه.

٥ في الجانب [«والجانب» د || ٨ الدَّرِيع] «الدَّرِيع» بد || ٩ والطحال [«والطحال» د || ١١ يتأذى] «ينادي» پ || ١٣ والبكاء [«والدكا» پ || ١٤ ويبس] «وبس» پ || ١٥ وتقلّ [«نقل» پ.

هذه صفة

4.2.4

تركيب صاحب الصفراء

يكون حارّ البدن، ضئيلاً نحيفاً، كاسف اللون، قليل الأكل، أصهب الشعر، بيّن العروق، كثير الضجر، سريع الغضب والرجعة؛ طيّاش، كثير الكلام، شديد الشهوة في النساء، قليل الماء، ذكيّ حادّ لطيف محافظ، يقظان قليل النوم طويل السّهر. ٥
وتكون أمراضه في الصيف، الذي هو حارّ يابس مجانس للصفراء.

فصل

ثمة الطبيعة الثالثة من طبائع الإنسان

4.3

وهي المرّة السوداء

المرّة السوداء ١١ في مزاجها باردة يابسة ثقيلة أرضية كدرة ١١ مظلمة؛ خلقت من الأرض، وهو ٥١١
عنصرها. ومسكنها: في الطحال. ومذاقها حامض. ولها من البروج: الترايبية؛ ومن النواحي: الغرب؛ ٢٣٩
ومن الرياح: الدبور (وهي الغربية). ولها من الأسنان: الاكتهال؛ ومن الأزمان: الخريف — والخريف 4.3.1
بارد يابس من شكّلها، كما أنّ الصيف حارّ يابس والربيع حارّ رطب.
وهيجانها وقوتها: على المكتهلين وفي فصل الخريف. وأمراضها: الماء الأسود، وظلمة العينين، ووجع ١٥
القفا والجانب الأيسر من الرأس، ووجع الخاصرة اليسرى من ریح السوداء والبلغم، والمخلوليا (وهو ثبته
العقل وذهابه)، والصرع في نقصان الأهلة، والمملكونية في الساقين، والسرطان، وداء الفيل، والدوالي،
والبهق الأسود، والوسواس، وحديث الثّقس، والوخشة، والفرع بغير شُبّهة، وتوقّع الكأبة، والحزن
والبكاء، وحُمى الربيع، والقولنج اليابس مع عدم العطش، وحَبْس | البول، وأرواح البواسير، والتقطيع ٢٣٩
في الأمعاء، والزحير، وارتفاع الطّمث. وقد تهيج هذه الأوجاع غالباً أو مغلوباً؛ ويكون صاحب هذه
العلل تهيج عليه بالليل، ولا ستيماً في الخريف. ٢٠

٣ ضئيلاً [«ضبيلاً» پ، «ضبيلاً» د ٤ طيّاش] «طيّاش» پ د ٤-٥ ذكيّ... محافظ [«ذكيّ حادّ لطيف محافظ» پ،
«ذكيّ حادّ لطيف محافظ» د ٥ يقظان] «يقظان» پ، «يقظان» د ١٠ المرّة [«المرّة» د ١١ الطحال] «الطحال»
د ١٤ المكتهلين [«المكتهلين» د ١٥ والمخلوليا] «والمخلوليا» د ١٥ وهو [«هو» د ١٦ والمملكونية] «والمملكونية»
پ، «والمملكونية» د ١٧ وحديث [«وحديث» د ١٧ بغير شُبّهة] «بغير سببه» پ، «يعين شهة» د ٢٠ تهيج
«تهيج» پ، «تهيج» د.

ويكون صاحب هذه الأمراض السوداوية كثير الشكوت، كثير الهم. ويجد يُبَسًا وخشونةً في صدره وحلقه ولسانه من غير حرارة. ويجد طعم الحموضة في فيه، لأنّ مذاق السوداء حامض. ويكون لونه إلى الخضرة وإلى الكمودة. ويشتهي الحلاوة والحرارة والحرافة والدّسم. ويجد قترّةً وأبردّةً، ويستحلي النار. وينفعه كلّ حارّ يابس من الأغذية والأشربة والأدوية والتدابير والمعجونات والترياقات والجوارشونات والإيارجات والمطبوخات. وأحسنُ الأشياء: إيارج اللوغاديا، وإيارج التيادريطوش، وإيارج روفش، وإيارج جالينوس: إذا شُرب من أحدها خمسة دراهم بوزن نصف درهم سقمونية محلول في ستة أواقي طبيخ الأفيون، إن شاء الله.

ويُستعمل القيء بعد الامتلاء بالفُجّل المقطّع والسكنجيين. ويُتغرغر بإيارج الفيقرا وعاققرحاً مع سكنجيين عسليّ؛ ويُتغرغر أيضاً بقدر مثقال صبر، ويُخلط بشيء من سكر مسحوق بماءٍ مطبوخ بأصول السوسن.

4.3.2 صفة صاحب السوداء

يكون صاحب السوداء آدم اللون، ظلم الوجه، ملوّن التركيب، ظاهر العروق والعصب، غليظ الطبيعة، صلب البدن، مكتنز الأعضاء، واسع الجبهة، أسبط الشعر أسوده، كبير الرجلين عظيم المنكبين، صبور على التعب، كثير الأكل قليل العطش، طويل الإطراق والفكر والصمت، قليل الشهوة في النساء، أيضاً للفضول، تاركاً للطيّش، ناظرًا في العواقب، قليل الضحك، حسن الاتقباض، محبّ في الحكم، تائق إلى العلوم، قليل الحفظ. ويتأدّى بالأشياء الباردة، ويشتهي الحلاوة والحرارة والحرافة والدّسم، وينتفع بذلك.

٢ حامض [حامضه] پ، «حامصة» د || ٣ الكودة [الكود] پ || ٤ والتدابير [والتدابير] پ، «التدابير» د || ٤ والجوارشونات [والجوارشونات] د || ٥ روفش [روفش] پ د || ٦ وإيارج [او إيارج] پ || ٦ أحدها [اعدام] پ || ٦ خمسة دراهم [وزن حلم] د || ٦ نصف درهم [صم] د || ٦ أواقي [اواق] پ || ١٠ السوسن [السوسن] د، «السوسن» پ || ١٤ صبور [صبور] پ د || ١٤ الإطراق [الاطراف] پ || ١٥ أيضاً للفضول [افضا للفضول] د، «أيضاً للفضول» پ || ١٦ محبّ [محب] پ، محبّ د || ١٦ تائق [تابق] د، «تابق» پ. ١٧ ويتأدّى [ويتأدّى] پ، «ويتأدى» د.

١٢ آدم [والآدم من التاس: الأشمز] لسان XII ١١١ ١٥ || ١٤ طويل الإطراق [وكان يجلس إلى سفیان فتى كثير الفكرة، طويل الإطراق] عقد II ١١١ ٢، «والإطراق: الشكوت عامة [...] الأطراق: أن يُقْبَل بصره إلى صدره ويشكّت ساكنًا» لسان X ١٢١٩ ٦-١ || ١٥ أيضاً [والأبض: شدّ البعير بالإباض، وهو عقال يُنْشَب في رُسْغ يديه وهو قائم، فيُنْشَد بالعقال إلى عُضديه ويُشَدُّ] تهذيب XII ٨٩ ١٠-١٢ || ١٦ تائق [التّوق: نُؤوُق النَّفْس إلى الشيء، وهو نزاعها إليه] لسان X ٣٣ ١٥-١٦.

وأما الطبيعة الرابعة من طبائع البشر
وهي البلغم

ب. ع. ط

4.4

د ٥٣ وبالبلغم في طبعه بارد رطب مائيّ، خُلِقَ من الماء والماء عنصره، وهو يُغذيه ويُبنيه. ومَسْكَنُه: الرئة. 4.4.1 وسلطانه: في الصدر والمفاصل. ومجتمع أُنْفَالِه: في الصُّلْب (وهو الخام). ومذاقه عذب.

٥ وله من العناصر الأربعة: الماء، الذي هو بارد رطب؛ ومن الجهات: الجوف؛ ومن الرياح: الشمال (وهي الريح الشمالية). وله من أسنان الإنسان: الشيخ، وفيه يستحکم ويبيح؛ ومن أزمان السنة: الشتاء، الذي هو بارد رطب ماويّ — وهو آخر أزمان السنة وأحدها، كما أنّ البلغم آخر الطبائع. وله من الأسنان: الشيخ، الذي هو آخر الأسنان.

٢ وهي [فهي] د || ٤ أُنْفَالِه [أُنْفَالِه] پ، «أُنْفَالِه» د || ٧ ماويّ [ماويّ] د || ٧ وهو [وهو] د || ٧ أزمان [زمان] «
پ || ٧ وأحدها [واخرها] پ.د.

وهذا حين نذكر البرهان، وذلك أنّ أزمان السنة:

4.4.2

الربيع

وهو ثلث شهور: أبريل ومايّه ويُونيّه. وله من البروج: الكبش والثور والتوءمان؛ فأوّلُه بنزول الشمس برأس الكبش، وآخرُه عند حلول الشمس بآخر التوءمان. والربيع حارٌّ || رطب هوائيّ. وهو أول الأزمان وأبهجها وأصفاها وألذها عند النفس والطبيعة. وفيه تظهر الأزهار، وتورق الأشجار، وتبدئ الثمار، وتغرد الطيار، وترتفع البحار، ويسترسل الماء في الأنهار، وتمتدّ الأرض، وتدبّ الهوامّ، ويتميح الحيوان، ويجري الماء في العود والدم في العروق. وله من الطبائع: أحسنها وأجلها وألذها عند الطبيعة، وهو الدم. ومن أسنان الإنسان: الصبا، الذي هو أول الأسنان وأبهجها وألذها عند النفس وأفرجها.

4.4.3

شهر الذي يليه

الصيف

وهو حارٌّ يابس نارّي. وجمليّه ثلث شهور: يوليّه وأغشت وأستنبر. وله من البروج: السرطان والأسد والعذراء؛ وأوّلُه يكون بنزول الشمس برأس السرطان، وتماؤه بنزول الشمس بآخر العذراء وتعلّقها برأس الميزان. وله من الطبائع: الطبيعة الثانية، وهي الصفراء. ومن الأسنان: سينّ الحداثه، الذي هو سنّ النّباهة والحِدّة والصّرامة والكفاية والشّجاعة والقوّة. وكذلك للصيف، إذا دخل على العالم والأبدان، سَطوّة وقوّة وسلطان وتحليل وتأثير وإيهال. وكذلك يفعل في الثمار: يُنضجها؛ وفي الخضّر: يُيبسها؛ وفي المياه: يُجفّفها. وفعلُه نظيرُ لفعل النار التي هي قسّمه وطبعه — وكذلك سلطان الصفراء في الأبدان نظيرُ السلطان الصيف في العالم.

٣ ثلث [«ثلث» پ، «ثلثه» د || ٣ بنزول [«نزول» پ || ٦ وتبدئ] «وتبدى» پ، «وتبدى» د || ٦ وتغرد [«وتغرد» پ، «وتغرد» د || ١٢ ثلث [«ثلث» پ، «ثلث» د || ١٣ بنزول [«نزول» پ || ١٥ هو] «هي» پ || ١٦ للصيف [«الصيف» د || ١٧ يُيبسها] «بسها» د || ١٨ التي [«الذي» پ || ١٨ هي] «هو» پ || ١٩ الصيف [«الصيف» پ.د.

ثمة الخريف

4.4.4

وهو يلي القَيْظ، وهو الزمان الثالث من أزمان السنة. وهو بارد يابس أرضي. وله من الطبائع: الثالثة الوسطى، وهي السوداء؛ والسنة الثالثة الوسطى، وهو سنُّ الاكتهال. وجملته ثلاثة أشهر. وله من البروج: الميزان والعقرب والقوس؛ فأوله يكون بزول الشمس (— —) بآخر القوس. ٥

وذلك أن الخريف هو الفصل الأوسط من أزمان السنة، وفيه تجتمع وتنأهى فوائد السنة، كما أن ٥٤٤
الاكتهال (وهو سنُّ الأربعين إلى الخمسين) فيه يجتمع العقل والأدب والعلم والتجربة !! — من بعد هذا السنُّ يُدبر الإنسان وتضمحلّ قواه حتى يردّ إلى أرذل العمر، فافهم.

٥٣٥ فليس بعد هذا || الزمان (وهو الخريف) إلا الشتاء، الذي هو آخر الأزمان. وتكمل السنة وتنقرض، ثم تبدأ سنة جديدة. وكذلك ليس بعد الشيخ (الذي هو السنُّ الرابع من أسنان الإنسان، وفيه تُنور ١٠
طبيعة البلغم) إلا الانقراض والذهاب؛ لأنَّ البلغم منقسم للمشاخ وهو الغالب عليهم، وهو منقسم من الأزمان الأربعة للشتاء، الذي هو آخر السنة وانقضاؤها. وكما أن لا تجد شيئاً خامساً للإنسان ولا طبيعة خامسة ولا زماناً خامساً في العام، كذلك لا ترجح في نفسك، أيها الإنسان، بالخلود والعيش، لا شيئاً إذا دخلت في هذا السنِّ واستحكمت عليك هذه الطبيعة البلغمية المذكورة. فارجع إلى بارتك من ١٥
قبل انقضاء أيامك وانصرام عددك وخلول أجلك. فليس بعد الكمال إلا النقصان، وبعد الارتفاع إلا الانخفاض؛ وكذلك ليس بعد الاكتهال (الذي هو استواء الإنسان وكمالُه) إلا الشيخ والإدبار والنقصان ٥٣٥
والأعراض والأمراض والانقراض. ثم يُنشئكم ﴿خَلَقْنَا آخَرَ — فَتَبَارَكَ اللَّهُ أَحْسَنُ الْخَالِقِينَ﴾ ﴿وَأَحْكَمُ ٥٣
الْحَاكِمِينَ﴾ ٥٣٥

١٥ فليس... النقصان [إته ليس بعد الكمال إلا النقصان] بداية ١٢٩٨٧ (→ عمر بن الخطاب) || ١٧ ثم... الخالقين [→ ﴿ثُمَّ أَنْشَأْتَهُ...﴾ القرآن ٢٣: ١٤ (سورة المؤمنون) || ١٧-١٨ أَحْكَمُ الْخَالِقِينَ] → القرآن ١١: ٤٥ (سورة هود).

٢ وهو [وهي] د || ٢ يابس [«رطب يابس» د || ٣ الوسطى] «الوسطا» د || ٣ الثالث [«الثالثة» د || ٣ الوسطى] «للوسطا» د، — د || ٤ ثلاثة [«ثلاث» د || ٤ والعقرب] — د || ٦ وتنأهى [«يتنأها» د، «تنأها» د || ٨ وتضمحل] «ويضمحل» د، «ويضمحل» د || ١١ إلا [«الي» د || ١٢ للشتاء] «الشتا» د || ١٢ وانقضاؤها [«وانقضاها» د || ١٢ شيئاً] «شيء» د، «شيء» د || ١٣ في العام + «للإنسان ولا طبيعة خامسة ولا زمان خامس في العام كذلك» د* || ١٣ ترجح [«ترجيح» د، «ترجحا» د || ١٥ انقضاء] «انقضى» د || ١٥-١٦ وبعد... الاكتهال] — د.

٢ القَيْظ [«القَيْظُ: صَيِّمُ الصَّيْفِ، وَهُوَ حَاقُّ الصَّيْفِ؛ وَهُوَ مِنْ طُلُوعِ النَّجْمِ إِلَى طُلُوعِ سَهِيلٍ (أَعْنِي بِالنَّجْمِ الثَّرِيَا)» لسان VII ٤٥٦-١٦-١٧.

واعلم، أيها الإنسان: كما أتت الشتاء، إذا دخل، جرت منه الأنداء والمجمود والسُّبُول والأمطار، كذلك أنت، أيها الإنسان، إذا دخلت في هذا السن، يكثر بهرك وشعالك وبصافك ولعابك وسلاستك وتقطيرك وتوههمك وظلتك ونسيانك! وتمطيك وكسلك وتثاؤبك وعجزك وآفاتك وأمراضك. وتنقل قواك، ويجدر جسمك، وتبرد أعضاؤك. ففكر في ذلك واتعظ وبادز إلى الرجعة، وانزجر وانزع إلى الفضائل والمحاسن، واستغفر إلى بارتك ومنشئتك، وارجع إلى ميميتك ومحييك وجاعل الإلهام فيك وواهب العقل لك وباسط الفضل عليك والإحسان إليك، قبل انصرام عددك وانقطاع مدتك. فتنقول: ﴿يَا حَسْرَتًا عَلَىٰ مَا فَرَطْتُ فِي جَنبِ اللَّهِ وَإِن كُنتُ لَمِنَ السَّٰخِرِينَ﴾.

4.4.5

وهذه صفة أمراض البلغم

وما يثمر منه

فمن علل البلغم: السُّغلة الرطبة، والبهير، والنسمة والضيق؛ وذلك أن مسكنه في الرئة، || وسلطانه في الصدر والدماع، وضروره في المفاصل، ومجتمع أفضاله في الصلب، وهو الخام بعينه. ومن أمراضه: الرُّمَّة والخشونة وانقطاع الصوت، وحمى الورد، والورم الرُّخو والغدد والخنزير، والإقشعرا، والإبردة والسلاسة والتقطير، والنسيان، والسُّكات، والسُّببات الكثير، والنوازل ودمع العين، والصرع في زيادة المهلّ وتمامه، وريح السُّبيل، واسترخاء اللِّهامة، والفالج واللُّقوة، والنقرس البارد، والارتعاش، وعزق النِّساء، والرُّكام، والأورام الرُّخوة، والبهق الأبيض، والحصاة، والبطن الدُّريع، والجذام المعروف بداء الحية، وموت الفجأة (وهو أن يتعقد البلغم في مجاري النفس، فيقطع النفس ويمنع الهواء || من الوصول إلى الرئة والقلب، فيموت مكانه فجأة).

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٥٥٥

٦-٧ يا حَسْرَتًا... السَّٰخِرِينَ] → القرآن ٥٦:٣٩ (سورة الزمر).

٢ وسلاستك] «وسلاستك» پ || ٣ وتثاؤبك] «وتثاؤبك» د، «وتثاؤبك» پ || ٣ قواك] «قواك» د || ٤ وتبرد] «برد» پ || ٤-٥ الفضائل والمحاسن] «المحاسن والفضائل الفضائل والمحاسن» د || ٨ وهذه] «وهذا» د || ١٠ والبهير] «الرطبة» د || ١٠ والنسمة] «والنسمة» پ د || ١١ وضروره] «وضروره» د || ١١ أفضاله] «أفضاله» پ، «أفضاله» د || ١٢ والغدد] «والعدد» د || ١٤ والنقرس... والارتعاش] «والارتعاش والنقرس البارد» د || ١٥ الدُّريع] «الدُّريع» پ د || ١٦ فيقطع النفس] د* || ١٧ فجأة] پ*.

١٣ والإبردة] «وفي الحديث: إنَّ البَطِيخَ يقطع الإبردة — الإبردة (كشهر الهمة والراء): علةٌ معروفة من علة البرد والرطوبة تُفتر عن الجماع (وهزتها زائدة). ورجلٌ به إبردة: وهو تفتُّير البول، ولا ينبسط إلى النساء» لسان III ٨٣-٤١.

ويكون صاحب هذه الأعراض كثير النسيان والهديان، وتأخذه القَرَّة ولا يكاد يدفأ، ويعرق عرقًا كثيرًا،
 ويكثر بصافه، وتأخذه غُصَّة في حلقه وصدرة، ويشتكي معدته | ومفاصله، وتأخذه زُكْمَةٌ، ويثقل لسانه^{٤٤ط}
 ويجد طعمًا فيه زاعقًا ومالحًا. ويكون لونه بين الصفرة والبياض. ويكون عديم العطش، ويشتهي الحلاوة
 والحرارة والحراقة والدَّسَم. ويكون بوله مائلًا إلى البياض، وعَرَقُه مائلًا إلى الغلظ والثقل، بطيء الضربان
 والحركة. ٥

وهذه صفة أخلاق صاحب البلغم

4.4.6

وتركيبه

من ذلك أن يكون جسيمًا أبيض رطبًا، قليل الشعر، لين الملمس، كثير الشَّحم، قليل الحمرة والدم،
 رقيق العروق، أسبط الشعر لينه أشقره، ويكون إلى الشَّهولة أقرب؛ كثير البُصاق والسكون، قليل
 الطَّيش والضجر والحركة، ضعيف النفس جبان، قليل الكلام والحفظ، كثير النسيان والبلادة، بطيء^{١٠}
 الجواب؛ قليل الشهوة في النساء (إلا أن تمتزج معه طبيعة الدم؛ فعند ذلك يكون قويًّا على الجماع)،
 فاترًا لئيمًا، حكيماً أديبًا، متودِّعًا.
 يتأذى بالبرد ويستلذَّ الحرَّ، ويصبر التعب والجوع والعطش؛ ويصلح جسمه في الصيف وعند الحرَّ،
 ويستقم في الشتاء وعند البرد.
 والذي يلاومه من الغذاء والدواء والتدبير والشراب: كلُّ ما كان حارًّا يابسًا مسخِّيًا مقطوعًا محللًا، مثل^{٤٩٥}
 الجوارشونات الحارة، والترياقات، والسَّقوفات، واللوعادية، والتبادريطوس، وما أشبه ذلك | من الحارِّ^{٥٥ط}
 اليابس — فافهم. ٥

١ النسيان والهديان [«الهديان والنسيان والهديان» د || ١ وتأخذه] «وتأخذ» د || ٣ ويشتهي [«واشتهى» پ ||
 ٤ بوله] «لونه» پ د || ٤ مائلًا [«مائل» پ د || ٤ مائلًا] «مائل» پ د || ٨ جسيمًا [«جسم» د، «جسمه» پ ||
 ١٠ جبان [«جبان» پ، «جبان» د || ١٣ ويصبر [«ويصبر» پ || ١٤ ويستقم [«ويستقم» د || ١٥ كلُّ ما] «كلما»
 پ د || ١٦ الجوارشونات [«الجوارشونات» د || ١٦ واللوعادية [«واللوعادية» پ، «واللعادية» د || ١٦ والتبادريطوس [«
 والتبادريطوس» پ، «التنادريطوس» د.

- واعلم أن الصفراء والدم طبيعتين متجانستين متفتقتين متناسبتين، ويلائمها من الدواء والغذاء والتدبير كل ما كان باردًا في طبعه وقوته ومُرًا أو حامضًا في مذاقه. وكذلك الربيع والصيف فصلين حارين متناسبين متجانسين في مزاجهما، كما تجانست طباعهما المنقسمة لها من الدم والصفراء. والذي يجوز فيها من التدبير والغذاء: ما كان مائلًا إلى البرد واللطافة؛ ولكن الربيع خاصّة تتغلّظ فيه فضول البلغم ورطوباته وعفوناته، لأنّ البلغم يجتمع في الشتاء ويغلظ مع برد الجو الذي يكتفه ويجمّده ويمنعه من التدوير والتحليل بالعرق وغيره. فإذا دخل الربيع بحرارته ورطوبته، انتشر وذاب وتحرك وجرى من عضو إلى عضو، | ومن مفصل إلى مفصل، ومن جدول إلى جدول — فينبغي للعاقل أن يستعمل إخراجة في الربيع بالأدوية المسهلة المحللة المقطعة، والفراغر، والتعرق في الحما في الأدهان الحارة، ويُداوم شرب الترياق في الحما، والشجزنايا وشراب السكنجبين.
- وكذلك يجب على من أراد أن تدوم صحته، أن يُنقى جسمه في الخريف من الفضول السوداوية والصفراوية المحرقة التي تنشبت في الأعضاء اللحمية والمجاري في فصل القيظ وخارته ومومه. ويستعمل الحما، والترياق الكبير، والأغذية الملطّفة السريعة الامهضام الجيدة الكيموس. ويفتصد في الاعتدال بعقب دخول الحما، وشرب الترياق، والتعرق بالزئبق ودهن البابونج ودهن اللوز. فمن استعمل هذا التدبير وجسمه صحيح، زاد في صحته واعتدل بدنه؛ ومن تولى على هذا التدبير وعمل له وجسمه (غير) صحيح، صحّ من سقمه، وبرئ من ألمه، ورجع إلى صحته، وفاز باعتدال بدنه واستقامة تركيبه.

١ طبيعتين... متناسبتين [«طبيعتين متجانستين متفتقتين متناسبتين» پ د || ٢ كل ما [«كلا» پ د || ٢ ومُرًا] «ومُرًا» پ، «ومرًا» د || ٢-٣ فصلين... متجانسين [«فصلين حارين متناسبين متجانسين» پ د. ٤ تتغلّظ] «تغلّظ» پ، «سلط» د || ٥ يكتفه [«نك ١٠٦٧هـ» پ، «⊗» د || ٧ وجرى] «حرا» د || ٨ المحللة [«المتحله» د || ٩ والشجزنايا] «والشجزنايا» پ، «والشجزنايا» د || ١١ تنشبت [«تنشبت» د || ١١ والمجاري...] - د || ١١ وخارته [«خارته» پ || ١٥ وبرئ] «برا» پ.

٩ والشجزنايا [«الشجزنايا» (وتفسيره «الكثيرة المنافع») إرشاد ١٤٢ ٧-٨؛ > ص ١٠٠٠ «اسم معجون، معناه كثير النجاح وكثير المنافع» *ThesSyr* ٢٥١٩ (± «πολύχρηστος»): (® «صفة السجزنايا» أقراباذين س ٤٣-٤٤-٧ || ١١ وخارته] «وخارّة القَيْظِ وخارته، أي شدته» أزمنة ١٦٥، «وخارّة القَيْظِ (بتشديد الراء) وخارته: شدّة خزّه» لسان IV ٢١١ ١٧-١٨.

5.2 وقال **جالينوس** الحكيم: «من اعتادته الحميات الربيعية || والخنزير والأورام وأوجاع العينين والرمد،
ب^{٤٦} فليشرب البختج الكبير بالسقمونيا، وإبارج اللوغاديا، وإبارج فيقرا؛ فإن لم يستطع عليه، فليشرب
حب التريدي، (أو) الجوهري، أو الأيسون الأوسط، أو الأصطاخيقون العشاري، أو حب الفزفير،
أو دواء المبارك — وليكن ذلك في أول الربيع.

٥ فإذا شرب من أحد هذه الأدوية مرتين واستنقى جسمه من العفونات والملائل والكيوسات الرديئة،
فليفتصد بعد ذلك في أول الربيع، إن شاء الله (وذلك من أربعة وعشرين يوماً من مارس إلى خمسة
وعشرين يوماً من أبريل). فمن فعل ذلك في الربيع، سلم من هذه الأمراض الموصوفة ومن سائر أمراض
الصيف، بإذن الله؛ ومن فعل ذلك في الخريف (وهو العصير) واعتمد على هذا الطريق من التدبير
الحكم، صحَّ بدنه في طول عمره، ولم تُدْر عليه في بدنه علة ولا حوالة ولا زيادة ولا نقصان؛ وإن كان
١٠ في تلك السنة فساداً في الجوّ وطواعين، سلم منها بإذن الله.»

5.3 وقال **جالينوس** الحكيم: «من أراد أن تدوم صحته ويستقيم جسمه، فليُنقِ بدنه بالدواء والفصد | في
ب^{٤٦} الربيع؛ وبالخريف بالفصد والدواء؛ وليعجل الفصد بعقب الدواء — وإن أتبعته بالدواء ثانية، فهو أمُّ
في تعديل الجسم.»

١٥ ويستعمل في الربيع والخريف من الأغذية ما كان معتدلاً لطيفاً سريع الانهضام حسن الكيموس من
الغض والاستحالة المذمومة.

ويتعرق في الربيع في الحمامات الحارة والزراعة الماء، وفي الصيف والخريف في الحمامات العذبة. ويُغيب
الحمام في الشتاء، إلا عند الضرورة؛ فإن كانت ضرورة، ففي اليوم الطيب الجوّ والهواء الشبيه بالربيع.
وليُدَّهن في الصيف بعد العرق بدهن البنفسج أو دهن الورد؛ وفي الشتاء والربيع والخريف، بدهن
الزيتق ودهن الرُّد، أو دهن الفَيْجَن، أو دهن النَّاعْنَدَسْت.

٢٠ وليشرب في الربيع والشتاء والخريف، بعد الحمام، الشراب الأصفر الرقيق، أو السكنجين العُصْلي، أو
الأفاويه المطبوخة بالماء والعسل، والبزور المطبوخة بالماء والعسل: مثل البَسْبَس، والكرويا، والكرفس،
والتَّعْنَع.

١ الربيعية [للربيعه] ب || ٢ فليشرب [فلشرب] ب || ٢ اللوغاديا [اللوعاديا] ب || ٣ التريدي [التريدي] ب || ٣ أو
الأصطاخيقون [والاصطاخقون] ب || ٣ الفزفير [الفزفر] ب. ٥ واستنقى [واستنقا] ب || ٩ حوالة [حواله] ب
|| ١١ فليُنقِ [فلينتقى] ب || ١٢ وبالخريف [والخريف] ب || ١٩ النَّاعْنَدَسْت [الناعندست] ب.

٥ والملائل [وفي الحديث: "لَا تَزَالُ أَلْمَلِيلَةُ وَالضَّدَاعُ بِالْعَبْدِ". المليلة: حرارة الحمى وتوتُّها. وقيل: هي الحمى التي
تكون في العظام] لسان XI ٦٣٠-٨-١١ [العصير] Ⓞ «*aaçir otoñada*» LAPA ١٣٧ {SR}* || ١٩ الفَيْجَن
«فيجن: سذاب البر، ولا يقال للبستاني فيجن لكن سذاب» عمدة ٨٤٥٠ || ١٩ النَّاعْنَدَسْت [نَاعْنَدَسْت] هو
العاققرحا» تلخيص [١٠٠٨].

ويستعمل التسخين في الشتاء في جميع أدويته وتدييره، والتبريد في الصيف. والإسهال والفسد في الربيع والخريف، والحُخْنُ || في الشتاء نافعة جداً إذا امتنع شرب الدواء. وكذلك القيء موافق في الصيف، خاصة لارتفاع المرّة الصفراء إلى فم المعدة.

5.4 وقال جالينوس الحكيم: «ما ينفع من الدم، ينفع من الصفراء؛ وما ينفع من البلغم ينفع من المرّة السوداء. ولم أجد لجسم الإنسان أفضل من التوسط والاعتدال في الحركات والسكون، والنوم واليقظة، وقلة الجماع (إلا في الربيع خاصة لأجل كثرة الرطوبة فيه)، وتزك السرف من المطعم والمشرب، وأخذ على سبيل القصد، وما يسدّ الجوع ويُقيم البدن ويُمسك القوّة ويُقوي الطبيعة — فما جاوز الحدّ وخرج عن سبيل الاعتدال، فهو ظلم وجورٌ على الجسم والنفس. فيجب على الإنسان أن يقدر ذلك أجمع على قدر ما تحمله المعدة والطبيعة والعادة والدربة».

5.5 فقد قالت الحكماء إن المعدة، متى أثقلت بالطعام المحمود، ضعفت عن هضمه، وفسد عن ذلك، واستحال ضرّاً. وإذا أكلت من الضارّ على قدر ما تستلذه الطبيعة وتحمله المعدة | ويسهل على القوّة الطابخة هضمه، انقطع ضرّه وكان سليماً عند تمام نضجه واستطلاع القوى الطبيعية لضّمه.

5.6 ومنه قالت الأفاضل من الفلاسفة: «تركيب الإنسان على تركيب الدنيا»، فينبغي له أن يستعمل فكره وعقله في ترتيبها وقسمتها وإحكام صنعها، وأن يستدلّ بما يرى ويُشاهد على منافعه ومضاره ولواحقه المخصوصة به. وذلك أنّ الدنيا تنقسم ثلثة أقسام: عُمران، وفراغ (وهو الخلاء)، وجمار (وهو المياه). فينبغي للعاقل أن يقسم معدته (التي هي حوض جسمه، وعماد بدنه، وخادمة طعامه وأغذيته) على هذه القسمة: فيجعل ثلثها للطعام، وثلثها للمشرب، وثلثها بياباً وفراعاً ليتسع فيها الطبخ، وتنفس الطبيعة وتترّوح، ويخفّ عليها التّضج لسبب الهواء الذي تتسع فيه القوى وتنسبط، وينهضم الطعام عند ذلك هضمًا حسناً ويستحيل إلى جوهر الدم المحمود — وفي ذلك صلاح الجسم، وتمام العقل والفهم، واعتدال البدن، وصحة التركيب، والسلامة من لواحق التّخم وآفات السقم، إن شاء الله، إته وليّ الخيرات || وقابل الحسنيات، ﴿لَا إِلَهَ إِلَّا هُوَ﴾، ﴿اللطيفُ الخبيرُ﴾، الصانع القدير.

4 وقال... السوداء] ≡ «وقد ذكر جالينوس [«الحكيم» س] إته ما نفع من الدم، فهو نافع من المرّة الصفراء، وما نفع من البلغم، فهو نافع من المرّة السوداء» زاد^{BK} ١٠٦ ٦-٥ || ٢١ وليّ... الحسنيات] ≡ «ولتكمل الآن هذا الفنّ بتأييد وليّ الخيرات وقابل الحسنيات» الفلسفة الأولى ١٧.

١ والتبريد] «والتدبير» پ || ٤ ينفع] «ينفع» پ || ٤ ينفع] «ينفع» پ || ٦ فيه] پ^٥ || ١٠ عن] پ^٥ || ١٢ القوى] «القوا» پ. ١٨ وتترّوح] «ويتروح» پ || ١٨ القوى] «القوا» پ || ١٩ إلى] «إلى» إلى پ.

- 6 وقد بدأت، أيد الله الجميل منك، بما لا يجب أن يخلو منه هذا الكتاب من التحميد لله والشأن على رُبوبيته والاعتبار في بدائع خلقته ولطائف حكمته. ثم رسمتُ في صدره أصولاً ومناهج يقتدى بها ويُقاس عليها، ويستدلّ بها دُؤو الهمة والفطنة على ما لم نذكره ولم يُحيط بجمعه هذا الكتاب — إذ كان غرضنا فيه تركّ التطويل والإكثار، وقصد الإيجاز والاختصار، وذكر المناهج الطيبة التي تُؤدّي إلى معرفة أمزاج أعضاء الإنسان وخواصها وأمراضها، والقصد إلى العلاج الموجز بأيسر مؤنّة وأقلّ كلفة.
- وإيّا هذا التأليف لمثلك، أطل الله مرتبك في النعمة، ولمن يروض في صناعة الطب — فميّز أصولها، وأحكم فروعها، واسلك مناهجها، واعلم طريقها. فيدري ما لم نذكره بما ذكرناه، ويصدق ما ذكرناه ويبرهنه بما لم نذكره. ومن كان مثلك، أطل الله بقاءك في الغناء والتزّهة والجود والنعمة، فقد يستغني عن أكثر مما وصفناه، ويقيس بالذي ألفناه ما | يردّ عليه من الموارد، ويُميّز ما يلحقه من العوارض، ويصل به إلى ما يرغبه من المصالح، إن شاء الله، وباللّٰه المستعان وعليه التّكال.
- ١٠

١ يخلو [يخلوا] پ || ٢ ومناهج [ومناهج] پ || ٣ يقتدى [يقتدا] پ || ٣ دؤو [دوا] پ || ٦ مرتبك [مترك] پ
 ٧ فيدري [فيدر] ؟ پ || ٨ الغناء [العنا] پ || ٩ ألفناه [الفناه] پ || ٩ ما [ما] پ.

ب^{٤٨} ط وهذا حين نصير إلى الأعضاء الجسائنية وأمزاجها وما يعرض لكل واحد منها من الآفات والأمراض، وعلاج ذلك ومداواته بأيسر ما يكون وأقربه، إن شاء الله. فمن ذلك:

جلدة الرأس

1.1

- أما مزاجها: فالبرد واليبس.
وأما منفعتها: فتحصين عظم الرأس.
وأما أمراضها: فالجرب والإبرية، والقمل، والقروح، وداء الثعلب، والعرق الكثير، والشجاج.

وأما دواؤها من الجرب والإبرية

1.1.1

- فإدامته المشط، والادّهان على إثره بالزّنبق ودهن البايونج ممزوجين.
والغسل بدقيق الحصى معجوناً بالخل. ويُغسل بماء التّيلق والخل، وبدقيق الحمص معجوناً بماء السلق.
ويُسقى حبّ جالينوس سبع ليالٍ، أو حبّ الأضطّاحيقون.
ويأرج فيقرا.
ويُغسل بماء السلق أو دقيق الشعير.

٤ [جلدة] ≡ «القول في جلدة الرأس» نجح ٢٢١٠٢-٢٢١٠٤.

٧ والقروح] + «المزة وتشفيق الشعر» نجح ١١ [سبع ليالٍ] «كل ليلة سبع حبّات» نجح.

١٠ والغسل] «والغسل» پ [١١ الأضطّاحيقون] «والصّاحيقون» پ.

٧ فالجرب] ≡ «ψωρίασις/ψώρα» [٧ والإبرية] «والهبرية والإبرية نُخَالَةُ الرَّأْس» عين IV ٧٤٧؛

≡ «πιτυρίασις/πίτυρα» [٧ والقمل] ≡ «φθειρίασις/φθείρ» [٧ والعرق الكثير] ≡ «ιδρώς» [٧ والشجاج]

«τραύματα» [١١ الأضطّاحيقون] ≡ «στομαχικόν» (صهله حصمه)؛ (R) ↓ Therap 1.5.5 ١٢ وإيارج

فيقرا] ≡ «ίερά πιερά» (صهله حصمه)؛ (R) ↓ Pharm 2.1|2.

صفة حب جالينوس

النافع، بإذن الله، من علل الرأس والبطن، وانسداد مجاري السمع، والغشاوات، والضداع، ورياح الشقيقة، والضقار والدود، والسدد الكائنة في الكبد والطحال

ب ٤٩

أخلاقه — يؤخذ صبر شطري، وشحم الحنظل، والمصطكى والأفسنتين، والسقمونية، وغبار إيارج فيقرا: من كل واحد جزو.

يدق ويخل ويعجن بماء شجر الثعلب.

ويشرب منه درهم بالموالاة؛ وعند التوحش، مثقالاً وأكثر — نافع إن شاء الله.

1.1.2

القمل وعلاجه

أما القمل، فدواؤه أن يشرب صاحبه حب جالينوس سبع ليال. ويغسل رأسه بماء قد طبخ فيه الحنظل والعلمق، ويخلط فيه شيء من تطرون. أو يغسل بماء الثرمس المتز بالنطرون، أو بماء الصبر، أو بالمرارات. وكذلك يفعل إذا كان في البدن.

1.1.3

القروح في الرأس وعلاجها

أما القروح، فإن كان الزمان موافقاً والقوة سليمة، ففتح عرق القيصال، ثم يجتمع إلى خمسة أيام. أو يشترط اليافوخ بعد أن يحكه.

(— — —)

١ صفة [نجح: «حب فوقايا» (κκκκκκ/κκκκκκ) > «κοκκία» ® «δία τῆς ἀλόης καταποτία» Γ
XII Sec. loc ٣٨٥ ٧-٢ ≡ «τοῖς δι' ἀλόης κοκκίσις» XII ٤٩٦ ١-٩.

١٠ والعلمق] - نجح.

٤ والسقمونية] «والسقمونية» ب [من | من «من | من» ب ٧ بالموالاة] «بالمولات» ب.

٧ التوحش] «وتوحش فلان للدواء إذا أخلى معدته ليكون أسهل لخروج الفضول من عرقه» لسان VI ٣٦٩ ٢٤-٢٥
|| ١٠ والعلمق] «فتاء الحمار هو العلمق» تلخيص [٩٦٤]. «فتاء جبلي هو العلمق» تصريف II ٤٣٧ ١. (≡ σίκυς
αγγίριος) || ١٤ عرق القيصال] «والقيصل: عرق في اليد يُفصد، وهو معرب» لسان XI ٣٥٦٢ ٢٩. «العرق الكفتي (وهو
القيصال)» تشرح Γ ٥٥٨؛ > «(φλέψ) κεφαλική».

(باب ذكر الأذنين)

1.4

1.4.1 (— — —) في سنّ الأكتحال والشيخ، فأكثر ما يفعله فيه الدواء والعلاج أو يُوقعه أو يقطع منه بعضه، وليس ينقطع الداء البلغمي والسوداوي إذا كانا في سنّ الشيخ بالكليّة لقوّة السوداء والبلغم وكثرتها وغلبتها على المشايخ.

- و رأس علاج الدويّ والصّيرير والتحيير، وثقلّ السمع واللسان، والارتعاش الكائن بالمشايخ، والشّدّد، والإبرية وكثرة الشّيب: فالتيادريطوس واللّوغاديا، يُشرب بالملأيلة من هذه الليلة ومن ذا الليلة بماء قد طبخ فيه البسباس والكرفس والتّعنع والخولنجان. ^{ب ٤٩ ط}
- ويُشتمّ شتّام الياقوتيّ وشتّام أهزن. وتُجنب الأغذية المتعقّنة والبلغميّة والسوداوية. فهذا أفضل ما امتحنه الحكماء ووصفته لهذه العلل الموصوفة الكائنة في الرأس والسمع من الدويّ والتحيير. قالوا إنّ الدواء، وإن كان في غاية الشّرف، إذا أخذنا عليه الأغذية الرديّة، انقطع فعله ونجّحه. ومثّل ذلك: من يأخذ البان الرفيع والمسك النفيس فيمزجه بالروائح المنتنة، كالخبيث والرجيع ونحوه.

وقال **أبقراط** إنّ الخشونة في الصوت والدويّ في الرأس والشيب واللّوّة والفالج والارتعاش والنقرس البارد، إذا عرضت للمشايخ، قلّ ما يبرون منها بالكليّة — أكثرها تموت معهم ويموتون معها.»

١٤ أكثرها... معها] ⇒ «الكهول [«οἱ πρεσβύται»] ... ما يعرض لهم من الأمراض المزمنة في الأكثر يموتون وهي بهم [«ξυναπθνήσκει»] فصول Iππ ١٦٩-١٧٠ IV L ≡ ٤٨٠-٤٨٢.

٢ والشيخ [«والشحيح»] («والشجايح»؟) ب، «والشحيح» ب^٥ || ٦ فالتيادريطوس [«التنادريطوس»] ب || ٦ واللّوغاديا [«الوواديا»] ب || ٨ والبلغميّة [«واللغمه»] ب.

٥ وثقلّ السمع] ≡ «βαρυχοῖα» || ٦ فالتيادريطوس] > θεοδώρητος (θεοδώρητος)؛ «صبة معجون هبة الله، ويُقال له تيادريطوس» دكان ل ٢٥٣-٤٣؛ ⇒ «Θεοδώρητος» XIII Iatrica ٧١٥-٧١٦-٢٥٧، II Pragm ٣٠٧-٤٣ || ٦ بالملأيلة [«والمياومة من اليوم، والملأيلة من اللّيل»] تاج XXI ١٥٢-٢٠١.

صفة دهن

ينفع الله به من الدوي والصرير والسدد والأوجاع الكائنة في الأذن من الرياح والبلغم والمرة السوداء، لا سيما المشايخ والمكتهين وفي فصل الشتاء والخريف. وهو في الأمراض المزممة أتم وأنجح، إن شاء الله. ب ٥٠

٥ أخلاطه — يؤخذ من دهن الرّند، ومن دهن اللوز، ومن دهن البان: من كلّ واحد أوقيتين. ومن زيت العقارب: وزن سبعة أواقي.

وتُجمع هذه الأدهان وتُجعل في إناءٍ نظيف مما يحتمل النار.

ويؤخذ من القُسط الهندي، ومن الأفيون، ومن الحنطيانا والبورق الأرمني والعاقزقزحا: من كلّ واحد نصف أوقية.

١٠ راوند صيني وصر أسقطري ومُرّ أحمر ونوى القبيجن والجنبادستر والسكبينج والجاوشير والكندر والميعة السائلة والقنّة والأفيون: من كلّ واحد ربع أوقية.

تُدق الأدوية اليابسة وتُنخل وتُنقع في رطل من طلي أصفر رقيق، وتُجعل عند الشمس الحارة اثني عشر ساعة. ثم تُصب عليها الأدهان الموصوفة (وتطبخ) بنار جمرٍ غير مُلهبة ولا مُدخنة طبعًا معتدلًا حتى يذهب الطبخ وتبقى الأدهان. ثم تُصقى الأدهان عن الثفل، ويؤخذ الدهن ويُجعل في إناءٍ نظيف

١٥ وترمى فيه العقاقير اللينة (وهي الميعة والقنّة والأفيون والجاوشير والسكبينج)، ويُطبخ في بُرمة مملوءة من ماء حارّ — وذلك أن تكون آنية | الدهن موضوعةً في جوف آنية. ثم يُطبخ ثانيةً بنار لينة أربع ساعات، ثم يُصقى ويرفع في إناءٍ آخر ويُطبخ عليه طبعًا حسنا، يُتحفظ به.

فإذا احتيج إليه، يُحمل منه مقدار نصف درهم بمثله من شرابٍ أصفر فُضّخ أو لبن سوداءٍ ثري صبيًا، ويُنقَط في الأذن، وهو فاتر، ثلاث نقط.

٢٠ فإنه نافع، إن شاء الله، للسدد والقبح والأورام والصّم والدوي والصرير وأوجاع الأذنين، إذا قُطر في الأذن من حمة الوجع.

٧ نظيف [«نضيف» ب || ٨ الحنطيانا [«الحنطانا» ب || ١٢ رقيق] «رفق» ب || ١٣-١٢ اثني عشر] «لثني عشر» ب || ١٣ مُدخنة [«مدحبه» ب || ١٥ مملوءة] «مملوه» ب || ١٧ آخر [«حاز» ب || ١٨ فُضّخ [«فصيع» ب.

٥ الرّند] > ر (≡ غار) || ٨ القُسط الهندي [«ومنه المر، وهو الهندي، وهو الأسود» عمدة ٤٨٦ ٢٤ || ٨ الحنطيانا] > «γεντιανή» (حنطيانا) || ٨ والعاقزقزحا] > «حمص» || ١٢ طلي [«الطلاء: ما طُبخ من عصير العنب حتى ذهب ثلثاه؛ وتسميه العجم «المبيخج»، وبعض العرب يُسمي الخمر «الطلاء»» لسان XV ١١ ٩-١٢ || ١٨ شرابٍ... فُضّخ] «كُنْتُ أَسْقِي أَنَا عبيدة [...] شرابًا من فضيخ وتمر» موطنًا ٢٢٧-١١، «وَالْفُضِيخُ: عَصِيرُ الْعَنْبِ، وَهُوَ أَيْضًا شَرَابٌ يَتَّخَذُ مِنَ الْبُسْرِ الْمَفْضُوحِ وَحَدَّةٍ مِنْ عَبْرٍ أَنْ تَمَسَّهُ الْكَلْبُ» لسان III ٤٥ ١٢-١٣.

وإن حُمِّل على الصُّرس الوجعة التي قد أُعِيَتِ المعالجين، أذهب وجعها.
 وإن وجد الإنسان وجع الوجه والأضراس كلها، نَقَط منه في الأذنين على ما حكينا — فإِنَّه يأخذ الوجع
 ويقطع الأوجاع كلها. ويسعط به المفلوج والمرعوش، فينبغه نَعْمًا يَبِينًا، إن شاء الله.
 ويُدهن به على الأورام البلغمية والدُّبجة والسرطانات والغُدَد، فيُدبِّبها، ويُلين العصب المتشجِّح المنقبض.
 ٥^{٥١} وتُدهن به الذبجة، وتُدهن || به الشُّرة والأنثيان والإحليل للورم والأوجاع والتواتر والانتقاض
 والاعوجاج.»

وحكى **جالينوس** الحكيم أنه علمه في النوم وجزيه في اليقظة، فوجده سريع النفع. وكان يكتمه ويصر به،
 وكان يُسقيه «المكتم» حتى علمه لقيصر الملك فُعرف خيرُه واشتهر أمره.
 وقال **جالينوس** الحكيم: «إن أردت أن ترى منه عجبًا، فَتَقِّي الرأس والأعضاء الباطنة ومجاري البدن،
 ١٠ وأنقض مادة العلة بإبارج اللوغاديا — وذلك أن تسقيه العليل جُرْأًا (والبُخران سبعة أيام)، ويكون
 قَدْرُ الشربة وزن ثلاثة دراهم، مع إصلاح الغذاء والاعتماد على المعتدل منه، الحفيد الكيموس، الحسن
 الجوهري. ثم تستعمل هذا الدهن على ما حكيتُه لك: ترى برهانه ونجحه وبركة فعله قبل أن تقوم من
 عند العليل، بإذن الله.»

وقال **جالينوس** الحكيم: «إذا صقيت لك هذا الدهن من ثفل هذه العقاقير، فاطرُح عليه قدر رطلين من
 ١٥ زيت الزيتون الرقيق، ومقدار رطل من الطلاء الأصفر، | وتطبخه أربع ساعات حتى يذهب المطبوخُ
 ويبقى الدهن. ويُرفع في إناء زجاج، ويُحفظ به. ويُدهن به للنافض والاقشعرار والإبرية وأوجاع الصُّلب
 والوركين والمفاصل الكائنة من البلغم والحام والرياح الباردة الغليظة.»

وحكى **جالينوس** الحكيم بما علمه في النوم وجزيه في اليقظة فوجده سريع النفع، عجبًا للسدة والصم
 والدوي والصرير والرياح الكائنة في مجاري الأذنين — من ذلك، مرارة الذئب ومرارة الدب: تُجمعان
 ٢٠ جميعًا بمثلها من ماء السذاب المعصور وماء شجرة أذن الفأر (وهو المَرْدَقُوش)، ويُدق، ويُرفع. ويُنقط
 منه في الأذن محلولًا بشيء من الشراب المُرِّ الرقيق أو بول غلامٍ محتلم. وإن خِفَّت أن يفسد الدواء
 ويُتِن، فتجعله في زجاجة نظيفة وتطبع عليه وتدفعه في عسلٍ صحيح، أو تجعله في مئانة كبشٍ أو مئانة
 معمولة من جلد طائفي، وتقبّره وتدفعه في العسل.»

٥ والتواتر [«والمواتر»] ب || ٧ علمه [«علمه»] ب (> *عمله) || ٧ ويصر به [«ويصره»] ب || ٩ فتقي [«فتقي»] ب
 || ١٠ اللوغاديا [«اللوغاديا»] ب || ١٨ علمه > *عمله || ١٨ عجبًا [«عجب»] ب || ٢٠ السذاب [«السذاب»] ب ||
 ٢٠ الفأر [«العاز»] ب || ٢١ محلولًا [«محلولة»] ب || ٢٢ أو تجعله [«ويجعله»] ب || ١ طائفي [«طائفي»] ب.

١٠ والبُخران سبعة أيام [«سبعة أيام»] ≡ χρισίς ≡ χρισίς > [«الكيموس»] > χυμός (حصحة) || ٢٠ أذن... المَرْدَقُوش [«مرزجنوش ومرزجوش ومرددوش ومردقوش» عمدة ١٦٣٣٢؛ > مرزان كوش ≡ «σάμψουχον»] ≠ «آذان الفأر» ≡ «μυός ὄτα».

وحكى **جالينوس** أنّ مرارة الفيل ومرارة الجاموس تنفعان من هذه العلة على || هذه الصفة التي وصفنا ب ٥٢ والتدبير الذي دبرنا.

وإذا أخذت مرارة ذكر الحجل وخلطت بماء الفجل، ويؤخذ شحمه ويجمع مثله من شحم التيلباج ويخلط جميع ذلك على نارٍ ليّنة بأوقية زنبقٍ رازقيّ أو زيت الفجل أو زيت اللوز، ويرفع ذلك من بعد تمامه في زجاجة نظيفة. وتثقب منه للسدة وتقل السمع والصم، خاصةً بعد تنقية الرأس باللوغاديا وحبّ الأصطاحيقون ثلاثين ليلةً. ويكون قدر ما يشرب من اللوغاديا: وزن درهمين ونصف بماء البزور والزنجبيل والخولجان. ويشرب من ماء الأصطاحيقون وزنٌ درهم: يشرب ذا الليلة وذا الليلة.

1.4.2

وأما إذا ما وقع في الأذن شيء

فإن رأيت، استخرجته (—) أو بعض آلات الحديد؛ فإن لم تره، فتوضع على الأذن محجمة واسعة وتمص مصّاً قوياً. ويعطس في خلال ذلك بالكندس، وتُمسك مناخره — فإذا عطس، اتسعت المجاري واندفعت الحبة من الأذن.

وبذلك يُحتال على المرأة إذا مات الولد في بطنها أو بقيت المشيمة في الوالدة: فإنها تُسقى ماء الحطمي ب ٥٢ أو شبه ذلك من الأشياء المزلقة، ثم تُقياً وتعطس، فعند ذلك تطرح ما في بطنها.

1.4.3

فأما إذا وقع في الأذن ماء وأردت إخراجه

فتأخذ لذلك قصبه تائبودا وتدخل طرفها الواحد في الأذن بعد أن تحده بسكين، وتدهن الطرف الثاني بالزنبق، وتوقد تحته النار. فإن القصبه، إذا سخنت بالنار، شربت الماء الذي في الأذن وجذبتُه ونَقَتْهُ وجففتُه، إن شاء الله.

وقال **جالينوس**: «إن كان الصم مزماً، لم تطمع في برئه».

1.4.4

علاج الدود في الأذن

يُصب في الأذن ماء لحم البقر المشوي. ويصب فيه ماء ورق الخوخ بالخل، أو ماء ورق الكبر بالخل، أو ماء الحزف الأخضر.

١ تنفعان [«نفع» ب || ٤ رازقيّ] «زازي» || ٧ الأصطاحيقون [«الاصباحيقون» ب || ١٢ بقيت [«بقية» ب || ١٣ المزلقة [«المزقة» ب || ١٥ تائبودا [«تابودا» ب || ١٨ برئه [برؤه» ب.

٣ التيلباج [«شحم السلاح النهرية» تصريف I ٩٦-٢٠٠؛ ٢٥٧ DAA *{SLBH} || ١٥ تائبودا [«بارس هو البردي [«... وبالبرية تابودا» تفسير ١٧ ٩-٨ (≡ «παπυρος»)، «تائبودا: البردي» عمدة ١٠٦-١٠٦.

باب ذكر الفم واللسان 1.5 ومراجهما وعللها المخصوصة بهما

أما مزاج اللسان : فالحرارة والرطوبة؛ وأما مزاج الفم والأسنان : فالبرد واليبس.
 ٥٣٥ پ وأما منافعهما : || ففي التُّطْق والأَكْل والنَّفَس.
 ٥ وأما عللها وأمراضها : فالأَكَّة، والحَفْر، ووجع الأسنان، والبَخْر، وسَيْلُ الدم من اللثة، وسواد
 الأسنان، والحروشة، والبَثْر، والورم، والاسترخاء يعرض في اللِّهَاء والغَلْصَمَة واللسان.

علاج الأكلة 1.5.1

المرهم المصري: تُحْكُ به ويُلْزَق عليها حتى يذهب العفن والقبيح.
 فإذا ذهب، فيؤخذ من العفص الغير مثقوب والهليلج الأصفر وأصول الكَبَّار وحبّ الأَثَل والسُّكَّ
 ١٠ (و)المَرّ والأُسنان: من كل واحد جزو. يُدَقُّ ويُنخل ويُعجن بماء العَوْسِج، ويُدْر ذلك على الأكلة —
 فإن لم يكن ماء العوسج، فالعسل. فإذا درزته، وتحبسه ثلاث ساعات.
 ويُشَلَّل الفم بالهليلج المطبوخ بالخل.

وأما علاج الحفر 1.5.2

فيُعَالج بما تُعَالج به الأكلة سواء.

٤ التُّطْق [للِبطن] پ || ٦ والغَلْصَمَة [القلصمت] پ || ١٠ (و)المَرّ [المز] پ || ١٠ ويُعجن [وبدهن] پ.

٥ فالأَكَّة [وفي أسنانه أكل (بالتحريك): أي أنها مؤتكلة، وقد انتكلت أسنانه وتأكلت] لسان XI ١٢٣ ٨-٩؛
 ≡ «βρωσις/βρωμα» (βρωσις/βρωμα) || ٥ والحفر [والحفر والحفر: سلاقي في أصول الأسنان؛ وقيل: هي
 صُفْرَةٌ تَعَلو الأسنان] لسان IV ٢٠٤-٢٦-٢٧ || ٦ والغَلْصَمَة [أعني بالغلصمة الجسم المعلق في فم الخنجر] تشریح^١
 ١٦-١٥٩٤؛ ≡ «ἐπιλωπτις» || ٩ الكَبَّار [DAA ٤٥٣ *{KPR}] || ٩ والسُّكَّ [والسُّكَّ: ضربٌ من الطيب
 يُرَكَّب من مسكٍ ورامك] لسان X ٤٤٢ ١١-١٢ || ١٠ والأسنان [أسنان يُقال له "أسنان الفم" ذخيرة ٦٥٣
 || ١٢ بالهليلج... بالخل] «طبيخ الهليلج بالخل» الحاوي III ١٠٤ ١٧-١٩ (→ شمعون).

1.5.3

وأما وجع الضرس والأسنان

- فيضمدها بالشجزيانيا والفلونيا أو المغيث الهندي أو الترياق الكبير.
ويُتغرغر بالغراغر الحارّة التي تُخرج البلغم: ويؤخذ لذلك الحلّ الصحيح فيطبخ فيه | العُبيراء والصغتر^{٥٣}
وحنظلة صحيحة وعافرقرحا وفلفل وخردل، ويضمض به سخناً.
ويضمض الميوزج (وهو حبّ الرأس) مع الرّفّت، فإنّه نافع لذلك ولبرد الوجه والنسيان والبلغم الكائن في
الفم وسيلان اللعاب.^٥

1.5.4

وأما تحريك الأسنان

- فينظرها: فإن كان قديماً فقد ماتت عروقها، فليأيس خيرها، ولا دواء لها إلا بتشبيكها بالذهب.
وإن كان ذلك محدثاً، فاحمل على أصولها الشّبان والسكّ مسحوقين.
أو يؤخذ من الشعير وزن درهم، فيدق ويخل ويصق بأصول الأسنان.
ويؤخذ الشّب اليابّي فيعجن بعسل ويخل، ويحمل على أصولها.^{١٠}

1.5.5

البحر وعلاجه

- البحر في الفم والأسنان: فإن كان من سنّ متأكّلة الأصول، فاقلعها؛ وإن كانت متأكّلة الأعلى، فايردها
بالمبرد.
ويضمض بخلّ العنصل. ويُسعمل مضغ الكرفس والشّونيز والسعدى وبزر الكزبرة والقرفة والإذخر: يدق
ذلك ويضمض حيناً بعد حين.^{١٥}

١١ الشّب... أصولها] «الشّب يُشدّ اللثة ويُمسك الأسنان إذا خلط بالخلّ أو بالعسل» ابن ماسويه د الحاوي
III ١٤٢-٩-١٣-١٤ فايردها بالمبرد] «ويبرد المتأكّلة بالمبردة لتستوي أطرافها» فردوس ١٨٧-٢٣-١٨٨-١٠ ||
١٥ ويضمض بخلّ العنصل] → «وإذا ضمض [διακλυζόμενον] بخلّ العنصل [...] وأذهب نتن الفم [τὰς περι]
[στόμα δυσωδίας] حشائش ١١١^ط ١٦-١٥ (III Δ ١٧-١٢-١٤ «σκιλλητικὸν ὄξος»).

٢ بالشجزيانيا] «بالسجزيانيا» پ || ٢ المغيث] «وللعنب» پ || ٥ الميوزج] «البورح» پ || ٩ الشّبان] «الشبان» پ ||
١٥ والشعدى] «والسعدا» پ || ١٥ والإذخر] «والاذخر» پ || ١٦ ويضمض] «وضع» پ.

٣ العُبيراء] ≡ ὀδα || ٥ الميوزج... الرأس] «تأويله "الزيب البرّي"، وهو المعروف عندنا بحبّ الرأس، ويُسمّى «الفارسية
"ميوزج"» تفسير^٣ ١٠-٩٨٨ (≡ «σταφίς ἀγρία»)، «ميوزج بالفارسية تفسيره "زيب الجبل"، وهو حبّ الرأس»
تلخيص [٥٣٧] (→ أهرن); > ميرك || ٩ الشّبان] «الشّبان: وهو الأيدع، وهو دم الأخوين» ثامنة ١١٩.

ويُستعمل سنون الأفويه الهندية وسنون الحجاج بن يوسف، ويديم الحك به. ٥٤٥
 ويؤاظب الغراغر الحازة والماضغ || التي تُخرج البلغم من الفم.
 فإن كان البحر من قبل المعدة، فيُعرف ذلك بزيادته عند رفع الصوت. فيُشرب حب المعدة وحب
 الشَّيار وحب المغيث الهندي وإيارج الفيقر: يُوالى ذلك حتى يبرأ، إن شاء الله.
 وإن كان البحر من قبل الرأس، ويُعرف ذلك بالتنفس، وأن يكون خياشيميًا من قبل الخياشيم. ٥
 فإن كان مزمنًا من الطفولية، لن يبرأ؛ وإن كان حديثًا، فيُعالج بما أصفه لك. وذلك أن يؤاظب صاحبه
 شرب الأدوية المنقية للرأس والمعدة من العفونات البلغمية، مثل حب الشَّيار وحب جالينوس
 والأصطاحيقون الأوسط وإيارج فيقرا وحب المعدة. وهذه الأدوية صالحة للأحداث لمن كان دون
 الأربعين. فمن جاوز هذا الحد، فليعتمد على التبادريطوس أو اللوغاديا وإيارج جالينوس: فإن ذلك أتم
 للمكتهلين والمشايخ، لا سيما إن كانت الرطوبة ناريةً وعلامات البلغم ودلائله حسنةً غالبًا. ١٠

صفة حب المعدة

النافع، بإذن الله، من العفونات البلغمية، والأوساخ المجمعة في الرأس والمعدة،
 والرياح الغليظة والنفخة، والتخمة والكظة وسوء الاستمراء والسدد، | وضعف الشهوة. ٥٤٥
 وينفع أيضًا من البحر ورياح القولنج، ويزيد في الباه، ويُنقي الرأس، ويزيد في العقل والحفظ.
 وإن شربه الصحيح، عدل جسمه وحفظ صحته، بإذن الله. ١٥

أخلاقه — يؤخذ صبر أسقطري: أوقية. مصطكى: أوقية.
 سنبل هندي وقرفة وقشر السليخة وأسارون وحب الأيسون (وهو البسباس الشامي): من كل
 واحد ثلث أوقية. ومن بزر الأفتيمون الإقريطي والتائخة والتريدي القصي والغاريقون والزعفران والإذخر
 والبليج: من كل واحد ثلاثة دراهم.

٢ ويؤاظب [«ويواظب» ب || ٤ الشَّيار] «السيان» ب || ٤ المغيث [«المشك» ب || ٤ يُوالى] «موالي» ب ||
 ٦ يؤاظب [«يواظب» ب || ٧ للرأس] «الراس» ب || ٧ الشَّيار [«الشَّيان» ب || ٨ والأصطاحيقون ... فيقرا]
 «والأصطاحيقون والأوشطوا | إيارج فيقرا» ب || ٩ التبادريطوس [«التبادريطوس» ب || ٩ اللوغاديا] «اللوغاديا» ب
 || ١٠ غالبًا [«غاليه» ب || ١٣ وسوء] «وسوا» ب || ١٨ الإقريطي [«الاقريطي» ب || ١٨ والتائخة] «والتائخة» ب ||
 ١٨ والغاريقون [«والحازيقون» ب.

١ وسنون ... يوسف] ® «سنون الحجاج» تصريف ١٠٤-٧١٠-٣-٤ وحب الشَّيار [«الشَّيار هو حب المصطكى
 والصبر» تلخيص [٩٧١] (→ أهرن)؛ ® أقراباذين سس ٢٩٧-٦؛ > شُب. ٩ وإيارج جالينوس] ® أقراباذين س
 ١٩٨٢-٨٨٣ || ١٧ وأسارون] «ἀσάρων» || ١٧ الأيسون ... الشامي] «وقيل: هو البسباس الشامي» فلاحق II
 ٢٥٩؛ «αθησον» || ١٨ الأفتيمون] «ἐπιθυμον» || ١٨ والتائخة] «> نُؤوه: αμμι.

ومن حبّ البلسم والراوند الصينيّ والسقمونيا: من كلّ واحد وزن درهين ونصف.
يُدقّ الجميع ويُعجن بماء البساس المعصور وماء النعنع، ويُجَبَّب.
ويُشرب منه بالموالة وزن درهين.
ومن أراد أن يعجنه بالعسل ويُبصره معجونًا، فجائز له — ويُسقى منه عند ذلك وزن ثلاثة دراهم عند
النوم — نافع، إن شاء الله. ٥

صفة حبّ الأصطماخيتون الأوسط

ينفع، بإذن الله، من الصداع والتخير والدويّ والصرير وريح الشقيقة، ومن آتساخ المعدة ونفخها،
ومن وجع المفاصل || والوركين وعزق النسا. ويُخرج المرّة السوداء والبلغم والحام.
وينفع لكلّ ما ينفع منه حبّ المعدة، إن شاء الله. ٥٥٥

أخلطه — يؤخذ من الأفتيمون الإقريطيّ وشحم الحنظل: من كلّ واحد خمسة عشر درهماً.
ومن الغاريقون: وزن سبعة دراهم. ومن الصبر الجيّد: ثلاثون درهماً.
ومن السنبل والتسط وحبّ البلسان والمصطكى وفقّاح الإدرخ والسقمونية والزعفران: من كلّ واحد
أربعة دراهم.
تُدقّ الأدوية وتُنخل وتُعجن بماء شجرة الثعلب، وتُجَبَّب كالفلفل.
ويُشرب منه القويّ مثقالين، والضعيف مثقالًا ونصفًا، إن شاء الله. ويشرب منه بالملايلة درهماً ونصفًا
بماء فاتر. ١٥

٦ صفة] ≅ (R) «أصطماخيتون آخر من أحد عشر عقير» تصريف I ٤٠٥-٣١٤٠٦؛ ≅ «صنعة أصطماخيتون آخر»
أقرأباذين س ١٧٩٦-٢٤.

٧ ينفع...] - ق || ٧ من الصداع... ونفخها] «من جميع اوجاع الرأس ووجاع المعدة والقرس» ت || ٨-٩ والحام... الله]
- ت || ١٠ الإقريطي] - ت || ١١ سبعة] «عشرة» ق ت || ١١ ومن... درهماً] «صبر أسقوطريّ وزن ثمانية وعشرون
درهماً» ق، «سقمونيا أربعة دراهم صبر سقطريّ درهماً» ت || ١٢ السنبل] «سنبل الطيب» ق || ١٢ والمصطكى] - ق ت
|| ١٢ وفقّاح] - ق || ١٢ والسقمونية] - ق ت || ١٣ أربعة] «ثلاثة [...] ونصف» ق، «ثلاثة» ت || ١٤ تُدقّ الأدوية]
«سليخة وزن ستة الدراهم ونصف تجمع هذه الأدوية مسحوقه» ق، «سليخة خمسة دراهم يدقّ الجميع» ت || ١٤ شجرة]
«الكرنب النبطي» ق، «ورق شجر» ت || ١٤ وتُجَبَّب كالفلفل] «ويصنع حبا مثل الفلفل» ت، «حبًا صغائرًا ويحْتَف في
الظلّ» ق || ١٥ ويشرب...] «الشربة منه وزن درهين ونصف بماء حارّ إن شاء الله» ق || ١٥-١٦ ونصفًا... فاتر] «بما
فاتر» ت.

٣ بالموالة] «الموالات» پ || ٤ معجونًا] «معمولًا» پ. ١٠ الأفتيمون] «الاضمون» پ || ١٥ ونصفًا] «ونصف» پ ||
١٥ ونصفًا] «ونصف» پ.

وقال جالينوس الحكيم إنَّ مَّا يُعالج به البحر، إذا كان محدثًا خياشميًا، أن يُسعط صاحب ذلك بهذا السُّعوط.
وصفنه — يؤخذ وزن درهم مَرَّ أحمر، ووزن ثَمَن درهم مسك، ووزن درهم ورق الفيجن الأخضر ومثله مَرْدَقُوش، ووزن عشرة دراهم زُنْدًا طريًّا.
يُغلى الجميع في طَنْجَهارة فضةٍ حتى يغلي، ويُصَفَى بعد ذلك ويسعط به صاحب | البحر مرارًا.

والمثل ذلك

يؤخذ من المتر والكندر والجندبادستر والشبَّ البجائي: من كلِّ واحد درهم.
يُدق ذلك ويُغربل ويُخلط بماء الكرفس المعصور، وتُدخل فيه فتيلة وتُدخل في المنخرين.
نافع، إن شاء الله.

1.5.6

وأما استرخاء اللثة وسيلان الدم

فاستعمل الحجامه تحت الجبين، وافصد الشارفين (وهما العرقان اللذان في الشفتين)، أو يُقصد الطالعان (وهما العرقان اللذان تحت اللسان)؛

ومما يشد اللثة ويصفي الأسنان

- وهو هذا السنون، وصفته: أن يؤخذ من النطرون والملح الأندراقي والزنجبيل والحولنجان والعاققرحا وجوز الطيب والصندل المحكوك والسعد العراقيّة والعفص الرومي والزأملك وحب الأثل والهليلج والبليج والأملج والقرفة ودقاق القرنفل وكس الصسد وكس الرخام وورق الورد وقاقلة وكبابة وشيطرح هندي.
- يُدق جميع ذلك ويُخل، ويُرفع في إناء نظيف.
- ب٥٦١ د ويُستاك به للحفر والبحر، واسترخاء اللثة، والشلاق، ووجع الأسنان وسوادها.
- نافع، إن شاء الله؛

1.5.7

وأما الحروشة والبشر في اللسان

- فيتغرغر صاحب ذلك بالزئد المغلي مع الحيار، أو بدهن البنفسج ممزوج بالخلباء أو ماء الخيطا.
- ويحتجم تحت الجبين.
- ب١٥ د ويُتغرغر برّب الثوث.
- ويفتح العرقين اللذين تحت اللسان، إن شاء الله؛

٢ اللذان [«اللسن» ب || ٢ الطالعان] [«الطليقان» ب || ٣ اللذان] [«اللذين» ب || ٧ وكس] [«وكس» ب || ٨ وشيطرح] [«وسيطرح» ب || ١٣ بدهن] [«يدهن» ب || ١٥ الثوث] [«السوب» ب].

٢ الشارفين] = «وفتح الشفرين (وهو عرقان في اللثة)» مجلس ١٦٦٤؛ «المهاركان» تصريف I ١١٧-١٦-١١٩+٧-٦؛ «السارقان (وهما عرقان تحت اللسان)» هارونيه ١٨٩ ١٥ || ١٠ والشلاق] [«والشلاق: حبّ يثور على اللسان فيتقشر منه، أو على أصل اللسان؛ ويقال: تقشّر في أصول الأسنان» لسان X ١٦٢ ١٦-١٧.

وأما الومر في اللسان واللسان

1.5.8

فَيُتَغَرَّغَرُ بِلَبْنِ أَتَانٍ أَوْ لَبْنِ مَاعَزٍ كُلِّ يَوْمٍ أَحَدَ عَشَرَ مَرَّةً.
وَيُسْتَقَى مَاءُ الرَّازِيَانِجِ وَيُتَغَرَّغَرُ بِهِ.
وَيُتَغَرَّغَرُ بِرَبِّ التَّوْثِ وَمَاءِ الْآسِ، (وَالْمَطْبُوحُ الرَّائِحَانِيُّ (وَهُوَ الْآسِ)).

وأما استرخاء اللسان وسقوطه

1.5.90

يَشْرَبُ صَاحِبُ ذَلِكَ الدَّوَاءِ اللُّؤْلُؤِيَّ.
وَيُطْلَى اللِّسَانَ بِدَهْنِ البَلْسَمِ، وَتَوْضَعُ تَحْتَهُ قِطْعَةً مِنْ خُصِيَّةِ جَنْدَبَادِسْتَرِ.
وَيُتَغَرَّغَرُ بِالْخَرْدَلِ وَحَبِّ الرَّأْسِ.
وَيُدْهَنُ الهَامَةَ وَالْأَخْدَعِينَ بِدَهْنِ الفَرِّيُّونِ (وَهُوَ التَّائِكُوتِ).

٩ التَّائِكُوتِ] «البائِكوت» پ.

٦ الدَّوَاءُ اللُّؤْلُؤِيَّ] ٦ «صِنْعَةُ دَحْمَرَتَا اللُّؤْلُؤِ» أَفْرَابَاذِينِ ٣ ١٢٥٧-١٩ || ٩ الفَرِّيُّونِ (وَهُوَ التَّائِكُوتِ) [٦ «أَوْفَرِيُونِ: وَهُوَ التَّائِكُوتِ، وَهُوَ الزَّقُّومُ» تَفْسِيرٌ ٢٥٤ = «εὐφρόριον»].

1.6

باب ذكر المنخرين ومزاجيهما وأمراضهما وأدويتيهما

أما مزاج المنخرين: فالبرد واليبس.

وأما منافعها: فالشِّمّ والتنفُّس.

وأما أمراضها: فانقطاع الشِّمّ وسيلان الأنف، والحرارة والورم، والقروح والبواسير، والرُّعاف،^{٥٦٥} والنَّسْن.

1.6.1

وأما دواؤهما من انقطاع الشِّمّ والسيلان

فيؤخذ شيء من سمن ومثله من زُبد، يُخلطان ويُجعل فيهما وزن دائق من كندر أبيض، ونصف دائق مُرٍّ أحمر، ووزن حبة مسك، وحبّة عنبر، وسبع ورقات مردقوش رطب. ويُغلى الجميع على نار جمرٍ حتى تخرج قوته، ويكون قدر ثلث مساعط. وتُصقّيه وتُسعط ثلاثة أيام. واسقه بما يمشيه المزة السوداء أو البلغم، نحو حبّ جالينوس وبعض الإبرجات الكبار، إن شاء الله.

1.6.2

وأما الورم والحرارة في الأنف

فأما من الورم والحرارة في الأنف والبواسير (وهي التآليل)، فافصد له عرق المنخر (وهو العرق الذي بين المنخرين).

١٥

واسقه الفيقرا والشبيبار، وتقى رأسه بالكندس.

وأحرق البُطم واسحقه، واعجنه بالخلّ الحاذق، واحمله عليه مرارا.

وعالجّه بفتائل مغموسة في الدواء المصريّ، وعالجّه ودأومّه بها حتى يذهب الباسور، إن شاء الله.

٨ فيؤخذ] ≙ «لانتقطاع الشِّمّ» وساد ١١٨٠-١٥.

٩ وسبع...] «وسبع ورقات مردقوش» و.

١ المنخرين] «المنخران» پ || ٧ دواؤهما] «دواهما» پ || ٩ مردقوش] «من دحسن» پ || ١٥ والشبيبار] «والشبيبار» پ || ١٦ واعجنه] «واعجن» پ || ١٧ الباسور] «الناصور» پ.

٥ وسيلان الأنف] ≙ «κόρυζα» || ٥ والبواسير] ≙ «πολύπους/δζαίνα» || ٥ والرُّعاف] ≙ «αίμορραγία».

وأما الرعاف

1.6.3

فيؤخذ له قرطاس محرق فيؤنفخ في أنفه.
ويُصبّ على رأسه الماء البارد.
وتؤخذ فتيلة فتبلّ في دهن الورد، وتغمس في الماء، وتدخل في أنفه.
وَيُشدّ أعضاؤه. ٥
٥٧٧ ويوضع على صدغيه الفلفل والحلّ ودقيق الشعير وماء الخطميّ في حكاية المرهم.
ويُتجم على الكبد بلا شرط.
ويخلط الزاج بالحلّ، ويدهن منه في المنخرين: فإنّ ذلك يقطعه، إن شاء الله.

٢ قرطاس محرق [«قرطاسا محرقا» پ || ٤ وتغمس] «ويغمس» پ || ٥ ويشدّ [«ويشد» پ.

1.7

باب ذكر الوجه ومزاجه وأمراضه ومداواته

أما الوجه، فمزاجه البرد واليبس.
وأما منفعته: فالزينة. وهو مكان الحواس.
(وأما أمراضها، — —).

1.7.1

علاجه من الحمرة

فصد القيح والعرق المنتصب في الجبهة.
واسقه الفبقرا عشرين يومًا.
واطلل على وجهه الأفيون بالخل؛ واطل عليه الأفيون والزعفران بماء شجر الشعلب.

1.7.2

وأما البرش والبشر والكلف

فاحمل عليه خرو الحمام بالخل الحاذق، ثم يُحمل بإثر ذلك ما يجلوه.
وصفه — أن يؤخذ من الكركم: جزو؛ ومن المز الأحمر: جزو. يُسحقان ويُخلطان بمخ بيضة، ويُطلى
به الوجه ويبيت به. ثم يؤخذ دقيق الفول والحمص واللوز ولباب الصنوبر، فتدق وتُعجن بالماء أو بلبن
حارة — فهو نافع، ويُغسل به الوجه بالغد غسلًا صالحًا.
ويُنقى الوجه واليد بالبخنج الكبير وحب جالينوس بالليل أو النهار.

1.7.3

وأما القروح في الوجه

فيداوى بما يُداوى | به المنخرين على ما قدمنا ذكره، إلا أن تكون العدسية: فتقطع وتكوى بالنار.

١٧ فيداوى [فيداوا] پ || ١٧ يُداوى [يداوا] پ || ١٧ وتكوى [ويكوى] پ.

٦ الحمرة [έρουπίτελας] || ٧ والعرق... الجبهة [ή εν μετώπω ορθίας φλέψ] XIV K Γ ١٥٢ ٧-٨ || ١٠ البرش
والبشر [έξάνθημα]؛ «بثر لبني» [φακός] || ١٠ والكلف [έφηλις] || ١٥ بالبخنج [البخنج: العصير
المطبوخ، وأصله بالفارسية «مبيخته» أي «عصير مطبوخ» لسان II ٢١١ ٢٢-٢٣؛ ® «بخنج ينفع من البهق»
دكان ل ٣٦ ط ١٤-٢٥؛ Pharm 6.16.

وأما اللقوة

1.7.4

فيسعط صاحبها بدهن الجندبادستر أو دهن الفريون، ويُداوم دهن الوجه بهذه الأدهان.
ويسعط بمثل حمصة من الجندبادستر محلولاً بالزنبق أو بلبن حارة أو بالشراب الحار.
ويسعط بأبوال الكلاب والإبل، إن شاء الله.

وأما انتشار شعر الحاجبين

1.7.5^o

يُحرق الشونيز، ويُخلط رماده بالخلّ، ويُطلى عليه.
أو يؤخذ رماد الرصاص المحرق، فيُدهن بدهن ورد.
ويُطلى عليه حافر (—) ورأس جزاء محروقة بدهن ورد.
أو يأخذ اللاذن فيُذاف بالطلّي ودهن الآس، ويُحمل عليها: فإنّها تنبت.

٢ فيسعط [≡ تصريف I ٣١٧٥-٣٢ («دهن الجندبادستر أو الفريون») || ٣ ويسعط] «إن سحق الجندبادستر في دهن زنبق واستعمل» ذخيرة ٢١٢٥-٢٢ || ٥ وأما [≡ «وأما انتشار الشعر وسقوطها» نوح ٣١٠٧-١٠٨ هـ || ٩ أو] نوح؛ → حشائش ٢٢ ظ ٥-٦ (≡ I Δ ٢٣٨٨-٢٤ «λάδων»).

٢ الجندبادستر [«الحمار اشنيز» پ || ٣ الجندبادستر] «الحماز شنبز» پ || ٣ الحار [«الجار» پ || ٧ أو ... ورد] پ* || ٨ ويطلّي [«وطلا» پ || ٩ بالطلّي] «بالطلي» پ.

٥ انتشار شعر الحاجبين [≡ «πτιλωσις/μαδάρωσις/μίλωσις»]

1.8

باب ذكر الحلق ومزاجه وأمراضه ومداواته

أما الحلق، فمزاجه الحرارة والرطوبة.
وأما منفعته: فخرج النَّفْسِ وَالصَّوْتِ.
وأما أمراضه: فالذُّبْحَةُ، والبَحَّةُ والخشونة، والورم، والعلَق، وورم اللهاة، والحنازير.

1.8.1

الذبحة وعلاجها

ب ٥٨١

افصدّه في ابتدائها، إن كان حَدَثًا قَوِيًّا.
واحمل عليها لُصُوقًا من دقيق الشعير وزريعة الكتان والحلباء.
واسقه الماء المطبوخ فيه الزبيب والحلباء.
ويُعَدَى بالزُّبْدِ والفانيد وماء الكَشْكُشْ.
ويُغْرَغِرُ برب التوت.
فإن كان ورمًا حارًّا غائرًا، فإن صاحبه يهلك في أربعة أيام — وأكثر ذلك سبعة أيام، إن شاء الله.

1.8.2

وأما البحوحة والخشونة

١٥

فيؤخذ الزُّبْدُ ويُخلط بدهن الورد، ويُدْفَأُ ويُتَغْرَغِرُ به.
ويُعْلَى الخيارشتر باللبن الحليب، ويُتَغْرَغِرُ به.
وتُعْلَى الحلباء وزريعة الكتان في الخلّ، ويُتَغْرَغِرُ به.

١ باب] ≡ «القول في الحلق» نجح ١٠٨-١١٠-٢٥١٠.

٤ والصَّوْتِ] «ومتر الطعام» نجح ٥ والخشونة] + «والحبسة» نجح ١١ برب التوت] «بما البرصاد» نجح ١٢ فإن
«وما لم يتبين، فهو داخل، مخَّوْفٌ في الرابع أو الخامس» نجح ١٣ والخشونة] + «والحبسة» نجح.

١١ التوت] «التوب» ب ١٢ غائرًا] «غارًا» ب.

٥ فالذُّبْحَةُ] «ذُبْحَةٌ/ذُبْحَةٌ/ذُبْحَةٌ» لسان II ٤٣٨-١٨-١؛ ≡ «κυνάγχης/συνάγχης» ٥ والبَحَّةُ] ≡ «βράγχος»
٥ والخشونة] ≡ «τραχύτης» ٥ والعلَق] ≡ «βδέλλα» (حلمة) ٥ وورم اللهاة] ≡ «σταφυλή»
«φλεγμοναί/χιονίδες» ٥ والحنازير] ≡ «χοιράδες» (σάνισα) ١٠ والفانيد] > «نيه/بانيد» ١٠ الكَشْكُشْ]
«الكَشْكُشْ: ماء الشعير» لسان X ٤٨١ ب ١؛ «πτισάνη».

صفة لا تقطاع الصوت

يؤخذ من عصارة الكُرْتَب، ويُطبخ مع عسل، ويُلقق.

صفة أخرى لا تقطاع الصوت

يؤخذ بزر كتان مدقوقًا منخولًا، وزبيب منزوع العجم، وحب الصنوبر الكبار مقلقًا، ويُندق: من كل واحد بالسوية.

تُسحق جميعًا وتُعجن بعسل مطبوخ، ويُعطى منها ملعقة واحدة.

وأما الورم في الحلق

1.8.3

فيحمل عليه ما يُحمل على صاحب الذبحة.

ويؤخذ الخيار سنبر فينقع في ماء حار، ثم يُصقى الماء ويوضع فيه القاقيا والزعفران والصبر: من كل واحد

وزن درهم؛ وماميثا: نصف درهم. فيستغرغ به.

ويستغرغ برَب التوت.

وأما ورم اللهاة

1.8.4

پ ٥٨ ظ

فيرفع بالثناذر والملح وشيء من عفص مسحوق.

ويستغرغ بالخل والملح، أو بخل العنصل.

١ صفة [«πρός φωνής ἀποκοπήν» XIII Γ ٤٨-١٢ (→ Ἀσκληπιάδης → Ἀντώνιος Μούσας) || ٣ صفة]
→ «ἀρτηριακή» Iatrica II ٩٢-١٢ (→ XIII Γ ٥٨-٢٥٩).

٤ ويُندق [«καρῶν ποντικῶν κεκαθαρμένων» Iat || ٦ ويُعطى ... واحدة] + «εἰς ὕπνον» Iat || ١١ برَب التوت [«رَبّ البرصاد» نجح].

٩ الخيار سنبر [«الخار | سنبر» پ || ١١ التوت] «للتوت» پ.

1.8.5

وأما العلق

- فَيُدَخَّنُ صاحبها بالطَّرْفَاءِ.
 وَيَأْكُلُ كُلَّ حَازٍ وَمَمْلُوحٍ، كَالثُّومِ وَالنَّشَاذِرِ.
 وَيَتَغَرَّغُ بِالزَّاجِ وَالْحَلِّ، أَوْ بِالنُّوشَاذِرِ وَالْحَلِّ وَالزَّنْجَارِ.
 وَيُقَرَّبُ إِلَيْهِ طَشْتُ فِيهِ مَاءٌ، وَيَفْتَحُ حَلْقَهُ: فَإِنَّمَا تَسْقُطُ فِي الْمَاءِ لَمَّا تَجَدُّ مِنْ حَرِّ الْأَدْوِيَةِ.
 ٥ فَإِنِ امْتَنَعَتْ، أُدْمِنُ التَّبَعْرُ، لَا سِيَّيَا بِالْبَقِّ: فَيُوشِكُ أَنْ يَحْتَرِقَ، إِنْ شَاءَ اللَّهُ.»

1.8.6

وأما الخنازير

- فَتُدَاوَى بِالدَّوَاءِ الْمَعْجُونِ الْمَصْنُوعِ مِنَ الْجَبِينِ الرُّطْبِ وَرَمَادِ الْحَيَّاتِ، وَيُعْجَنُ بِعَسَلِ الشَّهْدِ وَيُطْبَخُ بِهِ
 حَتَّى يَتَعَلَّكَ، وَيُجْمَلُ عَلَى الْخَنَازِيرِ.
 ١٠ وَيُجْمَلُ عَلَيْهَا مَاءُ لِسَانِ الْحَمَلِ بِالْقَطَنِ فِي كُلِّ يَوْمٍ ثَلَاثَ مَرَّاتٍ.
 وَيُحْمَلُ عَلَيْهَا الْأَدْوِيَةُ الْآكَلَةُ لِلْحَمِّ الْفَاسِدِ، مِثْلَ دَقِيقِ الْعَدَسِ بِالْعَسَلِ، وَالْمَرَاهِمِ الْمُنْتَقِيَةِ، كَالْبَاسَلِيْقُونَ
 وَالْمَرْهَمِ الرَّوْمِيِّ الْمَذْكُورِ فِي صَدْرِ الْكِتَابِ، أَوْ مَرْهَمِ الْأَرْبَعَةِ وَمَرْهَمِ الْمَصْرِيِّ.
 وَيَتَغَرَّغُ بِالْغَرَاغِرِ الْحَازَةِ.
 وَيُنْقَى || رَأْسُهُ بِالْكُسْتِجِ وَدَوَاءِ الْكَنْدَسِ.»
 ٥٩٥

٥ وَيُقَرَّبُ ... الْمَاءِ] «ثُمَّ يُوَضَعُ بَيْنَ يَدَيْهِ طَشْتُ فِيهِ الْمَاءُ وَيَفْتَحُ فِيهِ — فَإِنَّ الْعَلْقَ تَعَطَّشَ حِينَئِذٍ فَتَسْقُطُ» فَرْدُوس
 ٤٣٧-٤٣٨.

٨ فَتُدَاوَى] «فَتُدَاوَى» پ || ١٠ بِالْقَطَنِ] «وَالْقَطَنِ» پ || ١١ وَالْمَرَاهِمِ] «وَالْمَرَاهِمِ» پ، «وَالْمَرَاهِمِ» پ || ١٣ الْحَازَةِ]
 «الْحَادَةِ» پ || ١٤ بِالْكُسْتِجِ] «بِالْكُسْتِجِ» پ.

١٢ مَرْهَمِ الْأَرْبَعَةِ] «τρεφαρμακον/τρεφαρμακος» || ١٤ بِالْكُسْتِجِ] > كرت || ١٤ وَدَوَاءِ الْكَنْدَسِ] «τὸ»
 «διδά τοῦ στρουθίου».

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

فصل

وإذ قد تقضى رُبع الإنسان (الأول)، وهو الرأس والعنق؛ فلنبدأ بالربع الثاني، وهو الصدر. وذلك أنّ الأوائل قسمت جسم الإنسان على أربعة أجزاء وقرنته بالنواحي الأربع وأزمان السنة الأربع، فجعلت الرأس جزؤًا، والصدر جزؤًا، والجوف جزؤًا، والساقين جزؤًا. ووضعت لكلّ جزو من هذه الأجزاء ما يحدث فيه من الأمراض وما يُوافقه من الدواء.

وهذا حين نذكر الصدر ومزاجه ومنافعه وأمراضه وأدويته.

أما الصدر

2.1

فمزاجه: الحرارة واليبوسة.

فأما منافعه: فإنّه كالكبير في إدخال النسيم اللطيف من الهواء إلى القلب وإخراج الأبخرة الدُّخانية التي تتعمّ القلب. وهو حجاب القلب والرئة، وفي داخله تكون الأنفاس. ويُسمونه «تتور البدن». فأما أمراضه: فالوجع، والسعال، وضيق النَّفَس، والوَيْء، ونَثَث الدم.

علاج وجع الصدر

2.1.1

يُدهن الصدر بالزنبق والبنفسج ممزوجين.

ويُسقى وزن درهم من الترياق الكبير بقدر أسكُرْجَة من ماء فاتر.

٣-٥ وذلك... جزؤًا] ≈ فردوس ١٠٤-٢٣ || ٨ أمّا] ≡ «القول في الصدر» نجح.

١٢ والسعال] «وذات الجنب والسعال» نجح.

٥ والصدر جزؤًا] پ* || ١٠ كالكبير] «كالكر» پ || ١٠ الهواء] «الهوي» پ || ١١ تَعْمٌ] «نعم» پ || ١٢ والوَيْء] «والوى» پ.

١٢ والسعال] ≡ «βήξ» (عحهك) || ١٢ وضيق النَّفَس] ≡ «ἄσθμα» || ١٢ ونَثَث الدم] ≡ «αίματος πτύσις».

وَيُمَرِّخُ صدره بالمبيعة السائلة ممزوجة بالبنفسج الطيب لذات الجنب.
 فَإِنْ كَانَ الوجع من ذات الجنب، عُمِلَ له مرهم من المحيطا والعُنَابِ ودهن الورد.
 وَيُسْقَى الماء والعسل والماء المطبوخ بالمصطكى. وَيُسْقَى من الديبد كركما ومن الفلونية الرومية.
 وَيُقَصَدُ في مبتدأ العلة.
 وَيُسْقَى ماء الحلباء والزبيب مع شيء من سكنجبين.
 وَيُجَسَّى الحُبْتَازِ واللَّبْلَابِ.
 وَتَلَيْنُ الطَّبِيعَةَ.

2.1.2 وَأَمَّا السعال

فِيُداوَى بكلِّ ما يُتَلَيْنُ وَيُرَطَّبُ، بمثل لعوقٍ يُتَّخَذُ من الكثيراء والفانيد ولزوجة الحلباء.
 وَيُجَسَّى السُّكَّرُ بالسمن والعسل.
 ويدخل التمام، وَيُخَّرُ بالقسط والسعتر بالعود الهندي والسُّعْدُ.
 وَيُداوَمُ دَهْنُ صدره بالزنبق والبنفسج ليلاً ونهاراً حتَّى يبرأ، إِنْ شاء اللهُ.

2.1.3 وَأَمَّا ضيق النفس

فَيُسْقَى أَقْرِصَةُ الطباشير بالماء والعسل، وبالماء المطبوخ فيه الكرفس مع شيء من عسل، وباللعوقات
 الَّتِي ذَكَرْنَا من السعال؛ وبالعاقرقرا؛ يُطْرَحُ له في الطعام مسحوقاً.
 وبالحملة، فَإِنَّ الأشياءَ المفتحة للسدد من الترياقات والذبيذات والمطبوخات نافعةٌ لذلك، إِنْ شاء اللهُ.

٢ ودهن الورد [«والآس ودهن الورد» نجح || ٤ ويُقصد... العلة] + «من الجانب الخالب للوجع ليستجلب المادة من
 الجانب الثاني» نجح || ٦ ويُجسَّى... واللبلاب [«وحبته الخيار واللبلاب» نجح || ٩ الحلباء] «حب السعرجل والحلبا» نجح
 || ١١ والسعتر] - نجح || ١٤ وباللعوقات [«اللزوجات» نجح.

١ وَيُمَرِّخُ [«وممزج» پ || ٣ الديبد] «السد» پ || ٧ وتلين] «ولين» پ || ٩ بكلِّ ما] «بكلِّ» پ || ١١ والسعتر]
 «والسعر» پ || ١٤ وباللعوقات [«وباللوغات» پ || ١٦ المفتحة] «المفتحة» پ || ١٦ نافعة] «نافع» پ.

١ لذات الجنب] ≡ [πλευρίτις] || ٣ الفلونية الرومية] ® أقراياذين س ٤٤-٩-٢ || ٦ الحُبْتَازِ] «والملوخيا (هي الحُبْتَازِ)»
 طبَّ العرب ٢٣٨٥، [ملوكية] وهو الحُبْتَازِ البستاني» تلخيص [٥٢٦] (→ جالينوس، في صبي يُصرع).

صفة لضيق النفس

يؤخذ زرنبيخ: ربع. شت: ر(بع...): ربع. كبريت عراقي: (...).
ويؤخذ منه كل يوم (...): في بيضة انبرشت (...).

وأما نفث الدم

2.1.4

فيُعرف بأن يكون قليلاً صافياً. ٥
٦٠٠ فيُعمل له اللعوق الذي يُصنع من الصمغ العربي والكندر والشيتان والطين || الأرمني بالسمن.
ويُستقى لسان الحمل أو دم الأخوين واللُّوبان والجُلَّانار، أي ذلك كان، بالماء والعسل.
وتُجنب اللُّحان والدَّسَم، والأشربة المسكرة، والأشياء الحارة والحادة والخريفة والمسخنة؛ ويُستعمل
البارد، ولا ستيًا كلَّ قابض، مثل السَّفَرْجَل والكَمَثَاء.

وأما الوشي في الصدر

2.115٠

فيُدهن الصدر بالزنيق والموميا، ويُشرب منه أيضًا.
ويُحمل عليه ضاؤً من العدس المسحوق بقشره معجونًا ببيض البيض والعسل.

١٢ ضاؤً [«مرها» نجح || ١٢ المسحوق] «المطبوخ» نجح.

١ صفة... [٦٠٠] ٦ اللعوق [«العرق» ٦٠٠].

٣ انبرشت [> نيم برشت].

2.2

وأما الرئة

فمراجها: البرد والرطوبة.

وأما منفعتها: فالصوت والتنفس

والترويح عن القلب والروح، ولذلك سمّتها الحكماء «المِرْوَحَتَيْن».

فأما أمراضها: فالسّمة، والرّكام، والسّغلة.

2.1.1 فيعرف ذلك ويُميّز من السّيل: والسلّ يُعرف بنتن النفث وانتفاف الشعر — فإذا رأيت ذلك، فلا دواء له. وأما النسمة والزكام والسعلة، فتُعرف وتُميّز من السلّ إذا لم ينتف الشعر ولم يُنتن النفث.

2.1.2

علاج ذلك

بالعوقات المنقيّة الملتينة، كلعوق اللّزوجات والكثيراء وما أشبه ذلك.

ويؤخذ من حبّ القطن قدر رُبع رطل، فيُدقّ دقّاً حسناً ويُنخل. ويؤخذ من مُخّه قدر ما يملأ | الراحة ويجعل في قدرٍ ويُلقى عليه قدر نصف رطل من ماء عذب، ويُطبخ بلا ملح ولا ودك. ويحسوه صاحب العلة على الريق — يفعل ذلك ثلثة أيام.

أو يؤخذ من الكندر (وهو اللّوبان) مثلاً، ومن الشونيز مثل نصفه، ومثل ذلك ناخاة. ويُدقّ جميعه ويُخلط ويُعجن بعسل منزوع الرغوة. ويأكل منه على الريق مثل المندقة.

١ [وأما] ≡ «القول في الرئة» نجح ١١٢-٤-٢٦١١٤ || ٤ والترويح... - نجح؛ «والترويح عن القلب» فردوس ٦٢٢٨ ||
٤ ولذلك... «المِرْوَحَتَيْن» [«والرئة شبه المروحة» فردوس ٣٢٢٥-٤-٧-٦ والسلّ... له] [VII Morb Ἰππ ⇒
٢١-١٤٧٢.

٥ والرّكام [«والزكمة» نجح || ٥ والسّغلة] «والسلّ والفروح من التهطل» نجح || ٦ فيُعرف [«وأما السلّ» - فال يوحنا: فإنه يعرف «نجح || ٦ النفث» «الهم» نجح || ٦ وانتفاف] «انتثار» نجح || ٨ علاج ذلك [«وأما من النسمة والزكام» نجح || ١٠ حبّ] «لبّ» نجح || ١٣ الكندر [«الكندس» نجح.

٥ فالسّمة [«فالبشمة» پ || ٦ ذلك] پ || ٦ وانتفاف] «وانتفاف» پ || ٧ النسمة [«الشمه» پ || ٩ باللعوقات
«باللوعات» پ || ٩ اللّزوجات] «الروحات» پ. ١١ قُدْرٍ [«قدره» پ || ١٣ ناخاة] «ناخاه» پ.

٥ فالسّمة [«وهو التّقس والرّيو» لسان XII ١٥٧٤-٢٢-١٤؛ «صاحب النسمة» فردوس ٢٤-٢٣٢٠٤) || ٥ والرّكام] ≡
«κατάρρους» [٦ السّيل] ≡ «φθίσις» || ١٣ الكندر (وهو اللّوبان) [«ليبانوس: وهو اللبان، وهو الكندر» تفسير^{٢٠}
١٠١٤ (≡ «λίβανος»).

وأما القلب 2.3

ومزاجه ومنافعه ومضارّه

أما مزاج القلب: فالحر واليبس بالإضافة إلى الدماغ.
وأما منفعه: فالتبُّبُ وانبساط ریح الحياة في البدن، لأنه ينبوع الروح ومعدنه.
وأما أمراضه: فالعشي، والورم، والخفقان، والانتقاع لغشاء القلب.

فأما علاج العشي 2.3.1

فأفرغه بالقيء، وتوق معدته بالأصطخيقون والفيقرا.
وأطعمه الرمانين الحلو والحامض، واسقه شرابها، وأحمه من الأطعمة الغليظة.
واسقه ماء الشاهترج بالسيسنبر، واسقه من دواء المسك، إن شاء الله.

وأما خفقان القلب وضربانه 2.320

فتأخذ له وزن نصف مثقال شبتًا يمانيًا، فيسحق ويُسقى بماء السيسنبر ثلاث غدوات.
ويُسقى ماء الأصول بالحلثيت ثلاثة أيام في كل يوم أربع أواق.
ويُسقى دواء المسك أيضًا.

١ «وأما» [الفول في القلب] نجح ١١٤-٢٦-١١٥... ٤ ریح الحياة [وفي الآخر ریح الحياة] فردوس ١٢٢٥ || ٤ ينبوع
... ومعدنه] → «أن القلب كالمعدن والينبوع [πληγή] للحرارة الغريزية» مواضع^٢ ١٣-١٢-٥٢ (≡ VIII Γ ٢٩٨-٩) ||
١٣ دواء المسك [ويتعاهد شرب ديبد المسك، فإنه نافع للقلب جدًا] فردوس ١٦٦-١٧.

٣ بالإضافة إلى الدماغ] - نجح ٤ لأنه... - نجح ٥ فالعشي [بالعشي] نجح ٦ العشي [العشي] نجح ٨
والحامض [والمتر] نجح ٩ بالسيسنبر [بماء الامرسته^٣] نجح.

٥ فالعشي [فالعشاوه] پ ٥ لغشاء [لعشا] پ ٦ العشي [العغشا] پ ٩ بالسيسنبر [بالشيشنبر] پ
١١ السيسنبر [السيشنبر] پ ١٢ في [في | في] پ.

٥ والخفقان] ≡ «καρδιωγμός/παλμός» ٩ دواء المسك [صنعة دواء المسك] أقراباذين س ١٠٥٤-١٩، نسخة
دواء المسك المتر النافع للعشي والجيد للخفقان والوحشة والهتم منصوري ١٨٤-٩٢ || ١٢ ماء الأصول [صنعة ماء
الأصول] أقراباذين س ٩٨٧-١٥.

2.3.3

وأما ومره القلب والانتقطاع

فإتھما قاتلان من حمتھما، إلا أن يكون الورم باردًا، ويُعرف ذلك من مزاجه وضربان عروقه وسبته وغذائه وزمانه وعادته.

فإن كان باردًا، استعمل له ما يُستعمل لصاحب الغشاء، واجتنب الأطحمة الغليظة.

°

وافتح له الأكل، إن كان اليوم والزمان موافقين.

واستعمل الغراغر المخرجة للبلغم من الرأس واللاهوات.

ويُدِيم الحَمَام، ويُدهن جانب القلب بدهن الناردين أو دهن النرجس أو دهن الرازقي أو دهن القسط أو دهن السوسن.

ويُحقن بالحقن اللينة التي تُتخذ بالشيرج والشبث والحلباء مع ودك الرؤس والأكارع.

ب ٦١ ط

وهذه صفة الحقنة النافعة ليس | البطن والقولنج

« — ».

تم الجزء الثاني من أجزاء الإنسان

٥ وافتح... موافقين [«فينفعه فصد الأكل إن أعان السنّ والقوة والزمان» فردوس ١٥٢٢٦ || ٩ ويحقن... والأكارع] «واستعمل حقنة لينة بدهن خلّ وماء يطبخ فيه البابونج والشبث والحلبة» فردوس ٢٢٦-٥.

٤ الغشاء [«الغشاء» ب || ٥ والزمان [«الزمان» ب || ٦ واللاهوات [«اللوهاه» ب || ٧ الرازقي [«الرازي» ب || ١٠ وهذه] ب*.

٥ الأكل [«العرق الأوسط من العروق التي في المأبض، وهو الأكل» تشریح ٣٥٨.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

باب ذكر الكبد 3.1 ومنزاجها وأمراضها وأدويتها

فأما الكبد، فمنزاجها: الحرارة والرطوبة بالإضافة إلى القلب.
وأما منفعتها: فبتغيير الغذاء وإحالة إلى الدم وتغذيته إلى البدن.
وأما داؤها وأمراضها: فالضَّعْف، والوَثِي، والورم، والانسداد، والقرح، والماء الأصفر.

لضعف الكبد والاستحالة 3.1.1

ويُعرف ذلك بتغيُّر اللون — فحاجته من ذلك أن يسقى الذبيذ كركما والذبيذ لكًا والشكرنايا، ويُدهن بالزنبق الرازيقي.
ويُطعم الأطعمة اللطيفة، كاللجل والذَّراج والدجاج الفتية. وجبَّه كل ما يُولد الرياح.
واحمل عليه المرهم والضامات القابضة، كالسفرجل، والأفسنتين المطبوخ بالطلاع، وورق الورد، والصندلين، وشبهه.»

وأما الوثي في الكبد 3.1.2

فيُعرف ذلك بما عرض له من سقطةٍ أو ضربةٍ أو حَمَلٍ شبيءٍ ثقيل.
وذلك أن تُحمل عليه المومية بالرازيقي، || ويُسقى من ذلك.
وتُحمل عليه قرصة الورد، والأكْرُنْب مطبوخ مع شجر الثعلب، والعدس المطحون بقشره، مضروبًا ذلك بدهن الآس.»

٢ باب] «القول في الكبد» نجح ١١٥-١١٧-٤.

٨ أن... لكًا] «فعال بسقي ديبذ كركم أو ديبذ لكًا» فردوس ٢٢١-١٠١٢ || ٨ والشكرنايا] ≡ تصريف ٢٠١.

٥ فبتغيير] «بتغيير» پ || ٦ داؤها] «دواها» پ || ٨ والشكرنايا] «والشكرنايا» پ || ١٠ كل ما] «كلما» پ ||
١٥ المومية] «المومه» پ || ١٥ بالرازيقي] «بالرازيقي» پ.

٦ والانسداد] ≡ «ἄμφοραξίς» || ٦ والماء الأصفر] ≡ «ὕδρος».

صفة أقراص الورد لألتهاب الكبد وحرارتها

- ورد: ستة دراهم. حب البرباريس: أربعة دراهم.
طباشير أبيض، ونشاستج الحنطة: من كل واحد ثلاثة دراهم.
حب القثاء مقشّر، وصمغ عربيّ، وكثيراء، وزعفران: من كل واحد درهمين.
تُجمع منخولةً ويُصير فيها كافور: أربعة دوانيق. وتُقترص وتُجفّف في الظلّ.
ويؤخذ منها وزن مثقال.

3.1.3 وأما الورد في الكبد

- فإن كان السنّ موافقًا، فاقطع الأكل.
واسقه الترياق الأربع.
واحمل عليه مرهًا متخذًا من السفرجل والورد والصندل ودقيق الشعير.
واسقه الترياق الأكبر: فإنه يُنزل البول ويُثي المجاري — وينبغي أن يُسقا في ماء الأصول والبزور.
ويُسقى ديبد لكا وشبهه من الأشياء المفتحة المنشفة.

3.1.4 وأما السدد في الكبد

- ويُعرف بأن يجد | حس ذلك إذا أكل حلوا.
فاسقه كُنسج السكبيج والترياق المرّيع، أو دهن الخروع مع إيارج الفيقرا. واسقه السكرنايا.
وجبّه الحلاوة، وأطعمه كل قابض، كالسفرجل والكثيراء، وشبهه.

٥ القثاء [القثاء] ١٣ ديبد [ديبد] ١٣ المنشفة [المنشفة] ١٦ كُنسج [كُنسج] ١٦ السكرنايا [السكرنايا] ١٧ والكثيراء [والكثيراء] ب.

١٠ الترياق الأربع [١٣ ديبد لكا] ® Pharm 4-3132 ↓

وأما القروح في الكبد

3.1.5

فإن كان مع ذلك انقطاع عرق، ويُعرف ذلك بتقيؤ الدم الكثير الصافي — فإن ذلك مما يدل على هلاك صاحبه وانقطاع الرجاء منه.

وإذا لم يكن انقطاع عرق، كان منه الماء الأصفر^٢ (وهو المدور بماء الحين ذلك)^٣ ويكون منه تقيؤ الدم المختلط بالقيح. فاسقه من ذلك ألبان الإبل مع أبوالها، واعمل له أشربة منشفة مرة. ولا يأكل إلا مرة في اليوم. ويُستى وزن درهم من الراوند الصيني بألبان الغنم والأتن.

ويؤخذ حفن من كزويا ويُطرح عليه رطلان من ماء، ويُطبخ حتى ينتصف. ثم يُصفى ويشربه، وقد صُب عليه شيء من زيت لوز — يفعله أيامًا.

٦٣ پ ويؤخذ بزر الكرفس، وسكبينج، ودييد لكأ، ودييد كركيا، || والشكرنايا، ودييد قسط، ودييد الراوند، ١٠ وشبهه من أدوية الكبد.

٢ بتقيؤ [«تقى» پ || ٤ وهو... ذلك] «وهو المدور بما الحين ذلك» پ ٣* «وهو المستى الحين»؛ ٤* «وهو المداور بماء الحين» || ٤ تقيؤ [«تقى» پ || ٩ ودييد] «وديد» پ || ٩ ودييد [«وديد» پ || ٩ والشكرنايا] «والشكرنايا» پ || ٩ ودييد [«وديد» پ || ٩ ودييد] «وديد» پ.

3.2

وأما المرارة

فمراجها: الحرارة واليبوسة. وهي بيت المزة الصفراء. ومنفعتها: في تسخين المعدة والكبد وسائر الأعضاء الجسمانية، لا سيما في الشتاء. لأن المرارة نازة البدن، وهي المعينة على هضم الطعام وطبخه في المعدة والكبد، وتحريك الخلاء والبول، وتصفية دم الجسد من كيموس الدم الغليظ: تجذبه إلى نفسها بلطيف العروق. وأما أمراضها: فالضفار والتسدد.

3.2.1

وأما علاجها من الصفار (وهو اليرقان)

فمن ذلك: أن تؤخذ عشرة مثاقيل هليلج، ووزن داتنين سقمونية، ويُخرج بالغد لبنا ويشربه. أو يسقيه وزن مثقال غاريقون معجونا بالعسل بماء حار، إن شاء الله.

3.2.2

وأما السدة في المرارة

فيسقي صاحب ذلك الديدات التي حكينا. ويُعالج بما تُعالج به الكبد من السدد، إن شاء الله.

3.2.3

وأما اليرقان (وهي الصفرة التي تكون في العينين)

ب ٦٣ ط

أكثر ما تكون بإثر الحمى، فثداوى بالدواء الذي ذكرنا في باب المرارة.

3.2.4

وأما الصفار

يسقيه ماء الجبن المعقود بالقرظ مع السقمونيا. ويسعط بحب شونيز بلبن امرأة ترضع غلاما. واقطع منه العرقين اللذين تحت اللسان.

١ وأما [الفول في المرارة] نجح ١١٧-٤٢٢ || ٣-٥ في [العروق] «فعلها تسخين المعدة والكبد وهضم ما فيها، وتصفية دم العروق وتلطيفه، وفتح مجاري الجسد» فردوس ٢٣٨-١١١٣ || ٨ أن... ≡ أهرن د الحاي VII ١٦٧-٤٥، فردوس ٢٣٩-١٤١٦.

٢ وهي... الصفراء] - نجح ٦ فالضفار والتسدد [بالصبار والدود! واليرقان] نجح.

١١ الديدات [الديدات] ب || ١٤ تكون [تكون] ب || ١٧ العرقين اللذين [للعرقان اللدان] ب.

٧ اليرقان ≡ «ἰκτερος» (مصحف).

باب ذكر الطحال ومزاجه وأمراضه وعلاجه

3.3

أما مزاجه: فالبرد واليبس. وهو بيت المزة السوداء.
وأما منفعته: فتبريد القلب لئلا تنسد المعدة ونحوه، وتشهية الطعام، ودفع المعدة، ويرد ردي الدم من
الكبد ويجذبه إلى نفسه ليحييه مرةً سوداء. ٥
وأما أمراضه: فعدة أمراض الكبد؛ وأدويتها واحدة، لكن الكبد أسرع الأعضاء قبولاً، لأنها واسعة مجاري
العروق وكثرة دمها، والدم خليف الروح وعماد الحياة.

3.3.1 فعالج الورم والصلابة تكون في الطحال بما أنا أذكره لك، إن شاء الله.
أبدأ في ذلك بفتح الأكل والباسليق، ثم اسقه الدحمرا وترياق العزيز.
١٠ واقنع له التين في الخل، وأطعمه في كل يوم ثلث حبات من تين، واسقه من الخل.
٦٤٤٥ ومن أجود ما يُعالج به: المرهم المذكور بعد هذا في باب المعدة.
ويؤخذ من قشور عروق الأصف: وزن اثني عشر دهرماً.
ومن حب الشبث والإيرسا: من كل واحد ستة دراهم. ومن الخردل: درهمين. ومن المتر: سبعة دراهم.
يُدق ذلك ويُخل ويُعجن بخلّ وعسل.
١٥ الشربة منه: وزن درهمين. ويُطلى منه على الطحال — فإنه نافع من جميع أمراضه.
واقنع له عرقاً بين الخنصر والبصر من يده ورجله.

١ [باب] «القول في الطحال» نجح ٢٢١١٧-١٣١١٨ || ٣ وهو ... السوداء] - نجح، «الطحال بيت
السوداء» فردوس ٢٤١؛ «δόντος γάρ του σπληνός ως ταμείου τινός του μελαγχολικού χυμού» XVIIIA Hipp.Epid.comm ٤٣٣-٤٥٠ || ١٠ واقنع... الخلل] «ويُنفعه أن يؤخذ من التين ويُقنع في الخلل سبعة أيام، ثم
يؤكل منه في كل يوم ثلاثة ملاعق» فردوس ٢٤٢-٤٥٠.

٤ تنسد] «تيسد» نجح.

٤ تنسد] «سسد» پ || ٤ ودفع] «ودع» پ || ٤ ويرد ردي] «وترردى» پ || ٥ ويجذبه] «وجذبه» پ || ٥ ليحييه
«لتحييه» پ || ٦ وأدويتها] «وأدويتها» پ || ٦ لكن] «لكن» پ || ٩ الدحمرا] «الرحموتا» پ || ٩ العزيز] «العرر» پ.

٩ والباسليق] «[من العروق التي في المأبض] العرق الكبير الداخل (وهو الباسليق)» تشریح ٥٨؛ > (φλέψ)
βασιλικά] «٩ الدحمرا» > βαιίασσα: ① «صفة دخمرتا» فردوس ٤٥٢-١١٩، «صنعة الدحمرا» أقراباذين ص
١٠٥٧-١٠٥٧ || ٩ وترياق العزيز] > «ἡ Ἐσδρα (ἀντίδοτος)» ② Pragm II ٣٠٣-٥٢١.

صفة أقراص الكبر
النافعة لجساء الطحال

- قشر أصل الكبر، وقسط هندي، ولك منقي، وسنبل، وجعدة، وزراوند مدحرج وزراوند طويل، وقشر سليخة، وفقاح الإذخر، وإيارج فيقرا: من كل واحد مثقالين.
 ٥ يُدق ويُخل ويُعجن بماء الكرفس الرطب أو بخل خمير، ويُعمل أقراص — وزن كل قرص: مثقال.
 ويُجفف في الظل.
 الشربة: قرص ٥.

صفة أقراص الخشخاش
النافعة من الالتهاب والحارة الشديدة والقروح في الكلى والمثانة
من كتاب شمعون

- ١٠ يؤخذ بزر خشخاش، وبزر كتان، وبزر قثاء، ولباب حنطة: من كل واحد جزو بالسوية.
 يُدق | ويُخل ويُعجن، وتُعمل منه أقراص، وتُستعمل بماء المخطط وبزر الخطمي ٥.
 پ ٦٤ ط

١ صفة [≡ تصريف II ١٤-١٠١٤، ≡ زاد ١٢-٦٤٦٢ || ٨ صفة] ≡ زاد ٦٤٧٦-١١.

١ الكبر [الكبار] ز ٣ الكبر [الكبار] ز ٣ منقي [المنقا من عيدانه] ز ٣ وسنبل [+ الطيب] ت ٣ وزراوند ... طويل [والراوند الشامي والزراوند الطويل] ز، «الزراوند الشامي والزراوند الطويل» ت ٤ مثقالين [مثقالان] ز ٦ ويُجفف في الظل [- ت ٧ قرص] قرص مسحوق مذاب في ماء الشيح والقيصوم وأصل الإذخر وقشر أصل الكبار مع السكنجيين » ز، «قرص بماء الشيح والقيصوم وأصل الإذخر وقشر أصل الكبر مع السكنجيين فاتها غاية ونهاية» ت ١٠ من كتاب شمعون [من كتاب شمعون الراهب — وقد جربناها] ز ١١ ولباب [وكثيراء بيضاء ولباب] ز ١٢ و [ومخطط معها وبزر] ز.

باب ذكر المعدة ومراجعتها ومنافعها وأمراضها وأدويتها

3.4

أما المعدة، فمراجعتها: البرد واليبس.
ومنفعتها: إنضاج الطعام وإزلاقه.
وأما أمراضها: فالورم والوجع، والضعف وانقطاع الشهوة، والشهوة الكليبية، والفواق، والجشاء والتخمة
والمخوضة، وسوء الهضم وضعف الحبس، والقيء، ونفث الدم، والعطش.»

علاجها من الوجع والورم

3.4.1

إن كان السبب والزمان موافقين، فافتح له العرق، إلا أن تكون معدته باردة، وتعرف ذلك بصفرة لونه
وتخلل طعامه. فإذا رأيت ذلك، فتق المعدة بالفيقرا والأصطاحيقون.
واستعمل عليها مرهًا يعمل من دقيق الحلباء وزريعة الكتان والنبيد والتمر والماء والزيت والعسل: ويُمَدَّ
في خرقَةٍ ويحمل عليه شيءٌ من مصطكى وأفسنتين، ويحمل عليها، إن شاء الله.»

وأما ضعف المعدة وانقطاع الشهوة

3.4.2

وأما ضعف المعدة وانقطاع الشهوة، فأطعمه الرمانين الحلو والحامض مزوجين. وأطعمه ما يفتح السدد
ويشهي الطعام، كالجنثورية وخلّ العنصل. وأطعمه من جوارشن الكمون والإطريقل.»

١ [باب] «القول في المعدة» نجح ١١٨-١١٩-٢١١٩.

٦ والقيء] «والعواق والقيء» نجح ٦ [الدم] «الدم» نجح ١٠ والنبيد والتمر] «والتمر والسك» نجح ١٤ [الجنثورية]
«الفتنطوريون» نجح.

٥ والوجع] «والحوج» پ ٦ [الدم] «للطعام» پ ١٠ والنبيد] «والنبيد» پ ١٤ [الجنثورية] «الجنثورية» پ.

٥ والفواق] «λύγξ» ٥ والجشاء] «ἐρευγμός/ἐρυγή» ١٤ [الجنثورية] «ويُسمى [الفتنطوريون] بالرومية
«الجنثورية» ابن عمران = جامع س IV ٢١-٢٥ (≡ تريباق = ١٣٨-٢، تلخيص [١٨٥٧]).

صفة سفوف

يؤخذ القَرَطُ يُحَمَّصُ في الفرن، ويُطحن ويُعجن بدقيق فَطِير بماء الرازيانج والكرفس والهندباء والنعناع وسائر البقوليات.
ويُقَرَّص ويُخبز ويُجفَّف في الظلّ. ويُطحن ويُضاف إليه كَمُون أسود وأبيض، وشَار، وأنيسون، وكُزْبُرَة، وحصى لُبَان، وقشر التَّارُنج، والمصطكى، والسكر، والقرفة، وما أُحْبِبْتِ ٥.

صفة لثقيمة المعدلة

يأخذ حبَّ الرِيجَان إذا طاب حُبُّه، ويدقّه حسناً، ويطرحه في الماء، ويعرّكه عرّاً جيّداً. ثمَّ يُصْفِيه، ويُشرب منه على الريق — نافع.

3.4.3

وأما الشهوة الكلبيّة

١٠

فيُطعم الأشياء الحلوة الدسمة، وتُنقى معدته من الفضول بالفيقرا والأصطاحيقون. ولْيُستعمل القيء بكلِّ ما يُخرج البلغم المالح الغليظ.

3.4.4

وأما الفواق والقيء

فيُعطَّس.

٦٥ ط

وتأخذ قَدْر سُكَّرِجِيَّةٍ من ماء السذاب، وتجعل فيه وزن درهم من شَبِّ يَمَانِي ومثله سَكَّر | أبيض مسحوق، ويشربه.
ويُسقى وزن درهم ديبد كركم.

١٥

١٠ الأشياء... الدسمة [وينفع من الشهوة الكلبيّة أن يستعمل أطمعة دسمة لثينة] فردوس ١٦٢-١٧٠ || ١٠ وتُنقى... والأصطاحيقون [وإن كانت الفضلة غليظة، أخرجها بأصطمخيقون وبيبارج فيقرا] فردوس ١٨٢-١٩٠ || ١٣ فيُعطَّس [ويُعطَّس بالكندس، فإنَّ العطاس يُسكّن الفواق] تصريف I ١٦٩-٢٦٠.

٤ وكثيرا اطنه» پ ٥ || ٥ وحصى لُبَان [وحصالبان] پ ٥ || التَّارُنج [البارنج] پ ٧. حسناً [حسن] پ || ١٠ وتُنقى [وتنقى] پ ١٣ فيُعطَّس [فيعطش] پ ١٦ ديبد [ديد] پ.

٥ التَّارُنج [> نَرْك → نارنج.

وأما سهولة البطن

3.4.5

فإن كان مزمنًا، فهو من علامة التَّكَلُّفِ.
فيسقى الشكرنايا بشراب الآس. ويسقى الصبر والمصطكى: من كل واحد درهم، بشراب الورد وبالماء
السخن. ويأكل الإطريفل الكبير، إن شاء الله.

وأما الجشاء والتخمة

3.4.6

فاسقه الفنداديون، وحسوا من خلّ العنصل.
وألّن الطبيعة بالحقن. وأغمسه في الحوض.
واسقه فيه من دهن الخروع. واسقه وزن درهم من الناختة بماء حار.
وأطعمه جوارشن الكافور والشكرنايا والإطريفل الكبير. وأطعمه الأطمعة الخفيفة، كالسريس والخيار
ولحم الطير البرّي. ويُديم شرب الماء الحار.

وأما سوء الهضم وقلة الحبس

3.4.7

فيرعض من ذلك لُرُقُ المعاء والإسهال، ويُعرف ذلك بأن يخرج الطعام كما دخل نبيًا غير منهضم، ويخرج
قبل ثماني ساعات.
فينبغي أن يُسقى ذلك الترياق الأكبر والشكرنايا والفلونيا. ويُطعم جوارشن التَّبَق وسويق حبّ الرمان
والبَلُوط.
واسقه ربّ الآس، وربّ العنب الغض، وربّ السفرجل.
وأظله من خارج باللطوخ.
واسقه من قرص الطباشير، واسقه ماء الكشك والأرز المطبوخين.

٦ الفنداديون [«العبرادفون» نجح || ٧ وألّن الطبيعة بالحقن] «فيسعمل الحقن اللينة» زاد ١٢٣١٩ || ١٢ بأن... منهضم [«سرعة خروج الأغذية غير منهزمة» تصريف I ١٦١-٢٥ || ١ ماء... المطبوخين] «ويشرب ماء الكشك وماء الأرز المطبوخ» فردوس ١٢١٢.

٢ مزمنًا [«مزمن» پ || ٣ الشكرنايا] «للشكرنايا» پ || ٦ الفنداديون [«العبراقون» پ || ٦ وحسوا] «وحسو» پ || ٨ الناختة [«الناخاه» پ || ٩ والشكرنايا] «والشكرنايا» پ || ٩ كالسريس [«كالسريس» پ || ١٤ والشكرنايا] «والشكرنايا» پ || ١٧ باللطوخ [«بالطوخ» پ].

٦ الفنداديون [«الفنداديون» فردوس ١٢٢، معدة^٣ ٢٧١١٩؛ (R) «صنعة جوارشن الفنداديون النافع من النفخ وبرد المعدة» أقرابادين ٣٥٤-٨.

3.4.8

وأما نفث الدم

- ويُعرف (ب) أن ينفثه ولا يتقيأه.
فمُزّه من الطعام بكلّ قابض، كالسفرجل والكمثراء واللوز.
واسقه قدر أسكرجة من ماء الكثرات بملعقة من سكنجيين.
ويُصنع له هذا الدواء:
وصفه — لبان، وكوكب الأرض، ولباب القمح، والصمغ العربيّ، والجلنار، ودم الأخوين: من كلّ واحد جزو.
ودقه واعجنه بماء بارد، واجعله حبًا مثل الفلفل.
واسقه منه وزن درهمين بماء فاتر — فهو جيّد، إن شاء الله .

3.4.9

وأما العطش

- فاسقه ماء الرمان المرّ والسكنجيين، أو الإطريقل.
واسقه الماء الحارّ.
وقَيِّئْهُ البلغم المالح بالخلّ والعسل، إن شاء الله.
فإن كان العطش من المزة الصفراء، فاسقه الهليلج ومخيض البقر.

٧ وصفته] ≈ (R) فردوس ٢٣٧-١٦.

٥ واسقه... من سكنجيين] «واسقه قدر نصف سكرجة من ماء الكثرات بالسكنجيين» فردوس ١٠٢٣٧.

٤ والكمثراء] «والكمثراء» ب || ١٤ وقَيِّئْهُ] «وقيه» ب.

وأما الأمعاء

3.5

فالأمعاء، مزاجها: البارد والرطوبة.
 وأما منافعها: فإنها مسلكُ الغذاء والريح.
 وأما أدواؤها: فالتسحيج، والقولنج والرياح، والديدان والضُّقار.
 3.5.10 (—) ويُعرف ذلك بأن تكون المعدة والكبد صحيحتين، وتُعلم صحتهما باحمرار | الشفة وصفاء اللون.
 ٦٦ ط ويُعلم السحاج بخروج الدم والقشور في الخلاء.
 فيؤمر صاحب ذلك بأكل البُنْدُق والشاه بلوط المشوي بقشره الداخلي، وأكل المطبَّجات ونواهض
 الفراح وقشور الأثْرَج.
 ويؤخذ من لبن الغنم الحليب رطل ونصف، ومن الماء مثله. وتُجعل فيه حبات فلفل، ويُطبخ حتى يصير
 ١٠ إلى النصف. وتوضع فيه ملعقة من سكر، فيكون ذلك شراب المريض.
 أو يؤخذ خَرْوب وشاه بلوط، فيدقن، ويشرب منها مثقالين برب الآس كلَّ غداة.

وأما القولنج والريح

3.5.2

وأما القولنج والريح، فيُشرب دهن الخروع. ويُستنقع في الماء الحار.
 ويُطعم مرق ديك مسقن بماء الكراث والملح.
 ١٥ ويُسقى الحَبَّ الهندي. ويُعمل له دَسَّاشُ بمرارة البقر والنطرون في العسل.
 ويُسقى النانخة والحرف. ويُتجنب ما يولد الرياح، كالفجل والبالقي، وشبه ذلك.

١ [وأما] ≡ «القول في الأمعاء» نجح ١١٩-٢١١٢٠-١٣ || ويُستنقع... الحار [«وينفعه أن يبدأ فيستنقع في آبن ماء
 حار» فردوس ١٩٢٥٥ || ١٤ مسقن] ⊕ «مُسِن» || ١٥ ويُعمل له دَسَّاشُ... العسل] ≡ «فعالجه بالفتل، وتُعمل من
 فتاء الحمار وشحم الخنظل ومرارة البقر ونطرون وعسل: يُتخذ منه شياف طوال طولها ست أصابع» بولس د الحاوي
 VIII ١٢١-٤ || ١ النانخة [«النانخة تحل الرياح» ابن ماسويه د الحاوي VIII ١٦٠-٩ .

٤ فالتسحيج [«فالتسحيج» نجح ٥ || ويُعرف ذلك [«أما أدواؤها من السحج — فال يوحنا: ويعرف ذلك» نجح ٥ || اللون
 «الوجه» نجح ٧ || البُنْدُق والشاه بلوط [«البلوط» نجح ١٧ || المطبَّجات [«المطبَّجات» نجح ١٥ || الهندي] «الهندي»
 نجح.

٤ أدواؤها [«د اوها» پ || ٤ فالتسحيج [«فالتسحيج» پ || ٥ صحيحتين [«صحيحن» پ || ٧ صاحب] پ* ||
 ١١ خَرْوب [«حروب» پ || ١٤ الكراث [«الكراث» پ || ١٥ الهندي] «السوى» پ.

٤ فالتسحيج [«λειτουργία» || ٤ والقولنج] ≡ «καλικός» || ١٥ دَسَّاشُ [«الشيافات هي الدَسَّاسات» تلخيص
 [١٠٠] (≡ تصريف II ٤٤٩-٢٥٦): «دَسَّاسَة» DAA ١٧٩ {DSS}*.

3.5.3

وأما الديدان والصفامر

فيؤمر أن يستقّف الدقيق والشّيح الأرمنيّ في كلّ غداة.
ويُسقى وزن اثني عشر درهماً من حرف أبيض بماء أو نبيذ على ريق النفس.
أو يُسقى هذا الدواء:

وصفه — يؤخذ من التريد: وزن ستة دراهم. ومن السقمونيا: وزن ثلاثة دراهم.
يُدقّ ذلك ويُخل، ويُشرب منه || وزن درهين بلبني حليب — فإنه مُخرّج للئود والحيتات، صغيرها
وكبيرها، إن شاء الله.

٣ نبيذ [«نبيذ» پ || ٥ التريد] «الريد» پ.

٦ للئود [«ἀσκαρίδες» || ٦ والحيتات] ≡ «ἄλμινθος στρογγύλαι».

باب ذكر الكلتيين والمثانة ومزاجيهما وأدويتهما

3.6

وأما مزاجهما: فالبرد واليبس.
وأما منفعتها: فأخذُ فضلة الدم من الكبد وتصويره بولاً وإخراجه إلى المثانة، ودفع المنى وتحديده إلى
الأنثيين والدَّكْر.
وأما أمراضها: فالحصاة، والقروح، وسَلْسُ البول.

علاج الحصاة

3.6.1

أسقه دواء **ماسرجويه** المتخذ من الزرارع.
وأدخله الحمام، وادهنه بأدهنة طيبة.
وحَوْفُه من الأغذية الرديئة الكيموس.
واسقه الترياق الأكبر والشكرنايا.
واحقنه بسمن البقر ودهن الجوز ودهن السمسم ودهن اللوز: من كل واحد نصف سكرجة. ومثل
جميعها من ماء الحلباء والشبث مطبوخين. يُجمع ذلك ويُحقن به سخناً، إن شاء الله.
قال بلطنان الحكيم: «ينبغي لصاحب الحصاة أن يأكل أوقيتاً أو أوقيتين من لوزٍ مُرٍّ، ويشرب عليه
أوقيتة من شراب سكنجبين عسليّ وستّ أواقٍ من ماء البسباس أو الكرفس والدوقو مطبوخ، إن
شاء الله».

١ باب [«القول في الكلتيين والمثانة» نجح ١٢٠-٢٢١٢٢-٢٢٨ دواء... الزرارع] + «الذي ذكره أهرن في كتاب
الفولنج» نجح؛ ® «صفة دواء ماسرجويه [...] ويذيب الحصاة» فردوس ٤٦٥-٦٠٠.

٦ والقروح] + «والسحج» نجح ٦ وسَلْسُ البول] + «وحصر البول وتنظيره» نجح ٨ ماسرجويه] - نجح.

٤ وتصويره] «ويعيره» ب ٥ الأنثيين] «الانين» ب ١١ والشكرنايا] «والشكرنايا» ب ١٢ السمسم] «السمسم»
ب ١٤ بلطنان] «بلطنان» ب ١٥ وستّ] «وسته» ب ١٥ والدوقو] «والدوقو» ب.

٦ فالحصاة] «λιθιασος» ٦ وسَلْسُ البول] «وسَلْسُ بولِ الرجل: إذا لم يتهتأؤ له أن يُمسكه. وفَلَانٌ سَلْسُ البُول: إذا كان لا يَسْتَفِيكُه» لسان VI ١٠٨ ٤-٦؛ «σπραγγουρία»

ب ٦٧ ط

صفة | أقراص للحصى ووجع المثانة — لنتقيها

حبّ البطيخ مقشّر، وقُلب هنديّ: من كلّ واحد خمسة دراهم.
 بزر هليون وأصل هليون، وثيل حشيش، وحبّ الحسك، وبزشاوشان، وسقو(لو)فندريون: من كلّ واحد ثلاثة دراهم. دوقو: درهمين.
 ٥ تُجمع مسحوقةً منخولةً وتُعجن بماء، وتُقَرَص.
 والشربة منه: درهمين.

صفة دواء للحصى وأوجاع المثانة
للصيان خاص

يؤخذ أربع مجلات: ثدق بورقهنّ واعصرهنّ، واجعل مع مائهنّ قدر جوزة سمن بقر. ثمّ أغله حتى تخرج رغوته: ثغليه غليّةً أو غليتين بنارٍ ليّنة. ويؤخذ منه للصبيّ ثلاثة أيّام حين يتعالى النهار.

3.6.2

وأما سلس البول والقرح

فاسقه الإطريفل ودأومه.
 وأطعمه مائةً جميل مشويّة، والبّلوط والشاه بلوط المشويّ.
 ويؤخذ البّلوط والمزّ واللوتان، فيطبخ بالطلاء، ويصقى ويخلط بدهن الآس.
 ١٥ وتُسقى عصارة السذاب بالماء.
 ويؤخذ بزر القطف، وبزر المزّمأخوز (وهو ضربٌ من الممر(و)) والسذاب، فاطبخه بطلي، واسقه ثلاثة أيّام.
 وأطعمه خصى الديوك، إن شاء الله.

١٣ وأطعمه... مشويّة] «حمل» → «πρόσ τοὺς ἐνουροῦντας. κύστιν αἰγείαν ἢ προβατείαν κεκαυμένην» XIII Sec.loc Γ «πότηζε δι' ὄξυκράτου» ١٤ || ٣١٩-٣٢٠-٣٢١ || «أو يؤخذ بلوط ومزّ وكندر، من كلّ واحد جزء؛ فيطبخ بشراب، ويصّب له على الشراب بعد أن يصقى من دهن الآس وزن درهمين» زاد ١٥٤٩٢-١٦.

١٣ جميل] «حمل» نجح || ١٤ واللوتان] «والكندر» نجح || ١ وبزر المزّمأخوز] - نجح.

١ للحصى] «للحصى» ب || ٢ وقُلب] «وقلب» ب || ٣ وثيل حشيش] «وسل حسس» ب || ٣ وبزشاوشان] «وبزشاوشان» ب || ٣ وسقو(لو)فندريون] «وسقوفندريون» ب || ٤ دوقو] «دوقوا» ب || ٤ درهمين] «درهمين» ب || ٧ للحصى] «للحصى» ب || ١٠ يتعالى] «تعالا» ب || ١٥ وتُسقى] «وسقى» ب || ١ المزّمأخوز] «المزّمأخوز» ب || ١ الممر(و)] «المزّ» ب || ١ بطلي] «بطلي» ب || ٣ خصى] «خصي» ب.

وأما القمح في المئانة

3.6.3

- ٦٨٠ فاحقته بهذه الحقنة || التي ذكرناها في باب الحصة.
- فخذ له بزر كتان، ولباب بزر القثاء والبطيخ، والكثيراء: من كل واحد وزن درهمين.
- ومن لباب القمح: وزن ثلثة دراهم أو أربعة.
- ٥ يدق الجميع ويُنخل ويُعجن بلعاب السفرجل أو لعاب الحلباء أو الماورد، ويُجعل أقراصاً — كلُّ قرصة وزنها درهم.
- والشربة منه: قرصة بماء بارد.
- وامره بالحمام والدَّهن بالزنبق والبنفسج، إن شاء الله.

تمّ الجزء الثالث

٣ فخذُ [...] XIII Γ ١٥٣٢٢-١٨ → (Andróμαχος).

١ القمح في المئانة [«السحج والفروح» نجح.

ابتداء الجزء الرابع من أجزاء الإنسان

4.1

باب ذكر الوركين والظهر والفخذين ومنزاجهما

- أما الوركين والفخذين، فهما باردان يابسان.
ومنافعها: أنّ بهما يكون الاثناء للقيام وللقعود.
وأما أمراضهما، فمن الفضول المنجلبة إليهما، فيكون من ذلك: الوجع، وزوال عظم الورك، وعزق النساء.

4.1.1

علاج وجع الورك

- إن كان الزمان ممكناً والسبب موافقاً، فاقطع منه الأكل، ثم مَيِّه الخام، ثم اقطع العرق من رجله (وذلك ما بين الخنصر والبصر).
واسقه دواء الشيطرج والحب الفارسيّ^{١٠} والمسوا الصغير.
وكَيِّده بالمراهم الحارة والأدهان الحارة.^{١١}

١٠
١١

٢ باب] ≡ «القول في الوركين» نجح ١٢٢-٢٢١٢٣-٨١١٢٣ || ٩-١٠ فاقطع... والبصر] «عولج بفصد الأكل أو الذي عند أصل خنصر الرجل» فردوس ٣١٨-٤.

١١ والمسوا الصغير] «المسرى الرفيق نحو حب الأصابع» نجح.

١١ والمسوا] «المسوا» پ (ح) والميسوسن*).

٦ وعزق النساء] ≡ «ισχιας» || ١١ دواء الشيطرج] ≡ حب الشيطرج؛ ↓ (R) 4.3.2 Therap || ١١ والحب الفارسيّ] ↓ (R).

وهذه صفة الحب الفارسي

النافع، بإذن الله، من وجع الصُّلب والوركين، والسلاسة والتقطير، والإبردة والخام
ويُسَخَّن الكلى ويزيد في الماء، إن شاء الله

يؤخذ من الصبر السقطري الأحمر الجيد، وقشر الهليلج الأصفر، وشحم الحنظل الأبيض، والتريد
القصي، والملح الأندراي، وحب الرشاد، والشونيز، وصعتر فارسي، وزنجبيل صيني: من كل واحد
نصف أوقية.

يُدق الجميع ويُنخل ويُعجن بماء ورق الكزّاث والفجل.
ويؤخذ منه منقال على توحُّش، وبالليل وزن درهم، إن شاء الله.

وأما نروال الومرك

4.1.2

١٠ فيكون من الخام المنعقد، فيصير مثل الحصاة إذا أزم. فبدأ في أوّله باستعمال المشي، وتنقية البدن من العفونات والفضول الغليظة بمثل الحب الفارسي أو
حب الشيطرح أو حب الأصاع. واحمل عليه من الأدهان الحارة ما يُذيب ذلك الخام، مثل دهن الفريون وشبهه.
فإن لم ينفعه، فأكوه في ملتي العظمين كئياً بليغاً، إن شاء الله.

٣ الكلى [«والكلا»] پ || ٥ الأندراي [«الاندراي»] پ || ٨ على توحُّش [«اي قبل الفطور»] پ². ١١ الحب الفارسي [«حب للفارسي»] پ || ١٣ الخام [«اللحم»] پ || ١٣ الفريون [«الفريون»] پ.

١ صفة [®] ≠ [®] Pharm 3.1 || ١٢ حب الشيطرح [®] Therap 4.3.2 || ١٢ حب الأصاع [«وحب الأصاع، وكلّ حب يرد به تنقية البلغم»] مجالس ١٠١٥١؛ ® تصريف I ٤٠٨ I-١٢-١٧.

4.2
ب ٦٩

باب ذكر الأثيين || والذكر ومنافعهما ومداواتهما

أما مزاجهما: فالحرارة واليبوسة.
وأما منافعها: فإبراز البول وإقامة النسل.
وأما أمراضها: فالأدرّة والتفخ، والاسترخاء وقلة الشهوة، والوجع، والقرح.

4.2.1

علاج الأدرّة والتفخ

بهذا المرهم: يؤخذ من اللوبان، جزو؛ من الغراء، جزو؛ من الأنزروت، جزو؛ ومن المصطكى، جزو. يُدق الجميع ويُنخل، ويُتبع الغراء في الخلّ، وتُخلط به الأدوية، وتُطلى بها الرّفغان. وينام على قفاه ثلثين يومًا.
ويجتنب كل ما يُولد الرياح، نحو الباقلاء والتين اليابس والفجل والكرثا.
فإن كان ورمًا بلا أدرّة، حُجم في الظهر. وأخذ من دهن الورد جزو، من دقيق الفول جزو، ومن الماء جزو. يُسخن الدهن بالماء، ويُخلط بدقيق الفول، ويُطلى على خرقه وتوضع على الورم.

4.2.2

وأما استرخاء الذكر وضعف شهوة الجماع

فيؤخذ من دهن البلسان: جزو. ومن علك الأنباط ومن الكندر: جزو. ومن دهن السوسن: جزو. يُجمع الجميع على نارٍ فاترة حتى يمتزج ويعتدل، ويُترخ به الذكر.
ويُستعمل دهنه بالزنبق، ويُضجّه بالماء السخن. ويُستعمل الحبّ الهنديّ | وما يُخرج الخام.

١ باب] «الفول في الأثيين والذكر» نجح ١٢٣-١٢٥-٢٥١٢٥ || ٧ بهذا المرهم] ≈ ® «صفة ضداد من الأدرّة الكائنة من ربح» تصريف I ٢٣٢-١٧-٢٠.

٥ الشهوة] + «وكثرتها» نجح || ٥ والقرح] + «والبتق» نجح || ٨ في الخلّ] «في الشراب حتى يذوب» ت || ٨ الرّفغان] «الأدرّة والبتق» نجح، «على الموضع» ت || ٩ وينام... يومًا] «ويكون العليل أو الصبيّ ملقا على رأسه ثلاثين يومًا أو أربعين يومًا» تصريف I ٢٣٢-١٤-١٥.

١ الأثيين] «الاتسيان» ب || ٤ فإبراز] «في إبراز» ب || ٥ والتفخ] «والمح» ب || ٨ وتطلى] «ويطلى» ب || ٨ الرّفغان] «للرقتان» ب || ١٠ كلّ ما] «كلما» ب || ١٠ الباقلاء] «الباقلا» ب || ١٢ يُسخن] «وسهق» ب.

٥ فالأدرّة] «αρίλη» || ٨ الرّفغان] «الرّفغ والرّفغ»: أصول الفخذين من باطن» لسان VIII ٤٢٩ ١٤.

ويُجنب اللبن والسمك، ويُغتذى بلحم الضأن الفتية. ويُشرب الطلى الرقيق.
ويُتخذ الحب الفارسي، فإنه من أحسن ما يكون لذلك. والحقن بأوداك الرأس والآكارع. ويُشرب
الدواء الذي يُعمل بالزرارع، فهو شريفٌ بادر.
فإن أضررت عليه الشهوة، فليشرب شيئاً من عصارة السذاب، إن شاء الله.

صفة لبان

يؤخذ حبّ بلادر ويُقشره غلامٌ بين يديك، ويلق على إصبغه خرقةً لثلاً ينسلخ إصبغه. ويؤخذ قشره
الخارج ويؤمى بالداخل ويُقرض القشر الخارج بمقراض، ويؤخذ منه أوقية ويجعل في طنجير برام ويصّب
عليه دهن البطم (وهو الحبة الخضراء) يُخرج من اللوز، قدر ما يغمره.
ويؤخذ لبانٌ ذكر: عشرين درهماً. يُسحق ويترك في الطنجير، ويوقد تحته بنارٍ لينة قدر ما ينعقد.
ويؤخذ سقمونيا بيضاء ويترك منه على كلّ درهم من الدواء نصف حبة — فإن الجميع ينعقد مثل اللوبان.
واستعمل منه عند الحاجة قطعة: أمضغها — تنال المنفعة.

حل

٧٠٠ پ زيت: ثلثين درهماً.

سكر: ثلثين درهماً.

١٥ ويطرح فيه لبان أبيض: عشرين درهماً.

وتطرح لكلّ درهم حبة كافور، واعقد الجميع بنارٍ لينة.

ويستعمل منه قطعة مثل الأول.

وأما الوجع في الإحليل

4.2.3

فإن كان بلا خراج، فيؤخذ من الزيت العذب فيوضع في الشمس خمسة عشر يوماً، وقد وُضع فيه
عقرب حية. فيُدهن به ويُضج بالماء السخن والزنيق.
ويُحتجم على ظهره.
ويسعط ذكره بالزنيق.

١ الطلى [للطلي] پ [٤ شيئاً] «شيا» پ [٧ ويؤمى] «ويرام» پ، «مى» پ [٧ ويؤخذ] «ويؤخذ» پ [٩ درهماً] «درهم» پ.

٨ البطم... الخضراء [طرمثس: وهو شجرة الحبة الخضراء، وهو البطم] تفسير = ١٥، «(τέρμινθος)»، «البطم
شجرة الحبة الخضراء، ويقال للثمر أيضاً «بطم» تلخيص [١٤٣] (→ أبو حنيفة).

4.2.4

وأما القروح والمحكة في الإحليل

- فيؤخذ كُف من تنوير الرمان، وثلاثة مثاقيل سكر، وثلاثة مثاقيل من خرو العصافير. يُدق ذلك، ويُذَر ويُحشى به القرح، إن كان مفتوحًا، ويُنضج بالماء السخن.
- ويُعالج في تطيب الباطن: تُحمل المعجونات من الحلبة والكثان، ويسعط بالعسل المذاف بزيت الورد.
- فإن كان الأكل باطنًا: أخذ بورقًا وخلًا ودهن ورد، فيسعط به الذكر؛ وإن كان ظاهرًا: أخذ الزعفران والكافور، ويُسحقا ويُخلطا بالماء، فيسعط به.
- ويُحمل على ظهره بحريّة زُطبة وأُكرب مدقوقين معجونين بزيت الورد. ويُحمل | الحناء والحرمل معجونين^{ط ٧٠} بالخل، إن شاء الله.

4.2.5

وأما إفراط الإنعاظ وكثرة الماء والاحتلام

١٠

- فيؤخذ من حب السذاب: وزن دهرمين.
- ومن زريعة القنّب: مثله.
- ومن بزر الخش: مثل ذلك.
- ويسقيه بالماء البارد على الريق، إن شاء الله.

٢ تنوير [سويق] نجح || ٧ والحرمل [والحرمل] نجح || ١١ القنّب [الفسط] نجح.

٤ المذاف [المذاف] پ || ٧ بزيت [برب] پ، «بزيت» پ^٤ || ٧ والحرمل [والرمل] پ.

وأما الأسفل

4.3

فمزاجه : الحرارة والرطوبة.
وأما منافعه : فإخراج الثُّفل.
وأدواؤه : الوجع، والشَّقاق، والحكَّة، والورم والبثور، وخروج الصُّرم، والتَّاليل، والناصور، والداء الخفيّ.

◦

علاج وجع المخرج

4.3.1

يُشرب حبّ الشيطرح وحبّ الذهب الصغير، أو حبّ الأصباغ، أو حبّ المنتن، أو شبيهه من الأدوية التي تُخرج الفضول الغليظة والرياح.
ويُدهن المخرج بدهن الجوز والخوخ أو دهن البيض، إن شاء الله.

وأما الشَّقاق في المخرج

4.3.2◦

فيُدمن أكل الجوز، ويُستعمل شرب الشيطرح.
ويؤخذ من المرتك : وزن ثمانية مثاقيل. ومن الرصاص المحرق : أربعة مثاقيل. يُدق ذلك ويُخلط بدهن الزنبق، ويُتمسح به أيضًا.
ويُتمسح أيضًا بدهن الآس.

١ [وأما] ≡ «القول في الأسفل» نجح ٢٥١٢٥-٢٥١٢٧.

٤ والناصور [«والبواسير» نجح || ١٢ المرتك] «المرداسنج» نجح.

٣ الثُّفل [«التفل» پ || ٤ والبثور] «ولستر» پ || ٤ والتَّاليل [«وللتاليل» پ.

٤ والشَّقاق [«ῥαγάδες αὶ ἐν δακτυλίῳ» || ٤ الصُّرم] DAA ٢٥٠ {SRM} * || ٧ حبّ الشيطرح [Therap ↓ (R)

4.3.2 || ٧ وحبّ الذهب الصغير [(R) تصريف I ٤٠٨ ٤-١ || ٧ حبّ المنتن] Pharm 3.8 ↓ (R).

صنعة حب الشيطرج

النافع، || بإذن الله، من استرخاء الجسد، والفالج ووجع الظهر والأسفل، ووجع المفاصل
وعرق النسا، والقولنج، والنقرس ووجع الركبتين، وكلّ وجع يهبج من الرياح والفضول الغليظة

أخلاطه

- ٥ يؤخذ من الهليلج الأصفر: وزن عشرين درهماً.
ومن الصبر السقطريّ: مثله.
ومن الزنجبيل: وزن درهين.
ومن الفلفل والدارفلفل: من كلّ واحد ثلثة دراهم.
ومن الإسفندار، والملح الهنديّ والنفطيّ والوج، والشيطرج، وشحم الحنظل: من كلّ واحد درهين.
١٠ ومن الفانيد: وزن أربعة دراهم.
يُدقّ كلّ واحد على حدة، ويُسحق ويُعجن بماء الكزّاث أو بماء شجرة الثعلب، فيُحبّب كالفلفل.
الشربة منه: وزن درهين.

4.3.3

وأما الورم في المخرج والبشر

فدواء ذلك بإخراج الدم بالمحاجم من الظهر أو من الساقين: فإنّ ذلك نافع من جميع الأسفل.
١٥ ثمّ يؤخذ من المرتك: جزو. ومن الإسفيداج: جزو. ويُدقّ ذلك ويخلط بدهنٍ ويُدبم التمشح به، إن شاء الله.

١ صنعة] ≈ «حبّ الشيطرج الأصغر» فردوس ٤٧٠-٩١٦؛ ≈ «حبّ الشيطرج الأصغر» كتاش ٩٠-٢٩٠؛ ≈ تصريف
I ٤٠٩-١٢١٦؛ أفراباذين ١٠٠-٦١٤.

٧ الزنجبيل] + «وخردل» ق [٩ الإسفندار] «خردل» ك(ق)، «سورنجان ابيض» ت [٩ والملح الهنديّ والنفطيّ]
«ملح هنديّ نفطيّ» ف، «ملح هنديّ» ق ك، «ملح نفطيّ» ت [٩ والوج] - ك [٩ وشحم الحنظل] - ق [١١ بماء
الكزّاث] [بماء الكرنب] ك [١١ أو... الثعلب] [بماء عنب الثعلب] ف، - ق ك ت [١١ فيحبّب كالفلفل] «يُعمل
حبّاً» ك، «ويُحبّف في الظلّ ويُستعمل عند الحاجة» ق [١٢ درهين] «درهين وصنف» ق، + «بماء حارّ» ق ك.

٩ الإسفندار] «الاسدار» پ.

٩ الإسفندار] «إسفندار هو الخردل الأبيض» تلخيص [٤] (→ ابن إسحق، كتاش)؛ > سندان / اسندان.

وأما خروج الصُّرم

4.3.4

- فيُدهن الظهر بالأدهان القابضة، نحو دهن الآس والصُّرمو.
 ٧١^ط وتُحمل عليه المحاجم بلا شرط.
 ويُسقى السكبينج.
 ٥ ويؤخذ من المَحَار المحرق، ومن الصبر: من كل واحد جزو. ويُدقان ويُعجنان بمخ البيض، ويُخلط بشيء من خلّ ويطلّى به على الصرم.

وأما التَّالِيل في المَخْرَج

4.3.5

- فإن أحببت قطعها، فاستعمل فتحة الساقين.
 وأدمن شرب الشيطرج؛ وأدمن البختج الكبير، إذا كان الزمان موافقًا.
 ١٠ فاقطع الأكل.
 واستعمل اللوغاديا في الربيع والخريف، وشرب الترياق الكبير في كل شهر مرتين.
 وتتخذ لها أدهانًا من مخ البيض وزيت الورد وشيء من نبيذ خالص، ويوضع ذلك في رصاصة ويكون
 يُدهن منها ويُجكّ حتى يسودّ، ويُدهن مرارًا.
 ويتبخّر بآثر ذلك بأصل الخلفاء والقسط، والآس والحبة السوداء، إن أحببت جمعها وإن أحببت فرقتها.
 ١٥

وأما الناسور

4.3.6

- فيُتخذ ما تُداوى به التَّالِيل.
 وإن قدُمث وآنسعت، فاتخذ لها فتائل على قدرها وتظليها بالدواء المصري. فإذا وصلت اللحم الميت
 (ويُعرف ذلك بالدم وشدة الإحراق)، فاستعمل ما يُثبت اللحم على نحو ما للجراحات — وذلك كل
 ٢٠ ما كان قابضًا، كالشيتان واللويان ونحوه.
 ويُدمن ما قدّمنا ذكره من الكُسْتِج والشيطرج والبختج والإطريفل.

١٦ الناسور] «البواسير» نجح.

٥ المَحَار] «المحار» پ ٥ ويُعجنان] «وتعجنان» پ ١٢ مخ] «مخ» پ ١٢ نبيذ] «نبيذ» پ ١٢ رصاصة] «رصاصه» پ ١٧ تُداوى] «يُداوى» پ ١٧ التَّالِيل] «التاليل» پ ١٩ للجراحات] «للجراحات» پ ١٩-٢٠ كل
 ما] «كلما» پ ٢١ الكُسْتِج] «الكسنج» پ ٢١ والبختج] «وللبختج» پ.

4.3.7

وَأَمَّا الداءُ الحَنْفِيُّ

پ ٧٢

ويُعرفُ أنّه || جوهرِيٌّ غيرُ عرضِيٍّ من طريقِ العادةِ بما يجدُ صاحبه.

فَتتَّخذُ له صفيحةً من رصاصٍ وتُرطَّبُ على ظهره.

وتُستعملُ له الحَقْنُ الحَرْفِيَّةُ الَّتِي يَدْخُلُها البورقُ والشبُّ اليمانيُّ.

ويُدِيمُ شربُ الشلثا والتَّمسُّحُ بها.

ويُستعملُ أكلُ النبقِ والقَسْطَلِ المشويِّ بقشره الداخِلِ (ي).^٥

ويُحْسَى رائبُ البقرِ ومُخِيضُه.

وشربُ درهمينِ من بزرِ الحنَّسِ مدقوقِ مُدافٍ في المأكَلِ تسعةَ أيَّامٍ، إن شاء اللهُ.

وإِذَا يَكُونُ ذَلِكَ فِيما ذَكَرْتَ الْأَوَائِلَ مِنْ فسادٍ يَكُونُ فِي المَعَاءِ فِيه داءٌ مِنْ ذَلِكَ أَكْأَلًا وَحِكْمَةً.

٢ عرضِيٌّ [غرضِيٌّ] پ || ٤ الحَرْفِيَّةُ [الحَرْفِيَّةُ] پ || ٥ الشلثا [الشلثا] پ || ٦ والقَسْطَلِ [وللمسطل] پ.

٥ الشلثا [عجله: ٣] أقراباذين ٣ ٧٣-٦٠١١٧٥ والقَسْطَلِ [٥] «أكل القسطل والبَلوط» طبَّ العرب ١٠٦، ٧١٠٦، «قشطانيا هو الشاه بلوط، وهو القسطل عندنا» تصريف II ٤٣٧، «شاه بلوط: القسطل» عمدة ٣٥٤٨ (DAA) ٤٢٧ {QSTL/N}.*

باب ذكر الفخذين والساقين والركبتين

4.4

أما مزاجهما: فالحرارة والرطوبة.
وأما منافعها: فإدعاء الظهر والمشى.
وأما أمراضها: فمن جنس ما ذكرنا من الوركين، وهي: الرياح، والكسْر، والوْثِي، والحزازة والكَلْف،
والجُدْرِي والحَصْبَة، والبرص والبَهَق، والجُدَام، والفالج.»

أما الرياح في الساقين

4.4.1

فيُحَقَّن بحَقْنَةٍ لَيْتِنَةٍ، مثل دهن الأكارع، أو ماء الحلبة وزريعة الكتان باللبن، وشبهه ذلك.
ويُمرَّخ بالزنيق والميعة.
ويُفْتَح عرق الساقين. ١٠
ويُجْمَل عليها الحتاء والخزمل مدقوقين معجونين بالزيت في الحمام.
ويُدْهِنُهَا بِالْأَكَارِعِ | والأدهان الحارة، كدهن الرُّنْدِ والصَّرْوِ، إن شاء الله.»

وأما الوثي

4.4.2

فَيُيَمِّدُ وَيُدْهِنُ بِالزَّنِيقِ وَالْمُومِيَا.
ويُجْمَلُ عَلَيْهِ مَا يَقْبِضُ، كالعدس واللُّوبَانِ مَعْجُونًا بِبِيضِ الْبَيْضِ، وشبهه ذلك.»

١ [باب] ≡ «القول في المخذين والساقين والركبتين» نجح ١٢٧-٢٥-١٣٢٢-١٥ || ١٥ كالعدس... البيض [®] «صفة للوثي
أيضًا: يؤخذ من دقيق العدس ويُسْحَقُ وَيُعْجَنُ بِبِيضِ الْبَيْضِ، ويُجْمَلُ عَلَى الْوِثِيِّ» وساد ٢٣٩-٨.

٣ والرطوبة [«البيس» نجح || ٥ والحزازة والكَلْف] «والجرب والمسامير والفوباء والدوالي والملكونيا والكَلْب» نجح ||
٦ والبَهَق [- نجح || ٦ والفالج] - نجح || ١١ الحتاء [«الخيار» نجح.

٥ والحزازة [«الحرارة» پ || ١١ عليها] «عليها» پ.

4.4.3

وأما الكسر فيهما وفي سائر العظام

فيجبر ذلك، ويؤخذ دقيق الشعير والأبهل والبيض والزيت، فتخلط. ثم يُطلى على خرقه بقدر عرض الكسر، ويُلَف فوقه من العصائب والربائط ما يكفيه، وتوضع الجبائر من فوق — فإن ورم الموضع، حَلَّت من الرباط قليلاً.

وما يُسرِع جَبْر العظم فيما ذُكرت الأوائل: «احمل أدمغة الكلاب على الكسر: يبرأ»^٥.

4.4.4

وأما الجرب في البدن سائر أجمع

فتأمّره باستعمال البختج الهندي، ثم تسقيه شربة من أصطمخيقون، ثم تُنقَص بدنه بالمسهلات. فإن رأيت فيه فضل دم، قطعت فيه عرق الأكل.

وتأمّره بلزوم الحمام والتعرق فيه، والدلك بالمبعة مع البورق، أو بأخشاء البقر بالزيت، أو بالمرتك بزيت الورد. أو تؤخذ من الكبريت زنة خمسة دراهم، فيُسحق ويُذاف بالزيت، وتطليه به: يبرأ، إن شاء الله^{١٠}.

4.4.5

وأما الحنزنة والكلف والقوباء

فثداوى بمثل ما ذكرنا من أدوية الجرب، وفتح العرق، وادهاها بدهن الحنظة أو دهن بزر كتان^٥ ب ٧٣

^٥ فيا... ≡ D41 Κεστοί ≡ IV Nat.hist ٤٦٤-٢ || ٧ تسقيه... أصطمخيقون [«أن يُشرب أصطمخيقون» فردوس ١٨٣٢٣ || ٩ بلزوم الحمام] «ويتعاهد الحمام» + «ويكثر دخول الحمام» فردوس ٣٢٣-٧١٢.

^٩ بالمرتك [«وبالمرداسنج» نجح.

^١ فيهما] [«فيها» ب. ٧ البختج] «الخنخ» ب || ١٠ ويُذاف] «وُذاب» ب || ١٢ الحنزنة] «الحراره» ب || ١٢ والقوباء] «والفوى» ب || ١٣ فثداوى] «فيداوي» ب || ١٣ وادهاها] «وادهان دهنها» ب.

^٧ البختج الهندي] [«صفة بختج» وساد ٢٤٣-٨ || ١٢ والقوباء] [«λειχην».

وأما الجندري والمحبة

4.4.6

فإذا رأيت أعلام ذلك، فاسقه كل يوم وزن عشرة دراهم طلي مع نصف مثقال من عقيدٍ يُسْتَى
«جندبادستر».

فإذا مَصَّتْ له ثلثه أيام، سقيته هذا الدواء:

٥ أخلاطه — يؤخذ من الورد: أربعة دراهم. ومن حبّ اللسان المقشّر: مثل ذلك.

ومن اللّك: وزن درهمين.

يُجمع ذلك في قدرٍ نظيفة، ويُطرح عليه ماء، سُكَّرُجَتَيْن. ويُطبخ حتى يرجع إلى النصف، ويُصقَى
ويوضع فيه نصف (—) سكر، ويشربه على الريق.

١٠ فأما لتفقان^١: أخذ شيء من دهن السمسم ووضعه فيه شيء من الملح، ومُسح به ويقوم في الشمس.
فإذا نشفت، يُمسح بماء قد طُبِح بالآس وشجر الطرفاء، ثم تدّعه يومين. ثم تطليه بالقسط الأبيض

مسحوقاً بدهن السمسم وشيء من ملح وماء، ويُحمل عليه.

ويكون اضطجاعه على مرفقة قد حُشيت بدقيق الأرز أو دقيق الشعير.

ويكتحل في بدء ذلك كثيرًا بعصير بزر الكزبرة مع الإثمد الأصهبائي — وقد يغسله بعض الناس بماء
الكرفس والجلاب.

٢ فإذا... ذلك] «فإذا رأيت هذه العلامات [«الأعلام» بـج]» زاد ١١٦٢٦.

٢ أعلام] «علامات» نوح || ٢-٣ من... «جندبادستر» [«من جندبادستر» نوح || ٩ فاما لتفقان] «فإذا انتفعت» نوح ||
١٢ ويكون... الشعير] «فينبغي أن يفرش العليل فراش مملوء بدقيق الأرز» زاد ١١٦٢٨ || ١٣ ويكتحل... الأصهبائي]
«فينبغي أن يُلقى في العين كحلّ معمول بماء المطر وماء الكزبرة» فردوس ٣٠٧-٩، «الكحل الأصهبائي المرقي بماء الكزبرة
الرطب» كامل II.1 ٢٧٩.

٢ طلي] «طلي» پ || ٧ سُكَّرُجَتَيْن] «سكر حسن» پ || ٩ فاما لتفقان] «فاما لتفقان» پ || ٩ السمسم] «السمسم»
پ || ١١ السمسم] «السمسم» پ || ١٣ بدء] «بدئ» پ.

4.4.7

وأما البرص والبهق

پ ٧٣ ظ

فإته يكون من البلغم المالح.
فيسقى صاحبه | الدواء الماهياتي، ثم الدواء الهاشيمي، ثم الدواء الهندي المغيث.
ويؤزم الحمام. ويذهن الموضع بالبلسم والزنيق، إن شاء الله ٥

٥

صفة للبهق

تؤخذ رنة: تُجعل على النار حتى يخرج منها الدم والزبد الذي فيها. يؤخذ ويُجعل على البهق: يبرأ ٥

4.4.8

وأما الجذام

١٠

وهو «داء الأسد»، لأنه يُشبهه في قوته وفهرته الأسد؛ أيضًا وأن وجه صاحبه متفقع يُشبهه وجه الأسد.
وتكون رائحة صاحبه سهكة قبيحة، ويكون عيشه مُرًا. ويعرض له الخناق، وبه يموت أكثرهم.
وأصناف هذا الداء كثيرةٌ وعلاجه طويل، وهذا أخصر ما يكون من علاجه وأقربه.
من ذلك: أن تكوى مفاصله، ويسقى أقراص الأفاعي ويُغذى بلحومها وبلحوم الحيات الصخرافية
الموشاة بالحمرة.

١٥

ويسقى الترياق الأكبر في كل شهر مرتين، ويسقى التبادرطوس واللوعاديا في الربيع والخريف مرتين
محلولة في البخنج الكبير أو مطبوخ الأفيثون.
وقد ينفع من هذا الداء جميع ما ذكرنا أنه ينفع من البرص والبهق، إن شاء الله ٥

٨ وهو... الأسد] «ويسقى داء الأسد» لأنه يغير الصوت ويفسد صورة الوجه» فردوس ١٨-٢٢-٢٣ || ١٣-١٤ ويسقى
... الأفيثون] «ويشرب الترياق الأكبر والشيلثا والإبارجات الكبار بماء الأفيثون» فردوس ١٩-٣١٩-٦.

٣ الدواء الماهياتي] «الدواء الماهياتي» نجح.

٣ فيسقى] «فيسقى» ب || ٣ الماهياتي] «الماهيا» ب || ١٠ أخصر ما يكون] «أخصر ما يكون» ب || ١١ تكوى]
«كوي» ب || ١٣ التبادرطوس] «التبادرطوس» ب || ١٣ واللوعاديا] «واللوعاديا» ب || ١٤ الأفيثون] «الاهييمون»
ب.

١ والبهق] « $\alpha\lambda\phi\acute{o}\varsigma$ » (ασα) || ٣ الدواء الماهياتي] «الماهياتي» تذكره ٧، ٢٨ ظ ٢٦-٢٧ || ٣ الدواء الهاشيمي]
® «صفة دواء تُدعى «الهاشيمي»» تصريف I ١١٤١١-١٩ || ٨ داء الأسد] « $\lambda\epsilon\omicron\nu\tau\acute{\iota}\alpha\sigma\iota\varsigma$ » || ١١ أقراص الأفاعي] ®
١٦-٤٣٠٧ XIV TherPamph $\psi\Gamma$ « $\acute{\alpha}\rho\tau\iota\sigma\kappa\omicron\iota\ \theta\eta\rho\iota\alpha\kappa\omicron\iota$ »

وأما الخدر في الجسم

4.4.9

- ٧٤٥٠ فيستعمل صاحبه، ويُدبمه الحَبُّ || الهندي، والاتهان بدهن الفريون ودهن الكيلاج. ويشرب حَبَّ الشيطرح وكُشْتَج السكينيح وحبّ المنتن. ويلتزم الحتام.
- ٥ ويجتنب الغذاء المبرّد، ويُديم أكل الخردل.
- فقد يبرأ مع ما ذكرنا من الخدر اليسير؛ فأما (ما) عظم منه، فلا سبيلَ إليه ولا إلى مداواته — فافهم.

١ الخدر] «الخدر والعالج» نجح || ٢ الهندي] «حبّ الذهب الكبير وحبّ الفريون وحبّ الأصاغ ونحو ذلك من الحبوب المسهلة للبلغم والحام» نجح || ٢ ودهن الكيلاج] «ودهن الخروع ودهن البابونج ونحوه» نجح.

١ الخدر] «الجدري» پ || ٢ صاحبه] «صاحبه صاحبه» پ || ٢ الهندي] «الشتوى» پ || ٢ الكيلاج] «الكيلاج» پ || ٣ وكُشْتَج] «وكُشْتَج» پ || ٣ السكينيح] «الكسج» پ || ٦ الخدر] «الجدري» پ.

٢ ودهن الكيلاج] «دهن الكلاج هو دهن (الجوز) الهندي» تلخيص [٢٣٠]، «دهن الكللاج هو دهن جوز الهند» تصنيف II ١٣٤٢٤؛ ® «دهن الكلاج» فردوس ٤٨٨-١٩٤٩٩-٧؛ «دهن الكللاج نافع من الفالج والقوة» أقرابادين ص ١٧٤-١٧٥.

4.5

باب ذكر اليدين والرجلين ومزاجهما وأدويتهما

أما مزاجهما: فالبرد واليبس.

وأما منافعها: فالمشّي والبسّط والقَبْض.

وأما أمراضها: فالتقرّس والتقرّارة، والشقاق، والحمرة، والعبّة.

4.5.1

علاج تقرّس والدقراة

فتح العرق الأكل في الربيع والخريف، وفتح عرق القدم.

ويجمل مرهم الأكرنب ومخ البيض وثقل الخلل وزيت الورد.

ويُدبم شرب حبّ الفيقرا، ويشرب اللوغاديا في السنة مرتين في الربيع والخريف. ويشرب من الترياق

الأكبر في الشهر مرتين.

4.5.2

وأما الشقاق في اليدين والرجلين

فبالأدوية التي تُخرج المزة السوداء، وبما يُداوى به الشقاق في الأسفل من المراهم: ويُعرك بمرهم يُصنع من الشمع والزنبق.

ويجمل عليه الخلل والحرمل.

وتُستعمل الحجامه في الساقين والذراعين، ويُقطع | لهما عرق الصّافن، إن شاء الله.

٧٥٤ ط

١ باب] ≡ «القول في اليدين والرجلين» نجح ١٣٢-١٣٣٠.

٥ والشقاق... [نجح ٧ فتح... القدم] «عولج بقصد الأكل أو الذي عند أصل خنصر الرجل» فردوس ٣١٨-٤ ||
٨ مرهم... الورد] «أن تأخذ ورق الكرنب المسلوق المدقوق مع صفرة البيض الني ودردّي الخمر» ابن سراييون = الحاوي
١٧٩٣ ٢٢-٢٣ (≡ Therap II ٢٨٥٤٩-٢٨٥٥١ | Pragm I ٣٠٧-٣٠٨).

٥ والتقرّارة] «الدقراة» پ || ٦ والدقراة] «الدقراة» پ || ١٢ فبالأدوية] «فالأدوية» پ || ١٢ المراهم] «المراهم» پ
|| ١٣ والزنبق] «والرسي» پ.

٤ فالمشّي] ≡ «βάδις» || ٤ والبسّط] ≡ «ἔκτασις» || ٤ والقَبْض] ≡ «ἀντίληψις» || ٥ فالتقرّس] ≡
«ποδάγρα» || ٥ والتقرّارة] ≡ «DQR» * (لأبو دقراة < ποδάγρα < ποδάγρα) || ٥ العبّة]
«والعبّة: بزة تُخرج بالإنسان تُغيي» لسان I ٦٣٠ ١١: ≡ حصصه (≡ «σταφύλωμα/σταφύλη»).

وأما الحمرة

4.5.3

فَتُحْمَلُ عَلَيْهَا الْمَعْرَةُ الْمَذِيئَةُ مَعَ زَيْتِ الْوَرْدِ وَعَنْبِ الْأَذْتَبِ.
وَيُطْلَى بِدِمَاحِ حُبَارَى.
وَيُجْتَجَمُ فِي السَّاقِ وَالزَّرَاعِ.
وَيُؤْخَذُ لِلْحَمْرَةِ الْحَرْمَلُ، فَيُدَقُّ وَيُجَلَّ بِالْحَلِّ، وَيُحْمَلُ عَلَى الْمَوْضِعِ. ٥

وأما العنبة

4.5.4

الآبات الحبيثة وما أشبهها من

فاحمل عليها الورد اليابس مدقوقاً بزيت الورد، أو رماد الرزجون كذلك، أو مرهم المرتك والثورة
المغسولة.
واجمه فوقها أيضاً. ١٠
وافتح له عرق الأكل.

٢ فتحمّل... الأذتب] ≅ «أو يؤخذ من المغرة وتُسحق بالحلّ، ويُطلى بها الشراء والحمرة» تصريف II ١٧٧ ٢١.

٢ الأذتب] «النعلب» نجح || ٧ الآبات الحبيثة] «النوابت المتولدة عن اللحوم العنبة الغليظة» نجح || ٨ المرتك] «المرداسنج» نجح.

٣ ويطلّى] «ويطلي» پ || ٣ حبارى] «حباري» پ || ٨ مدقوقاً] «مدقوق» پ || ٨ الرزجون] «للزرحون» پ || ١٠ فوقها] «فوقها فوقها» پ.

4.6 باب ذكر الحميات وعلاجها

الحميات مختلفة الجنس والتَّوع، منها:

4.6.1 الربيع

وتكون من المزة السوداء، ودواؤها بالتحفظ من الأذية السوداوية، واستعمال الحماق والتعرق، وترك اللحم، وشرب شراب الأفسنتين أو شراب السكجيين ممزوج بالماء، وشرب الترياق الكبير والأصفرات || مثل أصفر سَلِيم وشبهه، وشراب معجون الحلتيت. ٥٥٥ هـ
فإذا أخذت في الانهضام وخفت، سقيته اللوغادية والتبادريطوس بمطبوخ الأفتيمون، إن شاء الله. ٥٦ د

4.6.2 وأما الحمى الورد

فتكون من البلغم العفن، فأمر صاحبها باستعمال القىء كثيرا، وأمره بأكل الأطعمة الحريفة المقطعة لغلظ البلغم، || كالخردل والثوم وشبهه. ١٠
واسقه الشراب الضلْب. ٥٧٥ ب
وقبئه بالماء الحار.
فإذا رأيت أثر الانهضام، فاسقه إيارج الفيقرا.
واعلم أن كل ما نفع من حمى الربيع، نفع من حمى الورد، إن شاء الله. ١٥

١ باب] ≠ «باب في الحميات» نوح ١٣٣-٩.

٥ واستعمل [واستعمل] ب [٧ سَلِيم] [سَلِم] ب [٨ اللوغادية] [اللوعاده] ب، «اللوعادية» د [٨ والتبادريطوس] «والببادريطوس» ب [٩ وأما الحمى الورد] [ومنها الحمى الورد] د [١٠ فتكون] [وتكون] د [١٠ فأمر] «فمر» د [١٠ وأمره] [او مره] د [١٣ وقبئه] [وقه] ب، «وقه» د [١٤ الفيقرا] «الفيقرا» د [١٥ كل ما] [كل] د.

٤ الربيع] «والربيع في الهقى: إتيانها في اليوم الرابع» لسان VIII ١٠٠:١٣، «τῆταρταίος πυρετός» || ٧ أصفر سَلِيم [®] «صفة أصفر سَلِيم» فردوس ٢٠٤٥٢-٣٤٥٣ + «صفة أصفر سَلِيم آخر بلغنا أنه النسخة الصحيحة استعماله سَلِيم النكراوي» فردوس ٣٤٥٣-٧٤٥٤، «صنعة أصفر سَلِيم» أقراباذين ص ١٥٦٨-٣٦٩ || ٧ معجون الحلتيت [®] Pharm ↓ III 4.24 «الانهضام» [®] «نضج» [®] «πείσις» || ٩ الحمى الورد] «ألوزذ يؤم الحقى إذا أخذت صاحبها لوقت» لسان III ٣٤٥٦-٣٠٢ (→ الأصمعي): «ἀμφημερινός».

وأما حمى الغب

4.6.3

فتكون من المزة الصفراء، فأحم صاحبها من الأطعمة الغليظة والعفنة والحلوة والحارة. واسقه السكنجين الشكري مزوجًا بالماء. وقد ينفعه الماء والعسل. وأمزه بإدمان أكل الرمانين، وأمزه بشرب ديبود ورد وأقراص الطباشير وأقراص الكافور. ولا تُفرط في تبريده. ^٥ فإذا رأيت الانهضام، فأطعمه مُح البيض^٦ إن شاء الله^٧.

وأما الحمى المحرقة والمطبقة

4.6.4

أما المحرقة والمطبقة، فبينة دلالتها لإفراط حرها، فاعتمد في علاجها على التبريد والترطيب. وأما المطبقة، وهي تأخذ بحجرٍ وغمٍ وصداع بلا رعدة. فإذا رأيت ذلك وساعد الزمان والقوة، فاسقه السكنجين بالترياق الكبير، وافصده في الأكل، إن شاء الله^٨. ^{١٠}

وأما الحمى المختلطة

4.6.5

وهي تكون من اختلاف الطبائع، فداوها بما تُداوي به الغب^٩.

٧٥٥ پ وقد أتينا على أكثر الكتاب، بحمد الله الذي هو المدخل إلى الحقائق والبرهان والسبب في إصلاح
الأنفس والأجسام، واسأل الله إيزاع الشكر
٥٦٥ د على تأييده وحسن عونه، فإنه جميلٌ مُنعمٌ.
١٥

١ وأما حمى الغب [الحمى الغب] د || ٢ فتكون [كون] د || ٣ ينفعه [نفعه] د || ٤ وأمزه [ومره] د || ٥ وأمزه [ومره] د || ٤ ديبود [ديد] پ، «ديد» د || ٥-٦ ولا... البيض [بيض] د* || ٦ فأطعمه [حمله] د || ٦ مُح [مخ] پ || ٧ وأما...
والمطبقة [للحمى المحرقة والمطبقة] د || ٩ تأخذ [أخذ] د، «أشد» پ (*أخذة) || ٩ بحر [بخر] پ || ١١ وأما
«ومنها» د || ١٢ فداوها [فداها] پ، «فداوها» د || ١٢ تُداوي [داوى] پ || ١٣ أكثر [أكر] پ د ||
١٤ واسئل [واسل] پ د.

١ حمى الغب [الغب من الحمى: أن تأخذ يوماً وتدع آخر [...]] وهي حمى غب على الصفة للحمى «لسان I ٦٣٥-٢٦-٢٩»
«τρίταιος» || ٨ المحرقة [καύσος] || ٨ والمطبقة [συνεχής πυρετός] || ١١ الحمى المختلطة [πλάνητες] «πυρετοί».

〈 النوع الثاني 〉

〈 — — — 〉

الفصل الرابع

پ ٧٥ ظ |

د ٥٦ ط

٥

في النسيان

قال **الطبري**: «إن أخذ لسان الهدهد وجُفّف وشُرب بطلاء، أذهب النسيان وأكثر الحفظ». وقال: «إن علقت عين الهدهد ولسانه على من يعتريه النسيان الكثير، اذكر ما قد نسي». وقال **الرازي**: «إذا تدخّن صاحب النسيان بشعر إنسان، نفعه». وقال: «إذا أدمن من به النسيانُ أكل الحفّاش، عاد حافظًا وقلّ نسيانه وجاد حفظه».

٦ إن [≡ خواصّ ٢٠٣٢٠-١٦؛ ف فردوس؛ → حيوان ٤ [49.17]، حيوان ب ١١٦٨-٢١٦٩ || ٧ وقال] ٥ ≡ ٢٣٠٢-٢٤٣٠١ (→ **أل سكري**)، خواصّ ٢٠٣٢٠-١٦؛ ≡ خواصّ ١٨١-١٩ (→ **الطبري**) LX ≡ ٢١٠-٢٠٣٠١؛ → فردوس ٢١٤٣٦-٢٢ || ٨ إذا] ٥ ≡ ٢٣٠٢-٤ (→ **أل سكري**)؛ ف خواصّ ٤٢٠-٦ (→ **اطرومينس**) || ٩ وقال [المغني ١٣-١٢١٥ (→ **الرازي**)، خواصّ ٢٠٣٢٠-١٨؛ ف خواصّ ٤٢٠-٦؛ → حيوان ٤ [53.27]، حيوان ب ١٨٣-٧.

٧ عين الهدهد ولسانه [«عينه» خ، «lingua» LX || ٧ من ... الكثير [«صاحب النسيان» ف خ || ١٧ اذكر ... نسي [«ذكر ما قد نسيه» ف خ، «يذكور יותר ممما ששכח» ٥.

٦ إن [«ادا» د || ٦ بطلاء] «بطلی» پ || ٦ وأكثر [«واحد» د.

الفصل الخامس في النور والسهر

في **كتب الحيوان**: «إذا جعلت سن إنسان أو عظم جناح هدهد تحت رأس إنسان نائم، فإنه لا يزال ينام حتى يُززع ذلك من تحت رأسه». وقال: «إذا سقي كثير البكاء وسخّ أذن حمار أو من أذن نسفه بلبن أمه، هداً ونام». وقال: «إذا غلّق الحديد على من يُعطى في النوم، لم يغطّ»^٥.

الفصل السادس في الصداع

قال **ديسقوريدس**: «إذا شربت أدمغة الدجاج بشراب، انقطع نزف الدم من حجاب الدماغ». وقال **بليناس** إنه، إن وجدت ورقة من ورق الشجر المعروف بشجر الغار من نفس الشجر دون أن تسقط على الأرض ووُضعت خلف أذن إنسان، لم يصدع ولم يسكر. وقال **الطبري**: «إن غلّقت طاقات سذاب على من به صداعٌ مما يلي الجانب المصدوع، سكنه». وقال: «إذا جُفّ جلد الهدهد وسُحق وديف بماء وسُعط بالماء، نفع من الصداع». وقال: «إن غلّقت شعر إنسان على من يشتهي شقّ رأسه، سكن وجعه». وقال **الرامزي**: «إن وُضع جلد الهدهد على من به صداع، سكن رأسه بإذن الله» — مجزب^٥.

٣ إذا [103] ≡ ١٥-١٣٠٢ (→ ١١٣٠٢ B)، المغني ١٨٠٧-٩ (→ خواص كتاب الحيوان): LX ٧٠٢٥-٢٧، حيوان [1.6] وقال [103] ≡ المغني ١٥٣-١٤٠٣ جامع ب II ١٥٣٥-٢٧٣٥؛ حيوان [19.3] [103] إذا [103] ≡ هارونية ٨٣٢٥؛ خواص ر ٨٣٠-٢١٠٨؛ خواص (→ الطبري): فردوس ٥٢٦-٤٣٠٣ إذا [103] ≡ خواص ر ٨٣٠-٢١٠٨؛ «الدجاج» حشائش ٣٣٣-٦٥ (≡ «ἀλεκτορίδες» I Δ ١٣٥-١٣٦ ١٠) [103] خواص ر ٨٨٩-٢٨٩؛ «بليناس، الطبيعيات» [103] إن [103] ≡ خواص ر ٣٠٣-٧٠٣؛ فردوس ٥٢٨-١١٠٣ إذا [103] ≈ خواص ر ٣٠٣-١٦٠٣؛ فردوس ٤٣٧-١٠٠٩ [103] وقال [103] ≡ المغني ٢٢٨-١٤٠٣؛ (→ الطبري): فردوس؛ حيوان [1.7] [103] إن [103] ≡ خواص ر ٨١٠-١٦٠٣؛ خواص ر ٨١٠ (→ الطبري): فردوس؛ حيوان [49.8].

٣ عظم... هدهد [103] «ala upupe dextra» LX، «ار علاج ادم شرب» [103] «برادة الحديد» [103] لم... يسكر [103] «لم يسكر ولم يصدع من الشراب» [103] «موزن علاج» [103] «من بعلة» [103] «أذن من» [103] «الجانب المصدوع» [103] «الشق المتصدع» ف.

٥ البكاء [103] «البط» ب، «البط» د [103] «الاذن» د [103] «ديسقوريدس» [103] «ديسقوريدوس» د [103] «بليناس» [103] «ملساس» ب [103] «سقط» ب، «يسقط» د [103] «خلف أذن إنسان» [103] «في الجدين والرقلين، نفع من ذلك ومن الكزاز ايضاً» د [103] «يسكر» [103] «يسكن» ب، «يسكر اطه» ب^٥.

فصل في شعر الرأس وجلده

- قال **الطبري**: «إذا دُلك الرأس واللحية بماء الفجل المعصور، أنبت الشعر الممتَرط». وقال إنَّ مَّا يُسَوِّد الشعر: أن يؤخذ كزائثُ ويُطرح كما هو في إناءٍ جديدٍ مَقْتَرٍ وَيُصَبَّ عليه ثلاث سكرجات من خلّ، ويترك أَيْامًا حتّى يبتَغق. ثم يُخرج وَيُسْحَق على صلاية من أُسْرَب، ويُطلى به الشعر — فَإِنَّهُ يَسْوَد.
- وقال إِيَّه، إن ذلك موضع داء الثعلب برؤس الذباب دلگًا شديدًا، أنبت فيه الشعر. وقال: «إذا حُلط رماد الضفادع (بزيت) وطُلي على داء الثعلب، أبرأه».
- وقال: «إذا أخذ القنفذ وحُقِّف وحُلط بعسل وطُلي به داء الثعلب، أنبت فيه الشعر».

٣ إذا [٥ ٣٠٣-٢٣٣٠٣؛ فردوس ٨٥٢٨؛ → روميّة ١٧-١٤٢٧٩ (Geop ١٨-١٦٣٧١) ٤ وقال [٥ ٣٠٤-٣٠٤، المغني ١٨-١٥٣٩٥؛ ⊕ «غراب» فردوس ٢٣-٢١٤٣٤ ٧ وقال [فردوس ١٩-١٨٤٣٧ ٨ وقال [٥ ٣٠٤-٦٣٠٤؛ فردوس ٨-٧٤٤٠ ٩ وقال [٥ ٣٠٤-٧٣٠٤؛ فردوس ١٩-٢٠٠٤٣١

٣ واللحية [«وهلحיים وهزقن» ٥ ٤ جديدٍ مَقْتَرٍ [«برول» ٥ ٥ صلاية من أُسْرَب [«ابن השיش» ٥ ٨ بزيت [«بشمّن زيت» ٥، «بالزيت» ف [٩ القنفذ... بعسل [«من جلد القنفذ ويسحق بعسل» ف [٩ أنبت فيه الشعر [«برياهور ويزمياح بو الشعرة» ٥.

٤ جديدٍ [«جديد» پ [٧ برؤس [«روس» پ.

〈 النوع الثالث 〉

القول في أمراض أعضاء الوجه

وهو ستة فصول

الفصل الأول

في العين

ب ٧٦ ظ

٥

قال **ديسقوريدس**: «نبات الدوسر، إذا دُق وتضمّد به، أبرأ الريشة المنفجرة». وقال: «إذا أحرقت الخطاطيف كلها وخلط رمادها بعسل واكتحل به، أبرأ اندمال القروح[†]». وقال: «متى أخذت مرارة الديك الأسود وخلطت بعسل واكتحل به، أبرأ اندمال القروح». وقال: «دهن البلسان، إذا أطخ به العين من خارج، نفع من بدو نزول الماء في العين جدًّا». وقال: «من ابتلع ثلاث جلنارات من أصغرها، لم يعرض له تلك السنة رمد». وقال: «السنبل، إذا سحق واكتحل به، أنبت الشعر المنتثر في الأشفار».

وقال **جالينوس**: «إذا شربت كبد الماعز بالخمير وقطر ماؤها في العين، نفع من العشا. وإذا كُت على بخارها العين، فعل مثل ذلك. وكذلك تفعل إذا أُكلت مشويّة».

٦ نبات [«الدوسر» حشائش ٩٧ ظ ٢١-٢٢ ≡ «αἰγίλωψ» Δ II ٢٨٣-٤ (٤-٧ وقال] ≡ ٥ ٣٠٤-١٨١٩؛ «خطاف» حشائش ٣٤ ٨-٩ ≡ «χελιδόνος» Δ I ١٣٨-١٠ (١٥-٨ وقال] ≡ ٥ ٣٠٤-١٩٢٠؛ «مرارات» حشائش ٣٨ ظ ٢١-٣٩ ≡ «χολή πασα» Δ I ١٥٩-١٦ (٢١-٩ وقال] ≡ ٥ ٣٠٤-٢١-٢٠؛ «بلسان» حشائش ٧ ١٥-١٤ ≡ «βάλαμον» Δ I ١٧٢-١٨ (١٠ وقال] → «رمان» حشائش ٢٦ ظ ٩-٨ ≡ «ρόα» Δ I ١٠٤-١٧ (١٩-١١ وقال] ≡ ٥ ٣٠٤-٢٢-٢١؛ «سنبل» حشائش ٤ ٩ ≡ «νάρδος» Δ I ١٢-١٧ (١٩-١٢ وقال] ≡ ٥ ٣٠٤-٢٢-٢١؛ «ذكر الكبد» مفردة ١٧٣ ظ ٢٢-٢٥ ≡ «Π. ἡπατος αἰγός και τράγους» Δ XII Γ ٣٣٦-٦).

٦ الريشة المنفجرة] «الغرب المنفجر» [«αἰγίλωπια» Δ I ٧ «أحرقت... كلها» [«السنونيت كلو» س. «أحرقت الأم مع الفزاح في قدر» حشائش [٧ أبرأ... القروح] [«أحد البصر» («يحدد הראות» (س) Σ → «ὄξυδερκίαν ποιεῖ» Δ) [٨ واكتحل... القروح] - س [٩ نفع... العين] [«يوعيل מהתחלת המים בעין» س. «ويجלו ظلمة البصر» Δ [١١ السنبل... الأشفار] [«وهو صالح لسقوط الأشفار لقبضه وإنباته إياها» (Δ) [١٢ شربت... بالخمير] [«ام {تتלה} {تتלה}]] كبر העז» س.

٦ الدوسر] «للروسن» ب [٦ المنفجرة] «المنفجرة» ب.

وقال: «إذا أُخِذَ مِلٌّ من ذهب وأُدمِنَ إدخاله في العين، جلاها وقواها وحسن نظرها» — وهو صحيحٌ مجزَّب.

وقال: «مَن شرب من دماغِ حملٍ مثقالاً بخلٍّ، نفع من غشاوةِ البصر. ومرارته، إذا شربت بسكنجيين، نفعت من ظلمةِ البصر.»

وقال: «مرارةِ الحجل، إذا خُلِطت بعسل وزيت أجزاءٍ سواءٍ وأُطِخت بها العين من خارج، نفع من بدو نزول الماء.»

وقال: «إذا دُقَّ ورق الغار وعُجِنَ بعسل وطُليت به العينان، || نفع من ظلمةِ البصر.»^{٧٧} پ

وقال: «رماد الخطاطيف المحرقة، إذا خُلط بسنبُلٍ واكْتُحل به، حسن العين وجلاها وعظّمها.»

وقال: «رماد العلق أيضاً، إذا عُجِنَ بالخلِّ وطُلي به الشعر الزائد في العين بعد تَنَفُّه، منع نباته.»

وقال: «دم الضفادع، إذا وُضِعَ على الأشفار، أُنبتها.»^{١٠}

وقال: «إذا سُحِقَ سلخ الحية في إناء نحاسٍ واكْتُحل به، نفع جدًّا وسوَدَ الزرق.»

وقال: «إذا أُخِذَ سلخ الحية وسُحِقَ الرماد بشرابٍ واكْتُحل به، قوى البصر والأجفان وجفَّفَ الدمعة.»

وقال: «إذا أُديفت مرارة النسر بعسل واكْتُحل به، جلت ظلمةِ البصر ونفعت من الحكمةِ والجرب.»

١ وقال [→ خواص ١٧٧-١٨٨ (→ «قيل»); → أحجار ٣٠٦-٨ || ٣ من [→ فردوس ٤٢٧-٤٣٠ || ٥ وقال [≡ ٣٠٤-٣٠٥-٣٠٥ (→ ألتابري); ⇒ فردوس ٤٣٥-٤٣٥ هـ || ٧ وقال [≡ ٣٠٥-٣٠٥ هـ || ٥ «البازي» وإذا دُقَّ ذرقه وُعُجِنَ بعسل وعسل وطُلي به العين، نفع من ظلمةِ البصر» فردوس ٤٣٥-٤٣٥ || ٨ وقال [≡ ٣٠٥-٣٠٥ هـ || ٥ ⇒ فردوس ٤٣٦-٤٣٦ || ٩ وقال [⇒ فردوس ٤٤٠-٤٤٠ || ١٠ وقال [⇒ فردوس ٤٤٠-٤٤٠ || ١١ وقال [⇒ فردوس ٤٤١-٤٤١ || ١٢ وقال [→ فردوس ٤٤١-٤٤١ || ١٣ وقال [≡ ٣٠٥-٣٠٥ (→ رازي); → حيوان 46.2[4]، حيوان ١٤٣-١٤٣-١٤٣.

١ وأُدمِنَ [«وأدمِن» خ || ١ جلاها... نظرها] «حسن الناظر جدًّا وقواه» خ || ١-٢ وهو... مجزَّب [— خ || ٣ بخلٍ] «بالخلِّ والعسل» ف || ٣ غشاوة [«الغشي» ف || ٤ نفعت... البصر] «وكذلك ينفع» ف || ٥ بعسل... سواء [«بشومن زيت» || ٧ وطُليت به العينان] «وتحبو» || ٨ وجلاها وعظّمها [«ويحزقها ويأمنها» || ١٠ الضفادع] «الضفادع الصفر» ف || ١٠ الأشفار [«الأشفار المتناثرة» ف || ١١ جدًّا] «جميع الأوجاع من العين» ف || ١٢ قوى... الدمعة [«أحد البصر» ف || ١٣ مرارة النسر] «زاتة المرارة» || ١٣ النسر [«مررت تيش» || ٥.

٥ ولُطِخت [«لطخ» پ || ٨ خُلط] «خلطت» پ.

الفصل الثاني في مداواة الأذن

وقال **ديستومريدس**: «إذا أُديف شحم الثعلب وقُطِر في الأذن، سَكَن وجعها».
وقال: «إذا طُبِّخ سلخ الحيتة بشراب وقُطِر في الأذن، نفع من وجعها».
وقال: «الحيوان (المعروف) ببنات وردان، إذا طُبِّخت بالزيت وسُحِّقت بزيت وقُطِر في الأذن الوجعة، نفعها».

وقال: «الحيوان الذي تحت الجرار الذي إذا مُسَّ استندار، يُقال له «القربنا»: إذا سُحِّق وصُبَّ في قشر رمانة مع دهن ورد وسُخِّن وقُطِر في الأذن، سَكَن وجعها».
وقال **جالينوس**: «دود الجرار الذي إذا مُسَّ استندار، إذا طُبِّخ بزيت وقُطِر الزيت في الأذن، سَكَن وجعها».

وقال **الطبري**: «إذا خُلطت مرارة الثور مع الكراث وقُطرت في الأذن، نفعت من الدوي والطنين. وكذلك تفعل إذا قُطرت وحدها في الأذن.
وإذا خُلطت مرارة الثور مع شحم الإوز ودهن الغار أجزاءً سواءً وقُطرت في الأذن، نفعت من الصمم».
وقال: «إذا خُلط دم الإوز مع عصارة البصل وشحم وقُطِر في الأذن، أخرج الماء منها».
وقال **الرائزي**: «إذا أُدخلت فتيلاً مدهونةً بشحم وقيرٍ مراراً في اليوم أَيْاماً كثيرةً، نفع من الصمم».
وقال: «إذا قُطِر من مرارة البقر قطرتان أو ثلاث قطرات في أذن مَنْ به دويٌّ وطنينٌ في أذنه، نفع منه».

[٣] إذا ٥ ≡ [١٢-١١ ٣٠٥ (→ آر ١٦٤٥)، هارونية ١٦٢٤٥؛ → «شحم الثعلب» حشائش ٣٨ ظ ٨ ≡ [٤٤] ت ٥
[٤] إذا ٤ ≡ [٧-٦ ١٥٨ I Δ (τῆς ἀλώπεκος στέαρ) ≡ [١١-١٠ ١٧٨ J → «سلخ الحيتة» حشائش ٣١ ظ ٢٢-٢٣ ≡ [١٢-١١ ٣٣ γῆρας ὀφθαλμοῦ] ≡ [١٣-١١ ١٢٧ I Δ (الحيوان) ٥ ≡ [١٧-١٦ ٢٤٥؛ → «ابنة وردان» حشائش ٣٣ ظ ١٢-١١
[٥] «σέλφης» [١٢-١١ ١٣٣ I Δ (الحيوان) ٧ ≡ [دويبة توجد تحت الجرار والحجاب» حشائش ٣٣ ظ ١١-١٠] ≡ [١٢-١١ ١٣٣ I Δ «οἱ ὑπὸ τὰς ὕδριας» (١٠-٨ ١٣٣ I Δ) ≡ [٩ دود] ≡ مفردة ١٧٩ ظ ٢٥-٢٢ ≡ [ὄνισχοι] ≡ [١٢-١١ ٣٦٦ XII Γ (٨٣٦٧-١٦٣٦٦) ≡ [١١] إذا ١١ ≡ [١٨٠-١٢ ١٧٨ J خواص ١٨٠-١٢ ٣٢١، هارونية ٣٢١-٢٤٧؛ → فردوس ٤٢٢ ظ ٧-٥ ≡ [١٣] إذا ١١ ≡ [١٢-١١ ٣٠٥ هارونية ٣٠٥-٢٤٧؛ → فردوس ٤٢٢ ظ ١٢-١٠ ≡ [١٤] وقال ١٤؛ → فردوس ٣٠٥-٢٤٧؛ → فردوس ٤٣٣ ظ ١٢-١١ ≡ [١٥] إذا ١٥ ≡ [١٨-١٦ ٣٠٥ خواص ١٨-١٦ ٣٢١، هارونية ٣٢١-٢٤٧؛ → خواص ٣٠٥-٢٤٧؛ → حيوان ٤٣٣] [46.3] وقال ١ ≡ [٢٠-١٩ ٣٠٥ خواص ٢٠-١٩ ٣٢١؛ → خواص ٢٠-١٩ ٣٢١ LX ٦٦-٦٨، حيوان ٤٣٣].

١١ الكراث] + «ماء» ف [١٤ وشحم] «وشومون האוו» س، «وسخن» ف [١٥ وقيرٍ مراراً] «ومعט מרה» س
١٥ من الصمم] + «וכובד השמע» س [١ البقر] «LX tauri».

٨ وسخن] «سحق» پ [١١ وقُطرت] «وقطر» پ.

الفصل الثالث في مداواة الأنف

قال **جالينوس**: «الحجر العربيّ (وهو يُشبهه العاج)، إذا غُلّق أو صُمّد به الأنف إذا رُفِع أو جُرح، قطع عنه نزع الدم».

وقال: «دماغ الدجاجة، إذا شُرب بشراب، قطع نزع الدم من حجاب الدماغ».

الفصل الرابع

في الوجه نفسه ومداواته

ب ٧٨

قال **ديسقوريدس**: «إذا تُلطّخ بدم الأرنب، نقي الكلف والبثور اللينة من الوجه».

وقال **الطبري**: «إذا شُقّت رئة الحمل ووضعت على الكلف والآثار السوداء، فإنه يقلعها».

وقال: «إذا طُبّخ غراء السمك بالماء، وأُخرج وُسُحِق وأُخذ منه زنة أربعة مثاقيل أُمع صفحة من المرتك[†] ونصفه من الخطمي، وُسُحِق الجميع وُطلي على الوجه وثرثك أربع ساعات، ثم غُسل: صقّي الوجه وصقله ونقاه من الآثار».

وقال **الرازي**: «إذا سُعط بوزن نصف درهم من مرارة الستور الأسود مع أستار من زنبق، نفع من اللقوة الشاملة للوجه».

٣ الحجر العربيّ [٥ ٥ ٢٣-٢١٣٠٥، تصريف I ١٣-١٢٨٨؛ ≠ «الحجر المعروف بالأعرابي» مفردة^F ١٥١٤٩ (≡) «أ»
III Δ «Ἀραβικός λίθος» (≡) ٣-٢ ١٢٩ حشائش ١٥-١٣٢٠٤ XII Γ «Ἀράβιος λίθος»؛ → «الحجر العربيّ» حشائش ٣-٢ ١٢٩ (≡) «أ»
١٠ (٦-٤٩٧) [٥ وقال [٥ ٥ ٢٤-٢٣٣٠٥، تصريف I ١٢٨٨؛ ≠ مفردة^F (II.VI.1 f) ٨ [٨ إذا [٥ ٥ ٢٥٣٠٥-٢٦، هارونية
I Δ «τὸ δὲ τῶν λαγῶν [αίμα]» (≡) ١٥٢٣٩ حشائش ١٤-١٣٢٤٩ (→ دياسقردوس الحشائشي)؛ → «دم الأرنب» حشائش ١٥٢٣٩ (≡) «أ»
١٠ (٦-٥ ١٦٦) [٩ إذا [هارونية ١٥-١٤٢٤٩؛ ⊕ → «رئة الحمل» فردوس ٢٤-٢٣٤٢٤ [١٠ وقال [٥ ٥ ٣٠٦-٢٦٣٠٥، هارونية
١٠ (٦-٥ ١٦٦) [٩ إذا [هارونية ١٥-١٤٢٤٩؛ ⇒ فردوس ٢٢-١٧٤٣٩ [١٣ إذا [٥ ٥ ٣٠٦-٢٦؛ → LX ٥٧-٥٥٣٦٩، حيوان^٤ [30.8].

٨ الكلف ... الوجه [«עדשי הכפנים» ٥ [٨ اللبنة [«والبثر اللبني [«φακός»] Δ [١٠ مع ... المرتك [٦٥
הליטרגיד» ٥، «ومن الكبريت مثله ومن المرتك ضعفه» ف [١٤ اللقوة ... للوجه [«oris tortura» LX.

٨ تُلطّخ [«بلطخ» پ [٨ اللبنة [«اللبنة» پ [٩ شُقّت [«سقت» پ (→ «ويشق» ف) [١٣ الستور [«الستور»
پ [١٣ أستار [«اسار» پ [١٣ زنبق [«زنبق» پ.

الفصل السادس في اللسان ومداواته

وقال **جالينوس**: «إذا عُلق الحلتيت على عنق مَنْ به ورمُّ اللهاة، نفع من ورمه بخاصة فيه».
 وقال **أرسطاطاليس**: «إن عُلق حجر الجزع على طفلٍ كثيرِ اللعاب، قلَّ لعابه وسكن سيلانه».

٣ [إذا] ١٨٨ ٢-١، خواص ١٩٠-١٧٣٢١؛ خواص ٨٢^ط-١٩٨٣ (→ جالينوس، مفردة)؛ → «ذكر الفاونيا»
 مفردة^١ ٢١-١١٠٤ (≡ «Περὶ γλυκυσθίδης» XI Γ ١٨٦٠-١٨٥٩) || ٤ [إن] ≡ ٥ ٢١-٢٠٣٠٦ (→ (٦١٤)،
 المعنى ٦٥^ط ٢-١، خواص ١٨-١٧٣٢١؛ → أحجارت ١١٦-١٣١١٥.

الفصل الثاني في الخوانيق

قال **جالينوس**: «إذا غُلِقَ الحلتيت على عنق مَنْ به وجع اللهاة والخوانيق، نفعه». وقال: «(إذا) أُحرق الخَطَاف في قِدْرٍ حَقَارٍ وتُحْتَك برماده، نفع من الخناق وورم اللهاة. وطبيخها (أعني مرقها) يفعل ذلك».

وقال: «إذا مُلِحت الخَطَاف وجُفِّفت وشُرب منها مثقالاً بماء، فعلت ذلك». وقال: «إذا سُحِق الدود الَّذِي تحت الجرار الَّذِي إذا مُسَّ استدار، مع عسلٍ، وطُلي بريشةٍ أو خُنْكَ به، نفع من ورم الحلق».

وقال **الرائزي**: «رماد الخَطَاف، إذا دُرَّ منه شيءٌ في حلق مَنْ به خوانيق، نفعه» — وقد جَرَّبته. وقال: «إذا سُحِق السرطان النهريُّ بقدر سكرجةٍ من ماء وتغرغر به، أبرأه من الخوانيق ووجع اللوزتين من ساعته».

وقال: «إذا طُبخت الضفادع النهريَّة والآجاميَّة وأُكلت وتُحَسِّي مرقها، نفعت من الخوانيق الكلَّية ووجع اللوزتين».

للعلق الَّذِي في الحلق

بعر الغم السُّود: يُحرق ويُسحق ويُتغرغر به — ينفع، إن شاء الله.

٣ إذا [هارونية ٢٤١: → خواص ١٨٢^ظ - ١٨٣ (→ الطبري | جالينوس): → فردوس ١٤٣٥٦ (III.vii.1) ||
٤ وقال [هارونية ٢٤١: → «ذكر ما ينتفع بحمكة بدنه من الحيوان» مفردة^١ ١٧٨^ظ - ١٧٧ (⇒ «Peri chelidōnōn»
XII Γ «κεκαυμένων» ١٤٣٥٩ - ٢٣٦٠) || ٦ وقال [المغني ١٧٧^ظ - ١٨٠: → «خَطَاف» حشائش ٣٤^ظ - ٩ (⇒ «Peri chelidōnos neossosoi» I Δ «χελιδόνος νεοσσόσι» ١٣٨ - ١٣٦) || ٧ وقال [«اوبي اي ايفو طاس ايدراس» حشائش ٣٣^ظ - ١٠ (⇒ «Peri chelidōnos neossosoi» I Δ «οί υπό τας ύδρίας» ١٣٣ - ٨) || ٩ رماد [٣٠٧ - ٢١٣: → خواص: → فردوس ٤٣٦ - ٨ || ١٠ وقال [٣٠٧ - ٢٣٠: → فردوس ٤٣٨ - ٢٤٠ || ١٢ وقال [٣٠٧ - ٢٥٢: → فردوس ٤٤٠ - ٣٠٥.

٩ وقد جَرَّبته [«הנהגה נסיתיו» ١٠ - ١١ ووجع... ساعته] - ٥ || ١٢ الكلَّية [«הכלליים» ٥.

٩ خوانيق [«خوانق» ب.

الفصل الثالث في الخنازير

- قال **ديسقوريدس**: «إن عُلق أصل الحمّاض في رقبة مَنْ به خنازير، نفعه». وقال: «إذا أُحرق | حافر حمار وعُجّن رماده بزيت وتضمّد به، حلّل الخنازير».^{ب ٧٩ ط}
- وقال **هرمس**: «إن عُلق أصل السوس على مَنْ به خنازير، نفعه».^٥
- وقال **أرسطاطاليس**: «إن أُحرق ذكر الحمار وسُحق مع الماء وطليت به الخنازير، جفّفها وبرّدها».
- وقال **الطبري**: «إن عُلقّت إحدى كلاء الثعلب على الخنازير بدم الأرنب^١، نفعها».
- وقال: «إذا أُخلط زبل الحمام بدقيق شعير وضرب بالماء ضرباً حسناً وطبخ بالخلّ والعسل وضُمّت به الدبيلة والخنازير والأورام الصلبة، حلّها وأبرأها».
- وقال: «إذا أُحرقت الحيتة التي تأوي إلى البيوت، وسُحق رمادها بزيت وطلي به على الخنازير، حلّها».^{١٠}
- وقال: «إن عُلق رأس أفعى في عنق مَنْ به خنازير، أبرأها».^٥

٣ إن] ≡ ٥ ٣٠٨-٢، هارونية ١٠٢٤١؛ → «الحمّاض» حشائش ٢٤٥ (≡ «ἵππολάπαθον» I Δ ١٦٠-١٧١) (I Δ ٤] إذا] ≡ ٥ ٣٠٨-٤، هارونية ١٠٢٤١؛ → «حواقر الحمر» حشائش ٣٣٣-١٧٢ (≡ «ὄνυχες ὄνων» I Δ ١٣٤-٩ → [ιστοριούται] (I Δ ٥] إن] ≡ ٥ ٣٠٨-٦ → «ألتابري» فردوس ٣٢٣-١٥٦ [I Δ ٦] → «حافر حمار» فردوس ٤٢٤-٢١ [I Δ ٧] إن] ≡ ٥ ٣٠٨-٨، هارونية ١٢٤١؛ → فردوس ٤٣١-١٤؛ ≡ خواص ٨٧-٥ → في كتاب يُنسب إلى هرمس) [I Δ ٨] وقال] ≡ ٥ ٣٠٨-١٠، هارونية ١٣٢٤١ → فردوس ٤٣٣-٢٢٤ [I Δ ١٠] وقال] ≡ ٥ ٣٠٨-١٢، هارونية ١٣٢٤١ → فردوس ٤٤١-١١ [I Δ ١١] وقال] ≡ ٥ ٣٠٨-١٣، هارونية ١٤٢٤١-١٥؛ ≡ خواص ٧٩-١١ (→ الطبري)؛ → فردوس ٣٢٣-١٧.

٤ وعُجّن ... به] «وإذا خلطت بزيت ووضعت على [الخنازير]» Δ [I Δ ٤] رماده] «أفرو (أو ذواته)» س [I Δ ٥] السوس] «سكاليزيا» س [I Δ ٧] على... الأرنب] «عل الحزيريم אשר בצואר יבריאם. ואמ' אם תרטה החזירים בדם הארנבת יועילם» س، «على الخنازير التي في العنق، برا» خ [I Δ ٨] ضرباً حسناً] «היטב» س، «حتى يصير كالحسو» ف [I Δ ١٠] الحيتة] «عور نחש» س [I Δ ١٠] تأوي إلى البيوت] «העומד בחורי הבתים» س، «تكون في البيوت» ف [I Δ ١٠] بزيت] - س.

٦ وطليت] «وطلي» پ [I Δ ٩] الدبيلة] «الدبلة» پ.

النوع الخامس

في أمراض الأحشاء

وينقسم على ثمانية فصول

الفصل الأول

في القلب

قال **الرائزي**: «خاصة المسك أن يقوي القلب والأعضاء الضعيفة إن شُرب أو شَمَّ الطيب رَأَحْتَه. ويُشجع أصحاب المزة السوداء إذا شربوه أو حُلط لهم في الأدوية المشروبة. ويذهب بالفرع والرَّجْف». ^{٨٠} پ وقال: «المرماحود نافع من الحفقان في القلب الكائن من المزة || السوداء». وقال: «إن عُلق حجر الشبِّ الأصفر في الرقبة أو في العضد، فهو صالحٌ للتعويد» .^{٨٠}

الفصل الثاني

في مداواة المعدة

قال: «إذا أخذ الحجاب الآذي في باطن حوصلة الديك (وهو الآذي يُطرح عند الطبخ) وجُفِّف وسُحِق وشُرب بشراب، وافق من كانت معدته وجعاً» . وقال **جالينوس**: «حجر الشبِّ الأصفر، خاصته النفع من وجع المريء وفم المعدة إذا عُلق في الرقبة» .

٦ خاصة [٢٠١٧٣٠٨ ٥ (→ (٦٢٢١): → الحاوي VII ١٦-١٣٣٥ || ٨ وقال] → «المرماحور» الحاوي VII ١٦-١٣٣٥
 ٩ وقال [٢٥٢٣٣٠٨ ٥ ⊕ → «ليثس إياسبس» حشائش ١٣٠^٧ (≡ «λίθος ἰασπίς» III Δ ١٠٠-١٦١٧) ||
 ١٢ إذا [٢٣٠٩-٢٧٣٠٨ ٥ → «الدجاج» حشائش ٣٣^٧-٥ (≡ «ἀλεκτορίδες» I Δ ١٣٦-٢٤٠). || ١٤ حجر]
 → «الحجر الشبِّي الأصفر» مفردة^F ١٤٩^٧-١٠ (≡ «ὄχλωρος ἰασπίς» XII Γ ٢٠٧-٢٠٥).

٧ والرَّجْف [«وهرعدة» ٥ || ٩ حجر الشبِّ الأصفر] «ابن كركومي» ٥ || ٩ في ... العضد + «ن"أ بئرך او بكتך ٥ || ٩ للتعويد» [«لهتسבות كיום دعوت وهو הפכי להשתוממות» ٥.

٧ والرَّجْف [«والرحف» ٥ || ٨ المرماحود] «المرماحود» ٥ || ١٣ كانت [«كان» ٥ پ.

- وقال: «مرقُ الدجاج، إذا طُبِّخ إسفديباجًا، فهو يُعدِّل المزاج».
- وقال: «إن غَلَّق حجر الماس على البطن، نفع من فساد المعدة والمغص الشديد».
- وقال **الطبري**: «إذا غَلَّق أصل الخطمي بعد أن يُقَلع بمحديدة على (من) معدته ضعيفة، نفعه».
- وقال **الرازي**: «لحم الدجاج ينفع المعدة ويجبس البطن».
- وقال: «خاصة الأفسنتين، النفع من المعدة؛ وذلك أنه يَقْوِيها ويجلوها ويجلو المعاء من الفضل المزوي ويفتح سدد الكبد ويُقَي العروق من المزار ويُخرجه في البول».

الفصل الثالث

في مداواة الأمعاء

- قال **جالينوس**: «الأفسنتين يقتل | حيات البطن إذا شُرب، ويُخرجها. وكذلك يفعل شحم الخنظل ونبات النرجس والتمس المتر: فإن هذه كلها تُخرج الدود المستسى «حب القرع» وتقتلها».
- قال **أرسطاطاليس**: «حجر اللازورد، خاصته إسهال المتر السوداء إذا شُرب منه أربع قراريط بشراب الورد».
- وقال: «إذا غَلَّق الزمرد الفائق على مَنْ به إسهال، نفعه».
- وقال: «إذا غَلَّق حجر الماس على البطن، نفع من المغص الشديد».
- وقال **الطبري**: «إن غَلَّق أصل الخطمي بعد أن يُقَلع بمحديدة على المبطن، نفعه».

١ وقال [٥ ٣٠٩ هـ] → «ذكر الدجاج والديك» مفردة^{١٧٨} ط ٢٣ ≡ «Περὶ ἀλεκτορίδων» XII Γ (١٨-١٥٣٦١) ←
 ٢ وقال [٥ ٣٠٩ هـ] → خواص^{١٠٨٤} ر ١٢ → (كتاب ثاوفرسطس في الحجارة) [٣ إذا] → فردوس ٢٥٠-٢٤٢ ←
 خواص^{١٠٨٤} ر (→ الطبري) [٤ لحم] ≡ [٥ ٣٠٩ هـ] → (٢٤٦ ز)؛ ؟ فردوس ٤٣٤-٤٣٨ [٥ وقال] ≡ [٥ ٣٠٩ هـ]؛
 ؟ [٩ الأفسنتين] ≡ [٥ ٣٠٩ هـ]؛ ؟ X Meth.med Γ ٧-٦١٠٢١ [١١ حجر] ≡ [٥ ٣٠٩ هـ]؛ ؟ → أحجار^٦
 ٤ [١١-٧٤٤ هـ]؛ اعتماد^{١٠٢٧٠} هـ ١٥-١٢٧٠ I Therap ٢٠-١٦١١ [١٣ وقال] ≡ [٥ ٣٠٩ هـ]؛ ؟ خواص^{١٠٨٤} ر ١٥-١٤ →
 ابن ماسويه) [١٤ وقال] ≡ [٥ ٣٠٩ هـ]؛ ٢١-٢٠٢٠٢ ≡ [٥ ٣٠٩ هـ]؛ ؟ → (أرسطاطاليس)؛ ≡ خواص^{١٠٨٤} ر
 ١٢-١٠٨٤ → (كتاب ثاوفرسطس في الحجارة) [١ إن] ≡ [٥ ٣٠٩ هـ]؛ ٢٣-٢١٣٠٩ ≡ [٥ ٣٠٩ هـ]؛ ؟ → (أرسطاطاليس)؛ VII.5 ↑.

١ إذا طُبِّخ إسفديباجًا [المطبوخة إسفديباجًا] («ἀπλοῦς ζωμός») Γ [١ فهو ... المزاج] «فقوته قوة مصلحة للمزاج»
 («ἐπιπεραστικῆς ἐστὶ δυνάμεως») Γ [٣ الخطمي] «الملوخية» فـخ [١٠ ونبات النرجس] «وفנגدشت» س [٥
 ١٤ المغص الشديد] «مشبري הבטן החזקים» ن، «ألزوحير» س [١ الخطمي] «الملوخية» فـخ [١ محديدة] «בחوت
 משי» س، «במשי» ن.

١ إسفديباجًا [إسفديج] پ [٥ ويجلو] «جلوا» پ [١١ أربع] «أربع» پ [١١ قراريط] «قراريط» پ.

الفصل الرابع في القولنج

- قال **جالينوس**: «إذا أخذ الحيوان المستى بالصرار وجُفِّف وشُرب ثلاث حيوانات أو خمس أو سبع مع عددها من الفلفل، نفع من جميع أوجاع القولنج».
- وقال: «مرق الديك العتيق يُسهل البطن، ولحمه يعقل البطن - وينبغي لمن أراد طبخه أن يُخرج جوفه ويحشوه ملحًا ويطبخه بعشرين [من] قوطليا من ماء حتى يبقى ثلاث قوطليات، ويُنجم ويُشرب».
- وقال: «حجر المغنيطس الذي يجذب الحديد، ويُسهل البلغم إذا شُرب منه نصف مثقال بماء القراطي».
- وقال ٨١ ||: «إذا دُقَّت الحلزون الصغار بجمتها وسُحقت وشُربت بخمر ويسير من ماء، أبرأت وجع القولنج».
- وقال: «إن عُلق عرقوب الأرنب الأيسر على صاحب القولنج، نفعه».
- وقال **أرسطاطاليس**: «حجر اللازورد يُستعمل المُرّة السوداء؛ وإذا شُرب منه وزن أربعة قراريط بشراب ورد».
- ومرق الديك العتيق: إذا شُرب، أسهل البطن ونفع من القولنج».
- وقال: «مرق الدجاج العتيق، إذا شُرب، حبس البطن».
- وقال: «إذا أخذ الجبن وطُبخ وشُرب طبيخه، نفع من وجع القولنج».

٣ إذا [⇒] «الحيوان المستى باليونانية طاطيجس» مفردة^{١٧٨} ١٢-٩ ط ١٧٨ (⇒) «Περὶ τετραγών» XII Γ (٦-٣٦٠) + ٥ وقال [⇒] «ذكر الدجاج والديك» مفردة^{١٧٨} ٢٥-٢٣ ط ١٧٨ (⇒) «Περὶ ἀλεκτορίδων» XII Γ (١٨-١٥٣٦١) + «الدجاج» حشائش^{٣٣} ١١-٨ ط ١١-٨ (⇒) «ἀλεκτορίδες» I Δ (١٠-٦ ١٣٦) ٥ || «ولحمه يعقل البطن» [⇒] ٧ وقال [⇒] Γ؛ ؟ → «مغنيطس» حشائش^{١٢٩} ١٢٩-٢٣ ط ١٢٩ (⇒) «μαγνίτος λίθος» III Δ (٢-١ ٩٧) ٨ || «وقال [⇒] Γ؛ ؟ ≈ ψ Γ XIV ١٠-٨ ٤٦٩؛ «قوخلياس» حشائش^{٣١} ١٥-٣١ ط ١٥-٣١ (⇒) «κοχλιάς» I Δ (١١-١٢٥-١٦ ١٢٤) ١٠ || «وقال [⇒] Γ؛ ؟ ≈ خواص^{٧٩} ٦-٤ (→) أركاغائيس، الأدوية المزمّنة) || ١١ حجر [↑] VII.2 || ١٣ ومرق [⇒] ؟ ١٤ وقال [⇒] ؟ ١٥ || → فردوس ٦٤٤٤.

٣ حيوانات [«حيوانات» («κόκκων») Γ ٥ [يُسهل] «فيطلق» Γ ٦ [ويُنجم] «ويُنجم» [«πάν ἐξαιθριασθέν»] Δ ٨ إذا ... وسُحقت [«Ὀστρέων ὄστρακα καύσας καὶ λεάνας»] ψ Γ «٨ بخمر ... ماء» [«δὲ ὕδατος θερμοῦ»] ψ Γ «بخمر وشيء يسير من مر» Δ.

٣ حيوانات [«حيوانات پ» ٦ [ويُنجم] «وبخ» پ ٧ [المغنيطس] «المغنيطس» پ ٧ [يجذب] «بخرج» پ ٨ [أبرأت] «أبرت» پ ١٤ [حبس] پ* [صح]، «سهل» پ.

وقال: «إذا أخذت الحراطين (وهي حيات الطير) وحُففت وشربت بماء الشبث المطبوخ، نفعت من وجع القولنج».

وقال: «إن طبخت أختاء البقر وطلي على البطن حارًا، نفع من القولنج والرياح — وينبغي أن يُفعل ذلك مرارًا».

وقال: «لبن البقر والمعز، إذا نُزعت رغوته وشُرب مع عسل، أسهل».

صفة للقولنج

يؤخذ كَفّ ملح، يُشرب بماء حار: يُطرح قرصين دم سواء (و...)».

الفصل الخامس

في المعدة

- ١٠ وقال **الطبري**: «إذا أحرقت الحية التي تأوي إلى البيوت وسُحق رمادها | بزيتٍ ودُهنت به البواسير، قلعتها وأذهبها».
- وقال: «إن قُطع سلخ الحية صغارًا كالأظفار وسُحق منه نصف درهم وعُجن بوزن درهمين من دقيق شعير وعُمل منه قرصٌ وطُبخ في كانون وأُكله صاحب البواسير، ذهب عنه».
- وقال **الرائزي**: «مَن جلس على جلد أرنب، ذهب عنه البواسير».
- ١٥ وقال: «إن صُمِدت البواسير بدقيق شعير معجون بلبن البقر، سكن ضربانها».

١ وقال [→ فردوس ١٢-١١ ٢٥٦ || ٣ وقال] ٥ || ١٨-١٦ ٣١٠ (→ ألتبكري); → فردوس ١١-٨ ٤٢٣ || ٥ وقال] ٥ || ١٩-١٨ ٣١٠; → فردوس ٢١-٢٠ ٤٤٣ || ١٠ إذا] ٥ || ٢٢-٢١ ٣١٠; → «البواسير» فردوس ١١-٩ ٤٤١ (IV.iii.6 ↑) || ١٢ وقال] ٥ || ٣٥-٢٣ ٣١٠; → حيوان ٧٩-77; هارونية ١١-١٠ ٢١٩ || ١٤ مَن] ٥ || ٢٦-٢٥ ٣١٠، هارونية ٢٣٩; → «جلد أسد» فردوس ٩-٨ ٥٢٥ / خواص ٣٧٩-٤ (→ الطبيعيات) || ١٥ وقال] ٥ || ٢٨-٢٦ ٣١٠; → حيوان 15:3].

٣ طبخت] + «بشمن زيت» س || ٣ حارًا] - س || ٤ مرارًا] «فلعميم ربوت» س || ٥ والمعز] «أو حلب العز» س || ٥ أسهل] «يشلسل البتخ» س || ١٥ ضربانها] «دفيقهم وكابم» س.

٦ صفة للقولنج...] ٥ || ٩ المقعدة] «المعدة» پ || ١٠ ودُهنت] «دهن» پ || ١٢ صغارًا] «صغار» پ.

الفصل السادس

في الكبد

وقال: «إذا ضُمد الانتفاخ العارض من الحبن بالخلزون الصغار اللاصق بالشوك والأشجار الصغار مدقوفةً نبتةً، لم تُفارق ذلك الانتفاخ حتى تُنقى رطوبته وتُحلل ورمه».

وقال: «الحيوان الذي تحت الجرار الذي إذا مُس استدار: إذا شُرب بشراب، نفع من اليرقان. وإن عُلق الكهرا على صاحب اليرقان، نفعه جدًّا».

وقال: «متى أخذت فراخ الخطاطيف وعُصفت بزعفران في أعشاشها: فإذا نظرت إليه الأمهات ظننت أن قد أصابها يرقانٌ من حرّ البيت الذي هي فيه، فتطير فتأتي بججر اليرقان فتلقيه تحتها. فمن أخذه فعلقه على من به يرقان، برئ».

وقال **الرائزي**: «نبات الغافت وعصيره: إذا شُربا، نفعا من وجع الكبد وكواها ومجاريها». وقال: «إذا شُرب بول الحمار، نفع من وجع الكبد».

الفصل السابع

في الطحال

وقال **ديسقوريدس**: «إذا شُرب من ورق الطرفاء أو زهره أو ثمره، حلل ورم الطحال. وكذلك يفعل طبيخه وطبيخ قشره».

وقال **جالينوس**: «من قشر أصل الكبر وشربه بخلّ وعسل أو شرب طبيخه بخلّ وعسل أو ضمّد به مع سكنجبين، أبرأ ورم الطحال».

٣ إذا [٥ ٣١١-٤؛ → «قوخلياس» حشائش ٣١١-٢٠٠ (≡ «καρχλιάς» I Δ ١٢٥-٢)] وقال [٥] «وهي دويبة توجد تحت الجرار والحباب» حشائش ٣٣١-١٠٠ (≡ «ὄνοι οἱ ὑπὸ τὰς ὑδρίας» I Δ ١٣٣-٥)] ٦ وإن [٥ ٣١١-٤ (→ «تفريوس»): → خواص ٨٣-١٣ (→ ثاوفرستس، كتاب الأحجار)] ٧ وقال [٥ ٣١١-٤ (→ «تفريوس»): → خواص ٨٧-١٧ (→ كتاب الحيوان القديم)] ١٠ نبات [٥ ٣١١-١٥ (→ «الطرفاء» حشائش ٢١٢-١١٤-٢١٤-٢١١] وقال [هارونية ٢٣٩-١٢؛ → «الجمال»] ١٤ إذا [٥ ٣١١-٢٢؛ → «الطرفاء» حشائش ٢١٢-٢٠٢ (≡ «μυρίακη δένδρον» I Δ ٨٢-٢٠٠)] ١ من [٥ ٣١١-١٢ (→ «الكبر» مفردة ١١٢-١٤١)] «Περὶ κατπάρεως» Γ XII (١٠-٧٩).

٣ الحين [«השקוי» س، «الحين» («τὰ ὑδρωπικὰ οἰδήματα»)] ٤ نبتة [٥ ٣١١-١٠ وكواها ومجاريها] «ويحزكو ويفتح ستومو» س، «ويحزكو ويفتح ستومو» ن [٤ ورق... ثمره] «كلفت تمرير أو عليو أو فرير أو زيصر» س [٥ ٣١١-١٥ قشره] «كلفت شرشو» س.

٤ تُنقى [«سقي» پ [٧ أخذت] «أخذ» پ [٩ برئ] «بري» پ [١٠ ومجاريها] «ومجاريها» پ.

فصل في الكلاء ومداواته

قال **ديسقوريدس**: «الدود الذي يكون تحت الجرار الذي إذا مُس استدار: إن شُرب منه بشراب، نفع من عسر البول».

وقال: «كبد بَطَّ الماء، إذا مُلِّحت وُجِّفت وشُرب منها بماء وعسل، فتت حصا المثانة».

وقال: «إذا سُحِقَ الحزون الصغار بجمته وشُرب بجمر[†] وماء يسير[†]، أبرأ وجع المثانة».

وقال: «إذا سُحِقَ البق ولُطِخ به فتيلةً وأدخلت في ثقب الإحليل، أبرأ من عسر البول».

وقال: «إذا أخذ الحيوان الطائر المعروف بالصرار وشوي وأكل، نفع من وجع المثانة».

وقال **المرزبني**: «إذا احتقن بدهن الورد مخلوط بلبن معز حليب، نفع من وجع الكلاء».

وقال: «إذا شُرب من العقارب المحرقة قيراطان مع مثلها من الكبر معجون بعسل، فتت حصي الكلى والمثانة بخاضة فيه».

وقال: «إذا غُلِقَ خُصي الفأر وأظلاف تيبس وشعره على من به حرقه المثانة أو من به أُسْرُ البول، نفعه بإذن الله».

٣ البود] ≡ ٥ ٣١٢[†] ≡ ٣-١٢١٦-١٠؛ → «وهي دويبة توجد تحت الجرار والحباب» حشائش ٣٣-٩-١١ (≡ «öno oi úpo tas údrias» I Δ ١٣٣-١٠) || ٥ وقال [المغني ١٨٦-٢٠، هارونية ٢٣٧-٤؛ → «اوتنا» حشائش ٣٤-٣-٤ (≡ «αΐθυια» I Δ ١٣٨-٤) || ٦ وقال [المغني ٣١٢-٥، هارونية ٢١٨-١١، هارونية ٢٣٧-٥؛ → «قوخلياس» حشائش ٣١^ط (≡ «κοχλίαις» I Δ ١٢٥-١٠) || ٧ وقال [«قورس = السفساس» حشائش ٣٣-٨ (≡ «κόρεις οι από κλίης» I Δ ١٣٣-٤) || ٨ وقال [«ططبعش = الزيز» حشائش ٣٣-١٩-٢٠ (≡ «τέττιγες» I Δ ١٣٧-٩) || ٩ [إذا] ≡ ٥ ٦٣١٢ (→ «المتبري»، المغني ١٩٠-٨، هارونية ٢٣٧-١٣-١٤؛ → فردوس ٤٤٤-٢-١٠ وقال [هارونية ١٣٧-٤-١٤؛ → فردوس ٤٤٤-٢-١٠ وقال [هارونية ٢٤٤١-٢٤٤٢ || ١٢ وقال [هارونية ٣١٢-٩، هارونية ٢٣٧-١٤-١٥؛ → فردوس ٢٦٤-٢٥-٢٥.

٣ الجرار] «الهلبنيم ن» تחת האבנים» ٥ || ٣-٤ إذا ... البول] - ٥ || ٦ الحزون الصغار] «הקלנגברא» ن || ٦ بجمته] «בקלפתם» ٥، «بمגינה» ن، «كيا هي بأعطيتها» Δ || ٦ وماء يسير] «ומעט ממירא» ٥، «ומעט מירא» ن، «وشيء يسير من مز» Δ || ٧ ولُطِخ ... الإحليل] «ووضعت في ثقب الإحليل [«τρω ούρητιζαώ πόρρα»] Δ || ١٠ الكبر] «قشور أصول الكبار» ه || ١١ بخاضة فيه] - ه || ١٢ الفأر] «الجرذان» ف || ١٢ تيبس وشعره] «تيبس خفل» ه، + «أو اشتمته القلديس ثم علقتة عليه» ف || ١٢ حرقه ... البول] «שתן במקוה او עיצור השתן» ٥، «أسر البول وقرحة المثانة» ه || ١٢ حرقه] «قرحة» ه، «قرح» ف || ١٢ شفه] «فاته يرا» ه.

٧ وأدخلت] «وادخل» پ || ١٠ قيراطان] «فراطين» پ || ١٠ حصي] «حصا» پ || ١٢ خُصي] «حصا» پ || ١٢ وأظلاف] «واضلاف» پ.

- وقال: «إذا شُرب من دم الأيل، فتت حصى المثانة كما يُفتت دم التيس حجر المعنيطس».
- وقال: «إذا شُرب من زبل الفأر مع كندر ونبذ العسل، أخرج حصى المثانة».
- وقال: «إذا أخذت عين الخظافة وديفت بالماء وشُربت، حلت أسر البول من ساعتها».
- وقال: «إذا شُرب السرطان النهري بعد أن يُسحق بشراب أبيض، نفع من أسر البول وفتت حصى المثانة وأخرجها».
- وقال: «الدود الذي تحت الجرار الذي إذا مُس استدار: إذا أخذت منها اثنتان وشُربتا مع ماء طبخ فيه أسارون، نفعنا من أسر البول منفعة عظيمة».
- وقال: «إذا شُرب مُخَّ خروفٍ مدافٍ بدهن الخروع مع سكر طبرزد وقطرات زنبقٍ خالص، نفع من بول الدم وحرقة المثانة».
- وقال: «إذا أُحرق عُزْفُ الديك وشربه || مَن يبول في الفراش، أذهب ذلك عنه».
- وقال: «إذا أُحرق ظلف تيسٍ وعُجْن بعسل وشُرب بماء، نفع مَن يبول في فراشه».
- وقال: «زبل الأرنب، إذا شُرب مسحوقاً بشراب، نفع مَن يبول في فراشه».
- وقال **الرائزي**: «إذا أخذت أعناق الدجاج وبطنها وجُففت وسُحقت مع شيء من مَر، نفعت من الحصا ووجع المثانة منفعة عظيمة».
- وقال: «مَن شرب من مرارة التيس، نفعت من وجع الكلاء».

١ وقال [فردوس ٤٢٧-١٩٢ || ٢ وقال] ≅ هارونية ١٥٢٣٧-١٦؛ فردوس ١٥-١٣-٤٣٠ || ٣ وقال] ≅ ٥
 ١٠٩٣١٢، هارونية ٢٣٩-٢؛ ⊕ → «طين عش الخظاف» فردوس ٤٣٦-١٢-١٣ || ٤ وقال] ≈ هارونية ٢٣٩ [جد
 ت]: ⇒ فردوس ١٥-١٣-٢٦٥ || ٦ وقال] → فردو ٤٤٣-٣-٤ || ٨ وقال] ≅ ٥ || ١٣-١٢-١٣١٢، المغني ٢٠٩١-٢٠-٢١، هارونية
 ٤٢٣٩؛ → LX ٦٦-٥٦-٦٢ / حيوان ع [21.2-3] || ١٠ وقال] ≅ ٥ || ١٥-١٤-٣١٢، المغني ١٩٦-٢٢-٢٣؛ → LX
 ٥٠-٤٧-٧٠، حيوان ع [61.2] || ١١ وقال] ≅ ٥ || ١٦-١٥-٣١٢، المغني ١٩٦-٢١-٢٢، هارونية ٢٣٩-٥؛ → حيوان ع [22.2]
 || ١٢ وقال] ≅ ٥ || المغني ١٩٦-٢-١، هارونية ٢٣٩-٥؛ → فردوس ٤٣١-٥-٤ || ١٣ إذا] ≅ ٥ || ٢٠-١٨-٣١٢، المغني
 ١٩٠-٩-١١، هارونية ٢٣٩-٧؛ → فردوس ٤٣٢-١٠-١٢ || ١٥ وقال] ≅ ٥ || ٢٣-٢٢-٣١٢، هارونية ٢٣٩-٨-٧؛ →
 فردوس ٤٢٥-٦.

٨ الخروع [«האגוז» ٥ || ٨ وقطرات] «וב' טפוח» ٥ || ١٢ مسحوقاً] - ه || ١٣ وبطنها] - ه || ١٣ مَر] + «بلاء»
 ه.

٢ حصى [حصاً] پ || ٤ حصى [حصاً] پ || ٦ أخذت [«أخذ»] پ || ٧ نفعنا [«نفعت»] پ || ١٢ مسحوقاً [«محروقاً»
 مسحوقاً] پ.

فصول في آلات التناسل

وينقسم على ثلاثة عشر فصلاً

الفصل الأول

في وجع الرحم

- ٥ قال **أطراطيس**: «إذا بُجرت المرأة بشعر إنسان، نفعها من وجع الرحم». وقال: «إذا أخذ من وسخ إبط النعجة وخلط بدهن ورد واحتملته المرأة، سكن وجع الرحم». وقال: «إذا تدخت المرأة بشعر المعز، نفعها من اختناق الرحم».

الفصل الثاني

فيما يعين على الحمل

- ١٠ وقال **ديسقوريدس**: «إن جُفف خصا الفأر وسُحق وشربت منه المرأة ووطئها زوجها، أسرعت الحمل». وقال: «إن شربت المرأة إنفحة أرنبٍ ذكرٍ أو خُصيته، ولدت ذكراً؛ وإن شربت إنفحة أرنبٍ أنثى، ولدت أنثى».

- وقال **الرائزي**: «خاصة الأذريون: إذا احتملته المرأة وكانت لا تحمل، حملت بإذن الله». وقال: «إذا شربت المرأة التي لا تحمل من إنفحة أرنبٍ واحتملتها، حملت بإذن الله. وإن سُقيت المرأة، وهي لا تعلم، لبنَ الفرس ثم ووطئها زوجها، فإنها تحمل».

٥ [إذا] ≡ ٥ ٢٥٣١٢ (→ ٥٥٦٥٥٨)، المغني ٢٠٩-١٢-١٣، هارونية ٨٢٣٤؛ → فردوس ٤٢٠-٤-٦ (→ أطرومينس) / الحاوي XX ٣٣ (→ أطهورسفس) / حيوان [1.15] ٦ [وقال] المغني ٢١٠-٥-٦، هارونية ٢٣٤-١٠-١١؛ → فردوس ٤٢٤-١٦-١٨ [وقال] ٥ ٣١٢-٣٠-٢١، هارونية ٢٣٤-١٠-١١؛ → فردوس ٤٢٥-١٦-١٧ [إن] → فردوس ٤٣٠-١٢-١٣ [وقال] ≡ هارونية ٢٣٣-١٠-١١؛ → فردوس ٤٣١-١٠-٨ [خاصة] ≡ فردوس ٤٠٢-٧-١٠ [وقال] ≡ هارونية ٢٣٣-١١-١٢؛ → «إنفحة الأرنب» حشائش ٣٦-٩-١ (≡ «πιτύα λαγωού» I Δ ١٥٠-١٢-١٤) [وقال] ١٥ [إن] ≈ هارونية ٢٣٣-١٤؛ → LX ٣٦٦-٣٨-٤، خواص ٧٠-٧-٨ (→ ر).

٧ المعز [«*πυγί*»] ٥ [١١ أرنب... خُصيته] «أرنب أو خُصيته، وتكون إنفحة ذكر» ه.

٧ المعز [«الخنزير المعز»] ٥ [١٠ خصا] «خصا» ٥ [١٠ ووطئها] «وووطئها» ٥ [١٣ الأذريون] «الأذريون» ٥ [١٥ ووطئها] «وطئها» ٥.

الفصل الثالث

فيما يمنع الحمل

- قال **ديسقوريدس**: «ورق النعنع البستاني، إذا احتملته المرأة قبل وقت الجماع، منع الحمل».
- وقال: «أصل بخور مريم، إذا عُلق على المرأة، منع الحمل».
- وقال: «إذا أرادت المرأة (أن) لا تحمل، تأخذ كلَّ شهر حبة قرنفلٍ ذكّرٍ فترددها: فإنّها لا تحمل».
- وقال **الطبري**: «إن عُلق قلب الأرنب على المرأة، لم تحمل ما دام معلقاً عليها».
- وقال **الرازي**: «إذا أخذت أسنان صبيّ وعُلقت قبل أن تقع على الأرض وجُعلت في أنبوية فضّة وعُلقت على المرأة، منعها الحمل».
- وقال: «إن عُلق زبل الأرنب على المرأة، لم تحمل ما دام معلقاً عليها».
- وقال: «إذا صُتر بزر الحمّاض وعُلّق في عضد المرأة الأيسر، لم تحمل ما دام معلقاً عليها».

٣ ورق [9.13] ≡ ٩-٨٣١٣٥، المغني ٢١٧ ط؛ → «نعنع» حشائش ١٤-١٣٦٢ ≡ «ἡδύσμον» II Δ (٧-٥٤٦) || [9.4] وقال [9.4] → «ققلامينوس» حشائش ١٩ ط ٥٠ ≡ «κυκλάμινος» I Δ (١٢٢٩-١٤٢٢٨) || [9.5] وقال [9.5] ≡ هارونية ١٨-١٧٢٣٣ → ايلوپطرة الحكيمية: [9.18] Δ: ابن عمران ٣ جامع ١٠ IV ٢١-٢٠، اعتماد ٣٢٤٩ → (إلا وبطرة) [9.6] إن [9.6] ≡ [9.13] ١٣-١٢٣١٣ هارونية ١٨٢٣٣-١٢٣٥: [9.13] ⊕ → «رحم أرنب» حيوان [9.31] [9.7] إذا [9.7] ≡ [9.13] ١٧-١٥٣١٣، هارونية ٢٣٥-٢٠١ → خواص [9.13] ٧٨-١٥٤ ط [9.9] وقال [9.9] ≡ [9.13] ١٧٣١٣، المغني ٢١٧ ط ٢٠٢؛ → خواص [9.13] ٧٩-٧٤، كتاب الحيوان القديم: [9.13] ١٠ [9.18] وقال [9.18] ≡ [9.13] ١٨٣١٣، هارونية ٢٣٥-٢٠٤؛ → خواص [9.13] ٨٣-٢٠٣، قسطس، الفلاحة: [9.13] ٢٩٠-٨٠ Geop ≡ [9.13] ٢٨٢-٨٠).

٣ الحمل [9.13] «الحبل» Δ [9.4] إذا ... المرأة [9.4] «إذا شدّ في الرقية أو في العضد» (περιαπτομένη) Δ [9.4] «الحبل» «الحبل» Δ [9.5] إذا ... تحمل [9.5] «إذا ازدردت المرأة كلَّ شهر حبة قرنفلٍ ذكّر، لم تلد أبداً» ه [9.7] «أخذت» [9.7] «أول ما تسقط تؤخذ» خ [9.7] أنبوية [9.7] «صحيفة» خ [9.8] على ... الحمل [9.8] «على النساء، يمنع أن يجبلن ويلدن» خ [9.9] معلقاً [9.9] - خ [9.10] صرّ [9.10] «تخوور [...] ببناد» ٥، «صير [...] في خرقه» خ [9.10] الأيسر [9.10] «هيمانيت» ٥ [9.10] معلقاً [9.10] ٥.

الفصل الرابع فيما يحفظ الجنين

- وقال **ثاوفرستس**: «إن غلّق القهرا على حامل، حفظ الجنين بإذن الله».
 وقال **الطبري**: «يؤخذ من الإبل || عظمٌ ويُعلّق على المرأة: يحفظ الجنين بإذن الله».
 وقال: «إذا صرّت عقربٌ في خرقةٍ وعلّقت على الجنين (أعني المرأة الحامل التي تُسقط أولادها)، لم تُسقط وحفظته».

الفصل الخامس فيما يُسقط الجنين

- قال **ديسقوريدس**: «أصل بخور مريم، إذا تحطّته المرأة وهي حامل، سقطت».
 وقال **أطراطيس**: «إذا تبخرت المرأة بحافر رمكةٍ، أخرج الجنين والمشيمة المحتبسة. وإذا تدخنت المرأة الحامل بزوث الخيل، أخرج الجنين الميت والحَي».
 وقال: «إذا شربت المرأة أدمغة الدجاج مع العسل المطبوخ بالماء، أخرج المشيمة».
 وقال: «إذا تبخرت المرأة بخور ستورٍ أسود، أخرج الجنين».

٣ إن [٣١٣ ٢٠٠-٢١٠، هارونية ٢٣١ ١٥؛ → خواص ٨٣ ١٢-١٣ (→ ثاوفرستس في كتاب الأحجار) || ٤ يؤخذ] ≡
 المغني ٢١٨ ١٨-١٩؛ → فردوس ٤٢٧ ٢١-٢٠ || ٥ وقال [≡ اكتفاء = المغني ٢١٨ ٢٠-٢١ || ٥ ٣١٣ ٢٤-٢٦ (→ (٢١٢١)؛
 → حيوان ٤ [8٥.11-12]، حيوان ٢٥٢ ٧-٦ || ٩ أصل] → «ققلامينوس» حشائش ٥٠ ١٨-١٩ (≡ «κυκλάμινος» Δ
 I ٢٢٨ ١٣-١٤) || ١٠ إذا [≡ هارونية ٢٣١ ١٨-١٩، ≡ ٣١٤ ٥ ٧-٥ (→ (٢١٢١)؛ → فردوس ٤٢١ ٥-٩ || ١٠ وإذا]
 ن ٢٣٢ ٦-٥ || ١٢ وقال [≡ ٣١٤ ٨-٩، ≡ ٢٣٢ ٥ ٥-٤ (→ (دياسكوريدس)، هارونية ٢٣١ ١٩-٢٣٣؛ → فردوس
 ٤٣٢ ٨-٩ || ١٣ وقال [≡ هارونية ٢٣٣ ٢-١؛ → فردوس ٢٨٤ ٥-٢ || LX / ٢٥٦٩ ٢٥-٢٤، حيوان ٣٠٦ ١٠-٣٠٧؛
 ⊕ «جوف الستور الأسود» حيوان ٣ [3٥.2].

٣ **ثاوفرستس** [«سافرستس» ج٣، «سافرستاس» س || ٤ الإبل] «الأيل» ف || ٤ عظمٌ [«في قلب الأيل عظم»
 ف || ٤ المرأة] + «حبل» ف || ٥ على ... أولادها [«عل الهرة אשר تليف يليديها» س ٦ تُسقط] + «العورب
 مممده» س || ١٠ بحافر رمكةٍ [«بل*ممت رحمة*» س || ١٣ ستورٍ أسود] «*gatti nigri coloris*» LX، «الستور»
 ف || ١٣ الجنين [«*fetum mortuum a matrice*» LX].

٣ **ثاوفرستس** [«ثاوفرستس» پ || ٣ القهرا] «القهرا» پ || ٩ تحطّته [«تحطّته» پ.

وقال **الطبري**: «إن سُحِقَ الزعفران وعُجِنَ وأُتخذ منه مثل الجوزة في العظم وعُلِقَ على المرأة بعد الولادة، أسقطت المشيمة».

وقال: «إذا قَطِرَ من دم الإورز على الرحم، أخرج الجنين الميت بإذن الله».

وقال: «إذا تبخّرت المرأة بأخفاء البقر، أسقطت المشيمة».

وقال: «إذا تدخنت المرأة بزبل الحمام، أسقطت المشيمة وأخرجت الجنين الميت».^{٨٤٥}

الفصل السادس

فيما يُدمر المحيض

قال **ديسقوريدس**: «الحلزون الصغير، إذا سُحِقَ نَيْبًا بجثته واحتملته المرأة، أدّر الطمث إدرارًا عظيمًا».

وقال **جالينوس**: «إذا شُرب النفط بجمٍّ وجندبادستر، أدّر الطمث».

وقال **الرازي**: «إذا خُلط الشونيز مدقوقًا بشحم الإورز واحتملته المرأة، أدّر الطمث».

وقال: «إذا مُسح طرف الذكر عند الجماع بقطران، أدّر الطمث».

١ إن [٥ ≡ ١٢-١١٣١٤، المغني ٢٢٠^ظ٥-٣، هارونية ٢٣٣-٤؛ ≡ خواص ٨١^ظ١٧-١٩ (→ الطبري)؛ ≡ فردوس ١٠٩-٩٢٨٠ || ٣ وقال [٥ ≡ ١٣-١٢٣١٤، المغني ٢٢٠^ظ١٥؛ → فردوس ٤٣٣-٨ || ٤ وقال [٥ ≡ ١٥-١٤٣١٤ || ١٥-٩٢٣٢؛ ≡ فردوس ٤٢٣-٧٨ || ٥ وقال [٥ ≡ ١٤-١٣٣١٤، هارونية ٢٣٣-٤؛ → LX ٧٠-٢ / حيوانع [55:5] || ٨ الحلزون [٥ ≡ ١٧-١٦٣١٤، هارونية ٢٣٣؛ → «قوخلياس» حشائش ٣١^ظ١٩-٢٠ (≡ «κوخλίας» I Δ ١٢٥-٤) + مفردة^٢ ١٧١-١٨١٩ (≡ XII Γ ٣٢٢-١٥١٦) || ٩ إذا [٥ ≡ ٢١-٢٠٣١٤؛ Γ ≠: → «نفط» حشائش ١٩-١٨^ظ١٩ (≡ «νάφθα» I Δ ١٣-١٢٧٣) || ١٠ إذا [٥ ≡ ٤٢٣٤-٥ (→ «زازي»، المغني ٢٢٥^ظ١٥-١٦؛ → فردوس ٤٣٣-١٢ || ١١ وقال [٥ ≡ هارونية ٢٣٣؛ → «شربين» حشائش ١٩^ظ٢٣-٢٠ || «αέδρος δένδρον» (≡ I Δ ١٨٧٦-٢٧٨).

١ سُحِقَ [«شحك» س، «سُحِقَ» خ، «دقت» ف || ١ وعُجِنَ... المرأة] «ويولش ويلقح ممانو كمو اغوز בגודل ويوشم בעצם» س، «وعُجِنَ وأُتخذ منه خرزة عظم وعلّق على المرأة» خ، «وأُتخذت منه بندقة وعلّقها على المرأة والداية» ف || ٢ أسقطت [«تفيل» س، «أخرج» خ، «فانها تطرح» ف || ٣ على الرحم + «وهو حاز» ف || ٤ المشيمة + «وتوزيا هعورب המת» سن || ٨ نَيْبًا [Δ - || ١٠ الشونيز] «زرع هنيأليا» ن.

صفة تلثم الحيض وينزل الدم

- جاوشير : درهم.
سكبيج : مثله.
مرّ وأهبل وخربق أسود : من كلّ واحد درهم.
يُحلّ الجاوشير والسكبيج في ماء السذاب وتُعجن به الأدوية في مرارة بقر، وتُتحمّل به عند النوم.
○ قرطاس، نقوع حلو كامل، وكفّ شمار وكفّ فوة صبغ، وثلاثة دراهم كسيلة، وكفّ حلبة وقليل شونيز.
يُغلى ويبرد ويشرب.
حبّ غاسول : عشرة دراهم. يُدقّ ويُنخل.
وعشرة دراهم حلبة ووقيتان عسل نحلّ : ويُلقق منه على الريق.
١٠ ثمّ تأخذ من حبّ غاسول مدقوق وزن درهم، ومن حنّاء فتّل درهم : يُعجن بماء السذاب ويُعمل فتائل
ويُتحمّل بها.

٢ جاوشير [«حوسير» پ || ٥ الجاوشير] الحاء | «وسير» پ || ٥ السذاب [«السذاب» پ || ٦ فوة] «فوه» پ ||
٩ ووقيتان [«ووقسن» پ || ١٠ تأخذ] «احد» پ || ١٠ السذاب [«السذاب» پ || ١٠ ويُعمل] «ويعمل» پ.

الفصل السابع فيما يجبس || نرف الدم

پ ٨٥

قال **أرسطوطاليس**: «مَنْ تَحْتَمَّ بِحَجَرِ الْعَقِيقِ (الَّذِي لَوْنُهُ يُشْبِهُ غَسَالَةَ مَاءِ اللَّحْمِ الطَّرِيقِيِّ) أَوْ تَقْلَدَهُ، قَطَعَ عَنْهُ نَرْفَ الدَّمِ مِنْ أَيِّ عَضْوٍ كَانَ — وَخَاصَّتَهُ لِنَرْفِ الطَّمْثِ».^٥

وقال **الرائزي**: «إِذَا سُحِّقَ بَزْرُ الْحَمَّاضِ وَخُلِطَ بِشَحْمِ الْإِوَزِّ وَاحْتَمَلْتَهُ الْمَرْأَةُ، قَطَعَ عَنْهَا نَرْفَ الدَّمِ الْمَفْرُطِ».^٥

وقال: «إِذَا أُخِذَ جُزْوٌ مِنْ أَفْيُونٍ وَمِثْلِهِ مِنْ عَفْصٍ وَمِثْلِهِ مِنْ كَثِيرَاءٍ وَمِثْلِهِ مِنْ جَنْدَبَادَسْتَرٍ وَشُرِبَ بِمَاءِ لِسَانِ الْحَمَلِ، قَطَعَ نَرْفَ الدَّمِ حَيْثُ كَانَ مِنَ الْبَدَنِ وَالرِّعَافِ وَالْإِسْهَالِ الْمَزْمَنِ».^٥

الفصل الثامن فيما يمنع الولادة

وقال **الطبري**: «إِنَّ دِمَاغَ الْأَفْعَى مِثْلَ الْحَجَرِ: إِنْ عُثِقَ عَلَى النِّسَاءِ، مَنَعَهُنَّ أَنْ يَلِدْنَ. وَإِنْ عُثِقَ وَسُخِّ أذن البغل في أنبوب فضة على امرأة حامل، منعها من الولادة».^{١٠}

٣ مَنْ [] س ٥ ٢٢٣١٤-٢٥؛ ⇒ أحجار ١١٤-١١٥ || ٥ [إذا] س ٥ ٣١٥-٣٠٣ ⇒ ج ٢٣٦-٢٠١ (→ ٢٨٢)؛ ٥
خواص ١؛ → فردوس ٤٣٣-١٥ || ٦ وقال [] س ٥ ٣١٥-٧ (→ أركس) ⇒ ج ٢٣٦-٢٠١ (→ ٢٨٢)؛ ؟ [] ١٠ [إن]
س ٥ ٣١٥ (→ ألتبري) ⇒ ج ٢٣٦-١٤ (→ ديأشكوروديش)؛ ⇒ خواص ٧٩-١٢ (→ أظهورسفس)؛ ٥
حيوان ٢٣٨-١١ (→ أرسطوطاليس) [] ١١ [وإن] س ٥ ٣١٥-١٢؛ → فردوس ١٧٤-١٨.

٥ بشحم [«بحلب»] س ٥ [نرف الدم المفرط] «دم الندوت» ج ٦ [ومثله من عفص] - [] ١٠ [مثل الحجر] «صلب
كالحجر» خ [] ١١ [البغل] «مفرده لبنة» س [] ١١ [أنبوب] «بأبوب» س، «صفيحة» ف [] ١١ [حامل] - [] ف []
١١ [منعها من الولادة] «لا تلد» س.

٤ الطمث [] پ ٥، «الدم» پ.

الفصل التاسع فيما يُسهّل الولادة

قال **ديسقوريدس**: «إن عُلق حجر الشبّ الأصفر على فخذ المرأة، أسرعت الولادة».

وقال: «إذا شُدَّ سلخ الحية على ورك المرأة عند الولادة، أسرعت».

وقال: «إنّ ممّا يَنْفَع تعسّر الولادة نفعًا، أن تأخذ حاشية ثوبٍ فتكتب فيها:

﴿ انفتح بابٌ من السماء فخرج منه سبعةٌ من الملائكة بأيديهم قضبان من نارٍ

يقولون: بالله، ألا ما ذهبتم | إلى فلانة بنت فلانة حتى تُخرجوا ما في بطنها حيًّا كان

أو ميتًا؟ بالله الحي وبالله الدائم، أنا أرقى وعلى الله الخلاص﴾

ثم تأخذ ماءً عذبًا فتجعله في جامٍ وتغسل الخرقه وتعصرها وتسقيها ذلك الماء. ثم تضع الخرقه على رأس

المرأة حتى تلد — فإذا ولدت، رفعت ذلك الخرقه — فإنّ هذا مجربٌ عندي.

وقال: «حجر المعيطس الذي يجذب الحديد: إذا أمسكته المرأة بيدها اليسرى عند الولادة، ولدت

مسرعةً».

وقال: «إذا صاحت جاريةٌ يكثرُ بالمرأة التي لا تلد باسمها: "يا فلانة، أنا جاريةٌ يكثرُ قد ولدتُ وأنت لم

تلدي" — فإتّها تلد في الوقت».

وقال: «إذا تجرّت المرأة بأخشاء البقر، سهلت ولادتها».

٣ إن [≡] ١٧-١٦-٣١٥ ٥-٤٢٣٨ (→ غلينوس)، هارونية ٢٣١-٢٣٠؛ ⊕ → «ليثس إياسيس» حشائش ١٣٠-١٢٩

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

٥ وقال [≡] ١١-٣١٦ (→ ألتبري) ≡ [٤ إذا] ≡ هارونية ٢٣١-٤٥؛ → خواص ٨٢-٨١ (→ أظهورسفس) ||

الفصل العاشر فيما يعين على الباه

- قال **الطبري**: «إن غلّق قلب الحبارى على الرجل وقتّ الجماع، هيج الشهوة». وقال: «إن مسح أحد قدميه بدماع الخفّاش، قوّي على الجماع». وقال: «من ربط مرارة الدبّ على فخذة الأيمن، جامع ما شاء ولا يُضرّه». ^{ب ٨٦}
- وقال: «من أراد أن يدوم انعاظه، شرب وزن درهم من أدمغة العصافير مع مثله من عصير الحسك || الرطب مذاقًا بنبيذ قبل الجماع».
- وقال **الطبري**: «الجرجير البستاني، إذا أكثر من أكله، حرّك شهوة الجماع. وكذلك يفعل بزُرّ الجزر البستاني والبرّي.
- وإذا شرب أصل خصى الثعلب بلبن المعز، حرّك الجماع. وكذلك يفعل النبات المستمى بخصى الثعلب إذا شرب بلبن». ^{١٠}
- وقال: «الأشقال، إذا أكل مطبوخًا أو شرب طبيخه، هيج شهوة الجماع. وكذلك يفعل إذا زُي بالعسل».
- وقال: «الجوز جندم (وهو يُربّب بالعسل): إذا شرب، ستمن البدن وزاد في المنى وأعان على الباه». وقال: «لسان العصافير (وهو بزُرّ شجرة): إذا شرب، فخاصته الزيادة في المنى والباه والمعونة على الجماع».
- وقال: «حبّ الزّلم يكثرّ الجماع والمني، ويقوّي على الباه، ويُديم الإنعاظ».

٣ إن [المغني ٢٠٣ ط ٥-٥، هارونية ١٦٩؛ ١٤] → «خفّاش» فردوس ٤٣٦-٢١٤ || ٤ وقال [هارونية ١٦٩-١٤، ١٥-١٤] المغني ٢٠٣ ط ٨-٩؛ حيوان [53:22] || ٥ وقال [هارونية ١٦٩-١٤؛ ١٥-١٤] LX ٣٦٧-١٦٤، حيوان [5:12] || ٦ وقال [هارونية ١٦٩-١٥؛ ١٦-١٥] فردوس ٤٣٥-١١٤+٢٦٨-٨٠ / حيوان [52:10] || ١٨ الجرجير البستاني [هارونية ١٦٩-١٥؛ ١٦-١٥] → «دياسكوريديا» (→ ١٠-١٤) → «جرجير» حشائش ٤٧ ط ٢١-٢٢ (→ «εὐζωμον» I Δ ٢١٠-٦) || ١٠ وإذا [هارونية ١٦٩-١٥؛ ١٦-١٥] → «خصى الثعلب» حشائش ٧٦ ط ٢٢ (→ «σάτυριον» II Δ ١٣٩-٨) || ١٠ وكذلك [هارونية ١٦٩-١٥؛ ١٦-١٥] || ١٢ وقال [هارونية ١٦٩-١٥؛ ١٦-١٥] → «ابن ماسويه»، هارونية ١٦٩-١٧؛ ١٨-١٧؛ ١٩-١٨ X الحاوي ١٤-٨ || ١٤ وقال [هارونية ١٦٩-١٥؛ ١٦-١٥] → فردوس ٤٠٤-٢١٠ || ١٥ وقال [هارونية ١٦٩-١٥؛ ١٦-١٥] → ابن عمران جامع I ١٢٧-١٨.

٨-٩ وكذلك... والبرّي] - د [١٠ الثعلب] «الكلب» ٥ || ١٤ وهو... بالعسل] - ف [١٥ بزُرّ شجرة] «الع» ٥ ||

١٠ [بخصى] «بخصا» [١٢ الأشقال] «الاشقال» [١٤ الجوز جندم] «الجوز جندم» ب.

وقال: «إذا شُرب من القرنفل وزنُ نصف درهم مسحوقاً باللبن الحليب على الريق، قوى الجماع». وقال: «الزنجبيل والدارفلفل والخولنجان: إذا شُربت مسحوقاً أو بعضها مع لبنٍ على ريق النفس، حرّكت شهوة الجماع، وكثرت المتى».

وقال: «إذا أخذ من عود الخولنجان عودٌ ومُسكٌ في الفم، أنعظ إنعاطاً شديداً».

وقال: «إذا أكل الرجلُ العصافير مطبوخةً مع أدمغتها وتحسى بيضها، هيجت الباه».

وقال: «إذا جُفّف قضيب الثور ومُحق وألقي منه يسيراً في بيضةٍ وتحسّاه الرجلُ، زاد في جماعه حتى يرى منه العجب».

وقال: «إن سُحق بزر الكرفس وخلط به سكرٌ أبيض ولت بسمن البقر وشربه الرجلُ ثلاثة أيام، فإنه يُجامع ما (شاء)».

وقال: «إذا أكل لحم الديوك، حرّك الشهوة، ويزيد في الماء — ولا سبياً الخصى وأدمغتها: فإنها أبلغ في ذلك».

وقال: «إذا أخذ من خصية ما أخصي ويئس وشُرب، أنعظ وهيج الجماع».

وقال: «إذا أخذت شعرةً من شعر ذنب الحمار إذا نزل على أتانٍ وعُلقت على الرجل، أنعظ».

وقال: «إذا أخذت خصية الأيل وجُففت ونُحت منها، أنعظ ولم يسكن الإنعاط، وهيج الشهوة. وكذلك تفعل نُحاته قضيبه إذا شُرب مجفّف بخر».

١ وقال [٥ ١٧-١٥٣١٧] ٥ ١٧١-٢٤٦، هارونية ١٧١؛ → ابن عمران ٥ جامع IV ١٠-٢١ ٢٣ وقال [٢ وقال] → ؟ [٤ وقال] ٥ ١٧٣١٧-١٨؛ → ابن عمران ٥ جامع IV ١٩١-٢٣ ١٩٢، اعتماد ١١١-٧ [٥ وقال] ٥ ١٧٣١٧-١٨؛ → ؟ [٦ وقال] ٥ ٢٢-٢٣ ٣١٧ ≈ ١٠-٨ ٢٤٨ (→ المنبסה)، هارونية ١٦٩-٣؛ → حيوان [15:38]، حيوان ب ٢٥٠-٤ [٨ وقال] ٥ ٢٤-٢٣ ٣١٧، المغني ١٩٩-١٠، هارونية ١٦٩-٩؛ → حيوان [15:49] [١٠ وقال] ٥ ٣١٧-٢٤؛ → حيوان [61:15] [١٢ وقال] → فردوس ٤٢٢-٢٠ ٢١ / حيوان [15:16] [١٣ وقال] ~ ٧-٤ ٢٤٨ (→ المنبסה)، هارونية ١٧١؛ → فردوس ٤٢٤-٣٠ ١٤ [١٤ وقال] → فردوس ٤٣٧-٢١ ٢٣.

١ قوى الجماع + «ويربها الزرع» ٥ [٥ أكل] «ياكل» ٥ [٩ شاء] «شیرצה» ٥ [١٤ أنعظ... الشهوة] «وشُرب من نُحاتها، هيجت الشهوة وأنعظت فلم يسكن» ف [١٥ مجفّف] - ف.

٣ وكثرت [«وكثرة» ب [٥ أكل] «اخذ» ب.

الفصل الحادي عشر فيما ينفع المربوط عن النساء

قال **الرازمي**: «إن نُحْتُ عَلَقٌ من أغلاق أبواب ويسقيه المربوط عن النساء، انطلق وجامع ما شاء. وكذلك إذا خُلط لحم الرخم بجردل وشراب وجُفِّفَ ونَجَّرَ || به: انتفع بذلك المعقود عن النساء والمسحور»^{٨٧} ب — مجزَّبٌ جيِّدٌ، إن شاء الله.»^٥

الفصل الثاني عشر فيما يمنع الباه

- قال **ديسقوريدس**: «البقلة الحمقاء: إذا أدمن أكلها، أضعفت شهوة الجماع.»
وقال: «الشبث: إذا أدمن شربه، قطع المنّي.»
وقال: «إذا أكل الحنّس البستاني أو شرب بزره، سكن شهوة الجماع. وكذلك يفعل بزر الحنّس البرّي إذا شرب.»
وقال: «إذا شرب السذاب أو أكل، قطع المنّي وجفّفه.»
وقال **ابن ماسويه**: «إذا شَمَّ الكافور أو شرب، قطع شهوة الجماع.»
وقال **الرازمي**: «إذا جفّف قضيب الثور وشحق وشربت منه المرأةً مثقالاً بشراب صلب، قطع عنها شهوة الجماع.»^{١٥}

٣ إن → خواص [ط] ١١٢-٨-٧ || وكذلك [٤] ٥ ٣١٧-٢٧٣١٨-٢٣١٨: خواص: → حيوان [56.4]، حيوان ب
١٥٤-٨-١٠ || ٨ قال [٤] ٥ ٣١٨-٧-٨: «بقلة الحمقاء» حشائش ٤٥ ظ ٢١ (≡ «ἀνδροχνη» I Δ ١٩٦-٩) || ٩ وقال
٥ ٣١٨-٨-٩: ٢٥٢-٤-٤: → «الشبث» حشائش ٦٦ ظ ٢٢ (≡ «ἀνηθον» II Δ ٢٧١-٣) || ١٠ وقال [٥] ٥
٣١٨-٩-١٠: «الحنّس البستاني» حشائش ٤٧ ظ ١٣-٧ (≡ «θριδαξ ἡμερος» I Δ ٢٠٧-١٤-١٢٢٠٨) ||
١٢ وقال [٥] ٥ ٣١٨-١٠-١١: «السذاب» حشائش ٦٣ ظ ٢٣ (≡ «πήγανον» II Δ ٩٥٧-١٠) || ١٣ إذا [٥] ٥
٣١٨-١٣-١٤: → ابن ماسرجويه د الحاوي X ٢٦٨-٩: ≈ ابن عمران د جامع س II ١٥٠-١٢-١٤ || ١٤ إذا [٥] ٥
٣١٨-١٦-١٧، هارونية ١٧٣-٧-٨ (→ ابن يوحنا): → LX ٦٦-٢٦-٢٨، حيوان [15.4٥].

٩ الشبث [«هائيتا» س، «هائيتا» د || ١٤ قضيب الثور [«virga tauri rubei» LX || ١٤ بشراب صلب] «cum»
— LX «uino optimo» .٥

٩ الشبث [«الشب» ب.

الفصل الثالث عشر

فيما يستعمل للمحبة

وقال **الطبري**: «إذا سُقيت المرأة من وسخ رجل إنسان وهي لا تعلم، فإتبا تُحبه حبًا شديدًا». وقال: «إذا أُحرقت قلامه أظفار إنسان وسُقيت المرأة الرماد وهي لا تعلم، أحببت زوجها حبًا شديدًا». وقال: «إذا سُحق القرنفل وُخلط بيسيرٍ من فلفل ودارصينيّ ويُخلط ذلك بعسل ولُطخ به الإحليل عند الجماع، لم تُحب المرأة سواه». وقال **الرائزي**: «إذا طلى أحدٌ إحليله بمرارة دجاج عند الجماع، لم تُحب المرأة سواه أبدًا».

ب ٨٧ ظ

الفصل الرابع عشر

في قروح الفروج ومدواتها

قال **جالينوس**: «الصبر يُدمل قروح الفروج والمذاكر، وما يُحتاج معه إلى سواه».

١٠

٣ [إذا] ٥ ٣١٨-٢١٣، المغني ٣٦٧^ظ ٢١-١٨؛ فردوس؛ LX ٧١-٢٧-٢٩، حيوان^ع [1.25] || ٤ وقال ٥ ≡ ٣١٨-٢٣٢، المغني ٣٦٧^ظ ٢٠-١٨؛ LX ٧١-٢٩-٣١، حيوان^ع [1.26] || ٥ وقال ٥ ≡ ٣١٨-٢٨٣١٩؛ LX ٧١-٢٣١٩، المغني ٣٦٧^ظ ٨-٧، هارونية ١٧٣-١٤-١٣؛ LX ٧٠-٤٣، حيوان^ب ٣٤١-٧ || ١٠ [الصبر] ٥ ٣١٩-٨؛ «ذكر الصبر» مفردة^ر ٩٧^ظ ٣-١ ≡ (XI Γ «Περι ἀλόης» ١١٨٢٢-١٤).

النوع السابع في أمراض المفاصل

وينقسم على ثلاثة فصول

الأول

عرق النسا

قال **ديسقوريدس**: «إذا شُرب من قشور أصل الكبر مسحوق وزنٌ مِثقال بشراب، نفع من عرق النسا منفعَةً بَيِّنَةً».

قال **أرسطاطاليس**: «إذا شُرب الأقط بخمرٍ وجندبادستر، نفع من عرق النسا».

الفصل الثاني

في وجع المفاصل

قال **ديسقوريدس**: «الحلزون: إذا سُحق بجمته بماء وضمّد على أورام المفاصل وأوجاعها، نفع منها - وينبغي أن يُترك حتى يسقط من تلقاء نفسها».

قال **جالينوس**: «أعرف طبيبًا كان يستقي الناس عظام الناس المحرقة، وكان يُشفي بها من وجع المفاصل».

٦ إذا [٥٣١٩-١٤] ⇒ «كبر» حشائش ٥٢^ط ١٩-١٨ ⇒ «κάπαρις» I Δ (٥٢٤١) || ٨ إذا [١٤-١٢٧٣ I Δ «ἀσφαλτος» ⇒ ٢٠-١٩^{١٩} حشائش «قط» ⇒ «(دياسقوريدوس الحشائشي)»؛ ⊕ «قط» حشائش ١٩^{١٩} ٢٠-١٩ ⇒ «فوخلياس» حشائش ٣١^{١٨} ⇒ «κοχλίας» I Δ (١٢٥-١٤) + «فوخلياس» مفردة^{١٧٧} ٢١-١٩^{١٧٧} ⇒ «Περὶ κοχλίων» XII Γ (٣٥٦-١٧٣٥٥) || ١٣ أعرف [٢٣-٢٢٣١٩] ⇒ مفردة^{١٧٤} ١٣-١١^{١٧٤} ⇒ «Περὶ ὀστέων κεκαυμένων» XII Γ (٣٤٢-٨).

٦ بشراب [٥١١] - [١١] بجمته - [١٢] من تلقاء نفسها - [١٣] طبيبًا [إنسانًا] تمن في دهرنا هذا^{١٧}.

الفصل الثالث

في النقرس

قال الإسكندر: «حجر المعنيطس الذي يجذب الحديد: إذا أمسك في اليدين والرجلين، نفع من ذلك ومن الكزاز أيضًا».

وقال ٥: «والرجاج (وهو زبد البحر): إذا سُحِقَ تَضَمَدَ به، نفع من النقرس وسكّن ورمه».^{٥٨٨}
 وقال: «إذا رُبِطت على رجل صاحب النقرس خرقه حيصه من أول حيصه المرأة، يرئ بإذن الله تعالى».

٣ حجر] ≡ اكتشاف C المغني ٣٢٢ ط ١٥-١٦؛ → خواص ر ٨٣ ط ١٦-١٨ (→ سلمويه | أياطيس الأمدني)؛ → Therap
 I Iatrica / ٢٧-٢٦٥٨١ II ٣١٦٥-٣٠١٦٤ ٥ وقال [⊕ → «فلومن ثلاثيوس» حشائش ٣٣-١٤-١٣ ≡ «
 I Δ «πνεύμων θαλάσσιος» (١٤-١٣-١٣٣) ٦ وقال [⊕ ≡ ٣٢٠ ط ١٤-١٦ (→ ٢٢٨٦)؛ → خواص ر ٧٨ ط ١٩-١٧٩ (→
 الإسكندر)؛ → Therap II ١١٥٨١-١٣.

٣-٤ نفع من ذلك... أيضًا] «ينفع من النقرس [...] وإذا أمسك في اليد ينفع من الكزاز» خ.

٣-٤ نفع من ذلك] - [٥ وقال] «قال» [٥ وهو] «هو» [٦ رُبِطت] «ربط» [٦ برئ] «برا» د ||
 ٧ تعالى] - د.

النوع الثامن في أمراض ظاهري الجسد

وينقسم على أربعة عشر فصلاً

الفصل الأول فيما يدفع وجع الأعضاء

قال **أرسطاطاليس**: «من تقلد حجر الياقوت أو تحتم به وكان في بلدٍ وقع فيه وباءٌ، منعه أن يُصيبه ما أصاب أهل ذلك البلد».
قال **جالينوس**: «مرق الدجاج: إذا طبخ إسفيدباجًا، لمخاضته إصلاح المزاج».^٥

الفصل الثاني في الفالج والارتعاش

قال **الإسكندر**: «حجر المغنيطس الذي يجذب الحديد: إذا أمسك في اليد، نفع من الكزاز».
وقال: «إن طبخت الضفادع النهريّة والآجاميّة وأكلت وتحتسى مرقها، نفعت من التشنج الكائن في الظهر منفعه عظيمة».^{١٠}

وقال: «إذا طبخ رأس الخفاش بقدر ما يغمره من الزيت مرارًا حتى يتهرأ، ودُهّن به الملفوج: نفعه. وكذلك ينفع من الارتعاش أيضًا».^{١٥}

وقال: «إذا أكل دماغ الأرنب، نفع من الارتعاش الكائن عن مرض».^{٨٨} ب

٦ من [٥٢١-١٨٣٢٠] → أحجار ١٠٦-٤٢ [٨ مرق] ≡ ٥ [٢٢-٢١٣٢٠] → «ذكر الدجاج والديك» مفردة^٦
١٧٨^٧ [٢٣ ≡] «Περὶ ἀλεκτοριδῶν» XII Γ (١٨-١٥٣٦١) [١١ حجر] ≡ ٥ [٢٦-٢٤٣٢٠] [١٢ وقال]
→ فردوس ٤٤٠-٥: ⇒ «ضفادع» حشائش ٣٢^٨ [٧-١ ≡] «βάρραχοι» I Δ (١٨-١٦١٣٠) [١٤ وقال] ≡
٢٨-٢٢٣٢٠ [٢٤٦ →] (٢٤٦) ≡ [١٤-١١٢٦٦] (→ «ألوكسندرس»)، هارونية ٢٢٧-٣: ؟ «حيوان» [53:45] [١٦ وقال] ≡
هارونية ٢٢٧-٥: → «أرنب البر» حشائش ٦٣^٩ [١١-١٠ ≡] «χερσαίος λαγῶς» I Δ (١٨-١٧١٢٧).

٦ وباءة [٥٢١-١٨٣٢٠]، «الطاعون» أحجار [١٤ مرارًا] «ب' פעמים» ٥ [١٤ حتى يتهرأ] «עד שימוח הראש» د.

٨ إسفيدباجا [إسفيدباج] «إسفيدباج» د [١٠ في الفالج والارتعاش] د، «في الارتعاش» د [١١ الإسكندر] «إسكندر» د [١١ المغنيطس] «المغنيطس» ب [١٢ التشنج] «الشنج» ب.

وقال **الطبري**: «إذا علقت (قلب) الأفعى على من به الفالج، نفعه. وكذلك يفعل قلب كل حية إذا علقت».

الفصل الثالث

في السحج وتورم الجسد

قال: «إذا علقت عظم فخذ النسر بعد أن يُعزى من لحمه على من به سحج نافذه، أذهب الوجع منه ويرى بإذن الله عز وجل».

وقال **الرائزي**: «إذا طبخ رأس الحفّاش بقدر ما يغمره من الزيت مرارًا حتى يتبرأ، ودُهّن به: نفع من ورم الجسد».

الفصل الرابع

في الرض والهتك والسقطة ونفث الدم

قال **جالينوس**: «إذا أخذ جلد كبش ساعة سلخه ووضعه على موضع الضرب ثم يجد ألمه، لم يجد ألمه، حتى أنه يرى موضع الضرب في يوم وليلة».

وقال: «الموميا: إذا شرب، نفع من الهتك العارض في الأعضاء الظاهرة والباطنة. وإذا شرب منه بتبيد قابض، نفع من السقطة الشديدة ومن نفث الدم».

د ٥٧ ط

١ إذا [٥٣٢٠-٣٢١، هارونية ٢٢٧-٧؛ ⊕ فردوس ٤٤١-٩ || ٥ إذا] ≡ ٥٣٢١-٣٢١ هـ (→ טאראפאטס)؛
 ≡ خواص ١٣٨٤-١٤ (→ أطهورسفسس) [٧ إذا] ≡ ٥٣٢١-٧، هارونية ٢٢٧-٣؛ † VIII.II.3 || ١١ إذا] ≡
 ١١-٣٢١؛ → «ذكر جلد الشاة» مفردة^F ١٧٤-١٦١ (≡ «Περὶ δέρματος προβάτου» XII Γ ٤٢-١١٣) ||
 ١٣ وقال [٥٣٢١-١٣؛ Γ. †

١ (قلب) الأفعى [«לב האפעה» ٥، «قلبه» ف || ١ الفالج [«الربع» ف || ٥ نافذه] «في فخذ» خ.

٥ يُعزى [يُعزى] پ، «يعزا» د || ٥ ويرى [«ويرا» د || ٦ عز وجل] - پ || ١١ سلخه [«يسلخ» د || ١١ ووضع
 «وبوضع» پ || ١١ لم يجد ألمه] - د || ١٢ يرى [«يرى» پ، «يرأ» د || ١٣ شرب] «شربت» پ || ١٣ نفع [«نفعت»
 پ || ١٣ شرب] «سربت» پ.

الفصل الخامس

فيما يلزق جراحات العصب واللحم والعظم

ويمنعها من الورم

- ٥ وقال: «بصل النرجس: إذا تَضَمَدَ به، أُلزق الجراحات العصبية. || وكذلك أصل الكثيراء».
- ٥ وقال: «الخلزون الصغير: إذا سُحِقَ مع مرّ وكندر وتَضَمَدَ به، أُلزق جراحات العصب».
- ٥ وقال: «إذا أخذ الحيوان المستمي «شحمة الأرض» ودُقَّ دَقًّا نَعْمًا ووُضِعَ على قطع العصب، أُلزقها — وينبغي أن يُجَلَّ بعد ثلاثة أيام».
- ٥ وقال **الطبري**: «إذا وُضِعَ الجبن الطري على الجراحات والقروح، منعها أن تَرم».
- ٥ وقال: «السمن العتيق يمنع ورم الجراحات».

الفصل السادس

فيما يمنع نرف الدم من الجراح وغيرها

- ١٥ قال **ديسقوريدس**: «الحجر العريّ يُشبهه العاج النقي: إذا عُلق أو دُرَّ على جرحه تنزف الدم، أو تَضَمَدَ به، قطع الدم».
- ١٥ وقال **أرسطاطاليس**: «من تختم بجرج العقيق (الذي يُشبهه لونه لون ماء غسالة اللحم) أو تقلده، قطع عنه نرف الدم من أي عضو كان من البدن — وبخاصة دم الطمث».

٤ [بصل النرجس] → «نرجس» حشائش ١٠٠^ط ١٧ ≡ «vάρκισσος» II Δ (٨-٧٣٠٣) || ٥ [وقال] ≡ ٥ ٣٢١-١٩٠٢؛
 ⇒ «قوخلياس» حشائش ٣١^ط ٢٠-١٩ ⇒ «κοχλίαις» I Δ (٧-٥١٢٥) || ٦ [إذا] ≡ ٥ ٣٢١-١٥١٧ → «(١٧)»؛
 → «خراطين» حشائش [«شحمة الأرض» Δ^T ٣٤^ط ٢٠-١٩] ≡ «γῆς ἔντερα» I Δ (١٣-١٢١٤٢) || ٨ [إذا] ≡ ٥
 ٣٢١-١٧١٩؛ فردوس ٤٤٤-٣ ≡ ٩ [وقال] ≡ ٥ ٣٢١-٢٠٢١ → «(١٦٣٥٨٦)»؛ فردوس ٤٤٤-١٥١٦ || ١٢ [الحجر]
 ≡ ٥ ٣٢١-٢٤٢٤؛ ⇒ «الحجر العريّ» حشائش ١٢٩^ط ٣-٢ ≡ «Αραβικός λίθος» III Δ (٦-٤٩٧) || ١٤ [من] ≡
 ٥ ٣٢١-٢٤٢٧؛ ⇒ أحجار^T ١١٤-١٤١١٥-٢١١٥ (VI.VII.1 1).

٤ الجراحات العصبية [«الجراحات العارضة للأعصاب» Δ || ٦ قطع العصب] «الأعصاب المنقطعة» Δ || ٩ السمن [«
 החמאה» ٥، «وسمن البقر» ف || ٩ يمنع ورم] «תמנל לאמחי» ٥، «ينفع من» ف || ١٢ عُلق أو دُرَّ [«سُحِقَ ودُرَّ»
 Δ || ١٣-١٢ أو ... به] - ٥.

٢ **جراحات** [«جراحات» د || ٤ الجراحات العصبية] «الجراحات العصبية» پ، «جراحات العصب» د || ٤ وكذلك [«وكذا» د || ٤ الكثيراء] «الكبر اظنه» پ* || ٥ جراحات [«جراحات» پ، «جراحات» د || ٨ الجراحات] «الجراحات»
 د || ٩ الجراحات [«الجراحات» د || ١٢ **ديسقوريدس**] «ديسقوريدس» د.

الفصل السابع فيما يخرج فضول العصب وغيرها من البدن بالعرق

قال **الطبري**: «إذا غُلِّقت أختاء البقر بالزيت ووضعت حارًا على البدن وترك ذلك حتى يجف، | وُرُفِع ذلك ووضعت غيره، ففعل ذلك مرارًا: أخرج فضول البدن والعصب بالعرق» ٥٨٥
پ ٨٩٦

الفصل الثامن في الطواعين والأورام والدمامل والداحس

قال **جالينوس**: «الطواعين هي أورامٌ تعرض في اللحم الرخو، كالإبط^١ والأرنبة وما أشبهها» ٥٠
وفي **كتب الحيوان** أنه، إن غُلِّي سمن البقر وضُبت على الطواعين، نفع منها ١٠
وقال: «إذا أخذ قضيبي آس طري وعُمل منه خاتمٌ وتحمم به صاحبُ ورم الأرنبة^٢ في خنصره، سكتها بإذن الله» ٥٠
وقال **الإسكندر**: «إذا شُدَّ أحدُ عَضَصَةٍ في رُكبة، نفع ذلك من خروج الدمامل» ٥٠

٣ إذا [٥٣٢٢٢ - ٤١٣٢٢] ٥ ٢٧٤ - ٧٥؛ ٥ → فردوس ٤٢٣ - ٣١٩ [٩ أنه] ٥ ٣٢٢ - ٨١٣ [٥ (ب"ب" ح)]: ؟ → فردوس ٤٤٤ [١٠ وقال] ٥ ٣٢٢ - ١١٣ [٥ (ألتابري)]: ٥ خواص ٧٩^٥ - ١٦٠ [٥ (الطبري)]: ٥ فردوس ٢٨٩ - ٣١٢ [٥ إذا] ٥ خواص ٨٤^٥ - ١٩٨٥ [٥ (الإسكندر)]: ٥ Therap.

٢ **فضول... بالعرق** [«موتري העצבים והזלתו מן הגוף בזיעה» ٥] ٥ ٣ غُلِّقت [«يبوشل» ٥، «يبشل» ٥، «طبخ» ٥] ٥ ٤ **فضول... بالعرق** [«موتري הגוף והעצבים בזיעה» ٥. «موتري הגוף בזיעה» ٥، «النصل والنصب» ٥، «النصل والنصب من البدن» ٥] ٥ ٩ غُلِّي [«تלה» ٥] ٥ ١٠ الأرنبة [«האורביים» ٥] ٥ ١٢ أحد [«على من يكثر خروج الدمامل به» ٥] ٥ ١٢ رُكبة [«تكنه» ٥] ٥.

٣ وُرُفِع [«ورج» ٥] ٥ («ويوسر» ٥، «واז يوسر» ٥، «رفع» ٥، «رفع» ٥، «رفع» ٥) ٥ ٤ فُعِّل [«يفعل» ٥] ٥ ٨ حي [«هو» ٥] ٥ ٨ والأرنبة [«والارنية» ٥] ٥، «والارنية» ٥] ٥ (> «والأرنبة») ٥ ١٢ أحد [«احدا» ٥] ٥ ١٢ رُكبة [«ته» ٥] ٥.

الفصل التاسع في الجذام والبرص والتآليل

قال **ديسقوريدس**: «إذا أكلت الأفعاء مطبوخةً أو مشويةً بعد قطع رأسها وذبها على قدر أربع أصابع، نفعت من الجذام وحفظت الصحة».

- وقال: «إنّ مما يقلع التآليل المسارية والتآليل النملية: أن تؤخذ من الحمص الأسود لكلّ ثؤليل حمصةً توضع على ثآلول واحد في ابتداء الشهر. ثم تؤخذ الحمصة التي وضعت على التآليل فتصرّها في خرقة ويُرَى بها إلى خلف».

وقال **الطبري**: «إذا غُلِقَ || على الذي يُشرف على الجذام عينُ الهدهد، لم يُصَبَّهُ جذامٌ».

وقال: «إذا طُليت التآليل بأخشاء البقر، تقلعت».

- وقال: «إذا خلط زبل الحمام بدقيق الشعير وضرب بالماء مع يسيرٍ من قطران حتى يصير كالمرهم ووضع على البرص ثلاثة أيام وجدد غيره أبداً، أبرأه».

وقال: «إذا أحرق حافر حمار وخلط بلبن وطلي به البرص، قلعه».

وإذا أخذ زبل العصافير وديف بریق إنسانٍ وطلي به على التآليل، قلعها».

٣ إذا [→ «أفعى» حشائش ٣١-١٥ ١٨-١٥ (≡ «ἐχιδνης σάρξ» I Δ ١٢٦-١٢٧-٢) || وقال ٥ [٣٢٢-١٦-١٩ (→ «دياسكوريدس»): «الحمص البستاني» حشائش ٤٣-٢-٢ (≡ «ἐρέβινθος ὁ ἡμέρος» I Δ ١٧٨-٩) || ٨ إذا [≡ ٣٢٢-٢١-٢١ ≡ خواصر ٨١-١ (→ الطبري): ≡ فردوس ٤٣٧-١٢-١٣ || ٩ وقال [≡ ١١٢٧٦ (→ «دياسكوريدس»): ؟ → فردوس ٥٩٤-٦ || ١٠ وقال [≡ ٣٢٢-٢١-٢٣ → فردوس ٤٣٤-٤-١٢ إذا [≡ هارونية ٢٢٥: → فردوس ٤٢٣-٢٣-٢٤ || ١٣ إذا [≡ ٣٢٢-٢٦-٢٧، هارونية ٢٢٥-١٠-١١؛ → فردوس ٤٣٥-٩-٨.

٥ التآليل ... النملية [«الهيبلوت المسمرية والهيبلوت النملية» ٥. «التآليل التي يقال لها أقروخردونس [«ἀκροχορδόνاس»] والتي يقال لها مرميكيا [«μυρμηκίας»] Δ ٨ الذي ... الجذام [«المسفاتة من الضرعة» ٥، «للمشرف على الجذام» خ، «ولن يُتخوف الجذام» ف ٨ عين [«لاي» ٥، «عين» خ، «أعق» ف ١٠ يسير [«ملاط» ٥، «شيء» ف ج ١٠-١١ ووضع على البرص [«ويوضع على البرص في خرقة كتان ويترك» ف ج ١١ أبداً، أبرأه [«نفع منه ويفعل به ذلك حتى يبرأ» ج، «يفعل به ذلك حتى يُبرئه» ف ١٢ البرص [«البياض والبرص» ف ١٣ بریق [«بلعاب» ف.

٢ والتآليل [- پ ٣ **ديسقوريدس** [«ديسقوريدوس» د ٥ المسارية [«المستارية» د ٥ تؤخذ [«وحد» پ، «يوخد» د ٧ ويُرَى [«ورمى» پ، «وترمى» د ٨ يُشرف [«يشرف» د ١١ غيره [ف ج، «غيره» د، «عليه» پ ١٢ حمار [«أل حمار» ١٣ على ... قلعها [«على الثلول قلعه» پ (التآليل، قلعها» ف).

وقال: «إذا دُقَّ سُلخ الحَيْتة وُعْجَن بثلاث تمرات وأكل ذلك مَنْ به التآليل، سقطت وزهبت»^٥.
وقال **المرزباني**: «إن نظر إنسان حين ينقض الكوكب ومسح بيده على التآليل، ذهب البتة»^٥.

الفصل العاشر

فيما يذهب بالرائحة الذفرة من الجسد

قال **ديسقوريدس**: «النبات المسمى «† سقلوس †» (وهو الخرشف): خاصته، إذا سُلِق بشراب وشُرب، أذهب برائحة الإبطين ورائحة الجسد كله. لأنه يُحدر بولاً كثيراً منتناً — وهو حارٌّ في الدرجة الثانية»^٥.

الفصل الحادي عشر

في تحذم العضو عند قطعه أو كتيه

قال: «عصارة أصل البيروح: إذا شُربت، أهدرت العضو الذي يُراد قطعه أو كتيه وأبطلت حسه»^٥.
وقال **أمرسطاطليس**: «من كانت فيه علةٌ تحتاج إلى الكي، ثم كوي بالذهب: لم ينتفض الموضع ولم يمد»^٥.

١ وقال [هارونية ١٢٥-١١٢؛ فردوس؛ حيوان^٤ [79:3] || ٢ إن] ≡ ٥ ٣٢٢-٢٣٢٥؛ خواص^٣ ٨٣-٧؛ فردوس ٥٢٥-٢٤٥٢٦ || ٥ النبات] ≡ ٥ ٣٢٣-٥١٠، هارونية ١٥٢٥-١٦؛ «سقلولوس» حشائش ٥٨-٧٨-٧ (≡ «σκόλυμος» II ٥٢١-٧) + «ذكر الخرشف» مفردة^٢ ١٣٣-٢٤٢١ (≡ «Περὶ σκόλυμου ῥίζης» XII Γ) (١٦٠-٩١٢٥) وهو... الثانية] «وهو حار ويبرد في البرد» [١٠ قال] ≡ ٥ ٣٢٢-٧٨-٦ → دياسكوري^١ ≡ ٣ ٢٧٨-٩ (→ «جلينوس»؛ «بيروح» حشائش ٩٠-٧٩ + ٩١؛ ≡ «μυδραγόρας» II Δ ٢٣٥-٦٢٣٧ + ٩١-٨٢٣٧) || ١١ من] ≡ ٥ ٣٢٣ (→ «ارست»؛ ≡ «أجارت» ١٥٧-٢٠١).

٢ الكوكب] «الكوكب» س، «الكواكب» ف || ٥ سقلوس] «سوكولوري» س، «كردون» ن || ٥ الخرشف] «خرشف» س
٦ رائحة الإبطين] - ن || ١٠ شُربت] + «بيي» س ن || ١١-١٢ ولم يمد] - س.

١ إذا دُقَّ] «ادو» د، «ادا» د^٤ || ١ بثلاث] «بثلاث» د || ١ وأكل ذلك] «وأكله» د || ١ التآليل] «التالول» پ ||
١ سقطت] «سقطت» د || ٢ ذهب] «ادهبت» پ || ٤ الذفرة] «الزفرة» پ || ٥ ديسقوريدس] «ديسقوريدوس» د
٦ أذهب] «ادهبت» پ || ٦ كته] - پ || ٩ تحذر] «تحذر» پ د || ١٠ شُربت] «شرب» د || ١٠ قطعه] «قطعيه»
پ || ١١-١٢ ولم يمد] - د.

الفصل الثاني عشر

فيما يخرج الشوكة ونصول السهام من الجسد

قال **ديسقوريدس**: «الخلزون الصغير: إذا سُحِقَ نَيْبًا وتُضَمَّدَ به، جذب النبل [◌] من داخل البدن [◌] واللحم [◌]». ٥

وقال **الطبري**: «إنفحة الأرنب: إذا خُلِطت بخرطبي وزيت، أخرجت النصول والشوك من البدن» ٥

الفصل الثالث عشر

فيما يقلع الكلف والبرش والقوابي والآثار السود [◌] من البدن [◌]

قال **ديسقوريدس**: «إذا خُلِط الخردل بالخلّ وأُطِخ على القوابي الوحشة، نفع منها».

وقال: «لحم الجزئي: إذا قُرِدَ ودُقَّ وتُضَمَّدَ به، أخرج النبل من البدن» ٥

وقال **الطبري**: «إذا شُقَّت رئة الجملة ووُضعت على الكلف والآثار السود في الوجه، قلعتها» ١٠

وقال **الرائزي**: «إذا أُحرق سلخ الحية في كوزٍ وعُجِنَ رمادها بزيت وطُلي على البرش، غيّر لونه» ٥

٣ الخلزون] ≡ ٥ ١٥-١٣٣٢٣؛ ⇒ «القوخلياس» حشائش ٢١-٢٠.٣١ ≡ «κωχλίαν» I Δ (١٢٥) ٥ وقال [٥ ١٥-١٣٣٢٣؛ → فردوس ١٣-١٢٤٣١ || ٨ إذا] ≡ ٥ ١٩-١٨٣٢٣؛ → «الخلد» حشائش ٤٩-٤٣ (٥) ≡ «στυλουργος» I Δ (٢٢١-٥) ٩ وقال [٥ ٢٨٠-٥؛ ⇒ «الجزئي» حشائش ٣٢-١١-١٠ ≡ «στυλουργος» I Δ (١٣١-٥)؛ ! ١٠ إذا] ≡ ٥ ٢٧-٢٦٣٢٣؛ → فردوس ٢٥-٢٤٤٢٤ || ١١ إذا] ≡ ٥ ٢٠-١٩٣٢٣ ٥ خواص ١٢٨٢-١٣٢٨٠.

٣-٤ من ... واللحم [◌] «مفنيمي البسر» ٥ || ٥ إنفحة] «كبر» ٥ || ٥ النصول... البدن] «هكوي» ٥ || ٥ والشوك [والقصب» ف || ٨ القوابي الوحشة] «هكوي» ٥ || ١١ في كوزٍ] - ٥.

٢ الشوكة] «الشوك» د || ٢ ونصول] «وفصول» د || ٣ ديسقوريدس] «ديسقوريدوس» د || ٥ النصول] «الفصول» د || ٧ والبرش] «والبرص» پ || ٧ والقوابي] «القوى» پ || ٨ بالخل] «لمح بالخل» د || ٩ الجزئي] «الجددي» پ د || ٩ قُرِدَ ودُقَّ] «قرده ودقته» پ.

الفصل الرابع عشر

فيما يبطل نبات الشعر من الجسد

ب ٥٩١

قال **الطبري**: «إن طُبِخَتْ أفعى حَيْثُ بَرِزَتْ حَتَّى يَهْرَأَ، وَدُهْنٌ بِالزَّيْتِ مَوْضِعَ الْجَسَدِ: لَمْ يَنْبِتْ فِيهِ شَعْرٌ».

وقال: «إِذَا أُخِذَ بِيضُ النَّمْلِ وَسُحِقَ بِالْمَاءِ وَطُلِيَ بِهِ الْبَدَنُ، أَبْطَلَ نَبَاتَ الشَّعْرِ» .

وقال **الرازي**: «إِذَا دُحِجَ الْحَقَّاشُ وَجُفِّفَ وَسُحِقَ بَزَيْتِ وَدُهْنِ بِهِ مَوْضِعَ الشَّعْرِ، لَمْ يَنْبِتْ فِيهِ شَعْرٌ» .

٣ إن [٥٣٢٤٥-٤؛ → فردوس ٧-٥٤٤١ || ٥ وقال [٥٣٢٤٥-٥؛ → فردوس ١٤٤٤٢ || ٦ إذا] المغني ٧-٣٠٠؛
 ٣ بزيت [بقدر رطلين من زيت] ف || ٣ ودُهْن... موضع الجسد [ويطلى من ألحمها على بعض الجسد أو من الزيت]
 ف || ٥ أبطل نبات [فلا ينبت] ف.

٢ نبات الشعر من الجسد [شعر الجسد، د، «نبات» د* ٣ موضع الجسد] - د.

الفصل الثاني في حمى الربيع

قال **ديسقوريدوس**: «من شرب أصول لسان الحمل أربعة أصول بأربع قوائمات، نفع من حمى الربيع». وقال «إذا أخذ الدود المتولد في شوك الحر(شف) وضّر في جلدٍ وغلّق في الرقبة أو في العضد، أبرأ حمى الربيع».

وقال: «العنكبوت الذي نسيجه كثيفٌ: إذا شدّ في جلدٍ وغلّق على العضد، نفع من حمى الربيع».

وقال إنّ في جناحي الديك عظمين مثقوبين: إن غلّق الأيسر على من به حمى الربيع، أبرأه.

وقال **الإسكندر**: «إن غلّق في عنق من به حمى الربيع شعرة من لحية التيس، إن فاتّه يبرأ».

وقال إنّ ممّا جرّبه الناس أنّه، إن غلّق من لحم التيس في عنق من به حمى الربيع، نفعه.

وقال: «إذا جُعلت الذرايح في خرقه حمراء وغلّقت على من به الربيع، أبرأته البتّة منها».

وقال: «إن لبست امرأة نساء ثياب المحموم، ثم لبسها الرجل من بعد ذلك من غير أن تُغسل: ذهبت عنه حمى الربيع».

وقال **الرامزي**: «إن أخذ ضفدعٌ وثرك حتى يجفّ وأخذت عظامه: فإنّ عظمه الأكبر، إن وضع على رأس قدرٍ تغلي، سكن غليانها. وإن غلّق على من به حمى الربيع، قلّعها».

٣ من [٥ ٣٢٤ ١٩-١٧، المغني ٣٢٠ ١٧-١٦؛ «لسان الحمل» حشائش ٤٦ ٣-٢ ظ ٣-٢ Δ «ἀρνόγλωσσον» I ١٢٠٠-١٢٠١ (٤ وقال) «دبسا قوس» حشائش ٥٨ ١٨-١٩ Δ «δίσπακος» I ١٩-١٠ (٦ وقال) «٦ وقال» ٥ ٣٢٤ ٢٢-٢٠ → «العنكبوت» حشائش ٣٤ ١٠-٩ ظ ٣-٤ Δ «ἀράχνη τὸ ζῷον» I ١٤١ ١١-٩ (٧ وقال) «٧ وقال» هارونية ٢٢١-٢٢٣، المغني ٣٢١ ١٦-١٩؛ Δ؛ → خواص ٨١ ٢-٢ هـ (→ في كتاب يُنسب إلى هرمس الحكيم) «٨ إن» ٥ ٣٢٤ ٢٣-٢٢، المغني ٣٢١ ١٩-٢٠؛ → خواص ٨٦ ١٩-٨٧ (→ الإسكندر) I ٤٣٧ ١٣-١٥ «٩ وقال» ٣٢٥ ٢-١ (→ **باز ماسويه**)، المغني ٣٢١ ٢٢-٢٣ ظ ٣٢١ ١٠-٩؛ → خواص ٨٦ ١٧-١٩ (→ ابن ماسويه، كتاب الحميات)؛ → حميات ٧٧ ١٢-١٠ «١٠ وقال» ٣٢٤ ٢٣-٢٤ (→ **ألسكندر**)؛ → I ٤٣٧ ٨-٥ «١١ وقال» ٣٢٥ ٥-٤ (→ **ألسكندر**)؛ → خواص ٣٨ ٨٦-٨٧ (→ ابن ماسويه، كتاب الحيوان)؛ → حميات ٧٧ ١٢-١٠؛ → I ٤٣٧ ٢٤-١٩ «١١ إن» المغني ٣٢١ ٣-٥؛ → خواص ٨٨ ١١-١٣ (→ **أطهورسفس**).

٣ الحمل [«الشور» ٥ «٦ كثيف» «لبنة ناهوت» ٥ «١٠ على... الربيع» «في عنق الصبي الذي به حمى الربيع» خ ١٠ منها] + «بسنغله شيش بو» ٥، «بخاصية فيه» خ «١ ضفدع» «الضفدع البرّي» خ.

٣ **ديسقوريدوس** [«ديسقوريدوس» د «٣ من» «ان من» د «٣ لسان» د «٣ قوائمات» [«قوائمات» د (> * «قوائمات» (≡ «αὐθός») «٤ شوك الحر(شف)» [«شوكالجز» ب «٤ أبرأ» [«إبري» ب «٦ نسيجه» [«نسيجه» ب، «نسيجه» د «٦ شد» [«شدت» د «٧ جناحي» [«أحد حى» د «٨ وقال» [«قال» د «١١ من» د «٢ تغلي» [«تغلي» ب، «يغلي» د.

الفصل الثالث في حمى الورد

- قال **ديسقوريدس**: «إن شرب من بزر القثاء بلسان الحمل صاحب الورد قبل ورودها، نفع منها»^٣.
- وقال **سقطور**: «إن جعل العنكبوت حيًّا في أنبوبة قصبية وعلّق على العضد، نفع من الحمى البلغمية». وفي نسخة أخرى: «إن جعل العنكبوت في خرقة سوداء وعلّق على العضد، نفع من الحمى البلغمية»^٤.
- وقال: «إن شرب العنكبوت مع شراب قبل دور حمى الورد البلغمية بساعة، ذهب بها البتّة — وهو مجرّب تعلمته من **هرمس**»^٥.
- وقال **الطبري**: «إن العنكبوت الذي يصيد الذباب: إذا شدّ في خرقة وعلّق على الصدغ الأيسر من المحموم حمى الورد، أبرأه — وهو مجرّب»^٦.

٣ إن [٥] ≡ ١٢-١١٣٢٥؛ Δ [٤] إن [٥] ≡ ١٤-١٢٣٢٥ (→ ٦٥٥٥)، المعنى ١٤-١٣٣١٩ (→ أطهورسفس)؛ → خواص ٣-٨٥ (→ أطهورسفس) ≡ LX ٨-٦٧٠؛ ≡ فردوس ١٦-١٥٤٤٢ [٦] وقال [٦] ≡ المعنى ١٣-٣١٩؛ → خواص ٧-٦٨٥ (→ أطهورسفس)؛ ≈ «وذكر أنّ الذي جرّبه» فردوس ١٨-١٦٤٤٢ [٨] إن [٥] ≡ ١٨-١٦٣٢٥ (→ ٥٦١٦)، المعنى ١٣-٣١٩ (→ الطبري)؛ ≡ فردوس ٢٠-١٨٤٤٢؛ حثيات ١٥-١٢٧٧ [٧] حشائش ٩-٧٣٤ (Δ ≡ I ١٤١-٧).

٤ حيًّا] - ف [٤ أنبوبة قصبية] «بكللي دس» ٥، «canna» LX [٤ العضد] «هنا» ٥ [٤ الحمى البلغمية] «حمى مقباروس البلغمية» خ، «حمى اليوم (وهي حمى البلغم)» ف [٤-٥ وفي نسخة أخرى...]- ف [٦ شراب] «شراب صرف» خف [٦ دور... البلغمية] «حمى مقباروس» خ [٦ وهو...]- ف [٧ هرمس] «هرمس الطيب» خ.

٣ **ديسقوريدس**] «دسقوريدوس» د [٣ القثاء] «القثاء» د [٤ **سقطور**] «سقطور» د [٤ أنبوبة] «أنبوب» د [٤ قصبية] «قصبه» د، «فصب» پ [٦ حمى الورد] «الحمى الورد» پ [٧ **هرمس**] «هرمن» پ، «هرمير» د.

د ٦٠٥ ط

الفصل الرابع في أصناف الحميات

قال **ديسقوريدس**: «إذا رُضَّ الخردل وشُرب، نفع من الحمى الكائنة بدوار» ٥.

وقال **أطهورسفس**: «إن أخذ الثراد من أذن الكلب اليسرى | وعلّق على المحموم، نفع من جميع الحميات الدائرة» ٥.

وقال **هرمس**: «إن في طرفي جناحي الديك عظمين مثقوبين: إن علّق الأيمن على من به حمى دائمة، أبرأه» ٥.

وقال **الطبري**: «إن علّق رجل العنكبوت في عنق من يحمّ بالليل أبرأه» ٥.

تم الكتاب الكامل
بحمد الله وعونه

١٠

٣ إذا [≡ اكتفاء د المغني ٣٢٤ ط ٥ ≡ ٣٢٥-٢٣٤؛ → «الخردل» حشائش ٤٩ ط ٤] «σίνηπι ή νάπτου» I Δ
٢٢١ (٦٠٥) [≡ إن ٤] ≡ المغني ٣٢٤ ط ٤؛ → خواص ر ٨٣-١٤ (→ أطهورسفس) [≡ إن ٦] ≡ ٣٢٥-٢٤٦، المغني
٣٢٤ ط ٧-٨؛ → خواص ر ٨١-٢ (→ في كتاب يُنسب إلى هرمس الحكيم)؛ [≡ إن ٨] المغني ٣٢٤ ط ١١-١٤؛ → خواص ر
١١٠-١٢ (→ الطبري)؛ ⇒ فردوس ٢٨٦-١٩٠.

٤ المحموم [صاحب الحمى] خ ٦ مثقوبين + «وفي نسخة أخرى مقوسين» خ ٦ دائمة [«אבכה» ٥، «الدائمة» خ ٨
رجل العنكبوت] + «اليسرى» ف.خ.

٣ **ديسقوريدس** [«ديسقوريدوس» د ٣ رُضَّ] «ارض» د ٤ **أطهورسفس** [«سهطورسفس» پد ٤ اليسرى]
«اليسرا» د ٦ دائمة [«دايرة» پ ٩-١٠ تم ... وعونه] «تم بحمد الله وعونه ونصره وتأييده نارخ المسحة في العشر
الوسط من ربع الاخر من عام سبعم وخمس مانه وهذا الكتاب المبارك في العشر الوسط من سهر حمدي الاخره من
عام —؟ و —؟» د.

- ٩٢^ط **في كتب الفلاحة:** «يؤخذ فأس من نحاس ويُقطع به شيء من وغل الأرض: لم يُعد نباته أبداً». وقال: «إن أخذ قطعة من العاج (الناب) تكون نقيته، فربطت بحيط في خرقه سوداء وغلقت في أعناق البقر، منع الوباء. والأجود أن تُثقب قرون البقر ويُطرح فيها من العاج — فإنه يمنعها من الوباء». وقيل: «يُتخذ إناء من شمع ودلي في ماء البحر، ودخله ماء البحر: عذب وطاب».
- ٥ وقال **الطبري** إن في طرفي جناحي الديك عظمين مثقوبين: إذا تقلدهما المسافر، دُفعت عنه آفة التعب. وهذا العظم يجعله عندنا بأرض فارس الناس في مناطقهم ليُدفع عنهم التعب. وقال: «إذا استقبلت امرأة حائض على ظهرها مكشوفة، ووجهها إلى السحاب الذي فيه البرد: لم يقع البرد في ذلك الموضع الذي هي فيه» — وهذا صحيح.
- ٩٣^ط وقال: «إن أخذت سلخفة || آجامية ووضعت على قفاها مقلوبة على اليد، ويُطاف بها حول كرم، ثم وُضعت على ظهرها على الأرض وهي حية، وخُفر حولها حتى لا تقدر أن تنقلب ما لا تُدرك يداها ١٠ ورجلاها من الأرض شيئاً: لم يقع البرد في ذلك الموضع البتة».

١ يؤخذ [إن أخذ] خء، «إن اتخذ» خء || ١ وغل [دغل] خء، «على» خء || ٢ أخذ] - خء || ٢ العاج (الناب) [ناب الفيل] خء || ٢ تكون نقيته] - خء || ٢-٣ أعناق البقر [البقر] خء || ٣ تُثقب [تشق] خء || ٣ فإنه يمنعها من الوباء] - خء || ٤ ودخله... وطاب [دخله الماء عذب] خء || ٧ استقبلت [استلقت] ف || ٧ مكشوفة [عريانة] ف || ٧ ووجهها إلى [بجذا] ف || ٧-٨ لم... فيه [لم تخف البرد] ف || ٩ سلخفة [سلخفة] Σ.

١ وغل [وعل] پ || ٧ استقبلت [استقبلت] پ.

وقال: «إن جعلت قلب هدهدٍ على امرأة وهي نائمة، أخبرت في نومها بكل ما صنعت».
 وقال: «إن بُخِّر البيت بلحم هدهد، أبطل التَّسْحَر عن المسحور فيه».
 قال: «وإن أخذت مفاتيح أبواب كثيرة فشدت وعُلِّقت على موضع عالٍ، صرفت البَرَد عن تلك القرية».

١ وقال [خواص ٢٤٣١٨-٤٣١٩؛ ؟] → «لسان الضفدع» فردوس ٤٤٠-١٨١٩ || ٢ وقال [خواص ١٣١٩؛ →
 فردوس ٤٣٦-٤٣٧ || ٣ قال [خواص ٨٠ طه → (بولونيوس في الفلاحة؟)؛ خواص ١٧-٢] → صاحب
 الفلاحة الرومية).

٢ بُخِّر [تدخن] ف || ٢ أبطل... فيه] «بطل ما كان فيها من السحر» ف.

١ بكل ما [بكلم] پ.

پ ۹۳ بسم الله الرحمن الرحيم

نحن ذاکرون فی هذه المقالة
من المعاجین والأشربة والأدوية المركبة وغيرها
ما فيه كفاية من صناعة الطبّ ويستغنى به عن سؤله

ابتداء المقالة

صفة إطريرفل على رأي جالينوس

1.1

تصلح للملوك وهو من الأدوية العظيمة النفع

يؤخذ من لحاء الإهليلجات الثلاث، وبليلج وأملج منقيان: من كل واحد عشرة دراهم. يُدق ذلك ويُخل ويُلْت بدهن لوز حلو.

ثم يؤخذ زنجبيل ومصطكى ودارصيني وسُعد وقرنفل: من كل واحد ستة دراهم.

ب^{٩٣} خولنجان وبزر | رازياخ عريض وأيسون وبزر كرفس وناخحة وسنبل هندي وأسارون وزعفران: من كل واحد أربعة دراهم.

قسط حلو وفلفل وشيطرح هندي وقشور سليخة: من كل واحد ثلاثة دراهم.

١٠ جوز بوا وسباسة وقاقلة صغيرة وعود هندي وقصب الأريفة وكبابة: من كل واحد درهمين.

تُدق الأدوية وتُنخل وتُخلط معها أوقية فانيد، ويُعجن الجميع بعسل منزوع الرغوة، ويُرفع.

الشربة منه: مثقال بماءٍ سخن على ريق النفس.

فهو عجيب، من الأدوية العظيمة: يُصلح المعدة الباردة ويُقويها، ويقطع الجشاء الحامض والتخليل والقلس،

ويُعين المعدة على الهضم، ويُشهي الطعام، ويُصفي اللون الحائل من قبل فساد المعدة وبردها ومن

البواسير الباطنة — وهو مجرب نافع .

٢ صفة] ≡ دكان ل ١٦-١٣١ = د ٣٩-٢٢+٣٩-١٢؛ ≡ تصريف I ٤٦٣-٢٧-٢٤٦٤ (→ «ألفه ابن الجزار على رأي جالينوس») → معدة ١٢٥-٢٠١٢٦. «ألفه على رأي جالينوس»: ⇒ SecMont ψΓ [= نصائح الرهبان] ٣٨٤ ٢٤-٣٩؛ (→ विफला ترجملا).

٣ تصلح] «يصلح» د || ٣ وهو... النفع] «وهو تما يصلح للأشراف لأنه من الأدوية العظيمة النفع» م || ٤ يؤخذ من «اخلاطه» د || ٤ الثلاث] ≡ د، «الثلاثة» دل، «الثلاثة الأصفر والهندي والكابلي» م، «الأصفر والهندي والكابلي» ت || ٤ منقيان] «منقى» م || ٥ حلو] - د || ٦ وسُعد] «وسعدا» د || ٦ ستة] «وزن ستة» م، «أربعة» د || ٩ وفلفل] ≡ دل، «وفلفل ودارفلفل» Σ || ٩ وقشور] «وقشر» م || ١٠ درهمين] «وزن درهمين» Σ || ١١ ويُرفع] + «بي برنية» د، «في آنية ملساء» م، «في اناء املس الداخل» ت || ١٢ مثقال] «مثقالان» ت || ١٣ يُصلح] «منافعه يصلح» د || ١٣ والتخليل] «والتخليل» د، «والتحلل» م، - ت || ١٣ والقلس] + «والرياح» دت، «والفصص والأرياح» م || ١ ويُصفي] «يُنقي» م || ٢ وهو... نافع] «وقد جزيناه» م || ٢ نافع] - د.

٤ منقيان] «مقنان» پ || ١١ ويُرفع] «وترفع» پ || ١٣ والتخليل] «والتحلل» پ.

١٣ والقلس] «القلس»: أن يبلغ الطعام إلى الحلق ملء الحلق أو دونه، ثم يرجع إلى الجوف؛ وقيل: هو التيء؛ وقيل: هو القذف بالطعام وغيره؛ وقيل: هو ما يخرج إلى الفم من الطعام والشراب» لسان VI ١٧٩ ب ٢٠-٢٣.

1.2

صفة الإطريفيل الأوسط على صنعة الحلب

يؤخذ لحاء إهليلج كابلتي وأسود، وبليلج وأمليج ومثل أزرق وأنيسون: من كل واحد أوقية.
مصطكي بيضاء ونوار بنفسج غير مستعمل: من كل واحد أربعة دراهم.
يُدق كل واحد على جدته ويُخل ويُلْت بدهن لوز || حلو طري، ثم تُعجن بمثله من عسل منزوع
الرغوة، ويُرفع.
الشربة منه: قَدْرُ الجوزة.

1.3

صفة إطريفيل إسحق بن عمران

إهليلج كابلتي وأسود، وبليلج وأمليج ودارفلل وزنجبيل: من كل واحد ثمانية دراهم.
ومن السمسم: أربعة وعشرين درهماً.
شيطرح هندي: عشرين درهماً.
تُدق الأدوية وتُخل وتُلْت بسمن بقري حسن الطعم، ثم تُعجن بعسل منزوع الرغوة، وتُرفع.
الشربة منه: مثل الجوزة.
نافع — يُطيب النفس ويُؤد السرور، ويُمتع مستعمله بسواد الشعر، ويزيد في القوة، ويمنع من الحمى،
ويهبج الجماع، ويذهب بالمتة السوداء والحام، ويمنع من أوجاع المفاصل.

١ صفة] ≡ دگان ل ٣١٧-١٢ = د ١٠-٦٤٠ || ٨ صفة] ≡ دگان ل ٣١٧-٢٠٣١ = د ٦٤٠-١٠٣١ (→ إسحق بن عمران); ≈ تصريف I ١٩٤٦٢-٢٣.

٢ الحلب] «الحلب» دل، - د ٣ يؤخذ] - د ١٠ وعشرين] «وعشرون» د ١١ وعشرين] «عشرون» د ١٢ بقري] «بقر» د ١٢ الطعم] «المطعم» د ١٣ مثل] «مفدار» د ١٤ نافع] «منافعه» د ١٤ ويمنع] «ويمنع» دل، «ويمنع» د ١٥ ويمنع] «ويمنع» د.

٢ الحلب] «الحلب» پ ١٤ ويمنع] «ويمنع» پ.

صفة إطريل كبير

1.4

يؤخذ إهليلج أسود منزوع النوى (وإن كان مكانه الكابلي، فهو أفضل) ولبليج وأمليج وشيطرح وناخنة ويزر كرفس وصعتر فارسيّ: من كلّ واحد ثلاثة دراهم.
دارصينيّ وفاحشة (وهي خُصية البحر) وفلفل وملح هنديّ: من كلّ واحد أوقية.
وَجّ: ثلاثة دراهم.
خبث الحديد: ثلاثة أواق.

يُدق ذلك ويُعجن بسمن بقرٍ وعسل نخلٍ منزوع الرغوة.

الشربة منه: مثل الجوزة بشرابٍ مزوج.
وينفع من برد المعدة والبواسير، ويُحسّن البدن. ومنافعه كثيرة جدًا، وهو حسنٌ نافع إن شاء الله.

صفة سفوف مسهل

1.51

يخرج الماء الأصفر ويذهب بالومره ويقوي الكبد

أفسنتين روميّ وتريد أبيض وسكبينج: من كلّ واحد أربعة دراهم.
بزر كرفس بستانيّ وجبليّ، ويزر رازيانج عريض، وأيسون وإيرسا: من كلّ واحد دراهمين.
سقمونيا وعيدان شُبْرُم ومصطكى وأصل الإذخر ودارصينيّ: من كلّ واحد درهم.
يُدق ويُنخل ويُقرض السكبينج صغارًا.
الشربة منه: مثقالين بماء قد طُبخ فيه أصول الإذخر ويزر رازيانج وأيسون.
فإنه نافع سريع.

١ صفة] ≡ «صفة إطريل كبير آخر» دگان ل ٢٩-٢٩٠٢٩ ط ٧ = د ٣٧-١٣-١٩؛ ≈ «إطريل كبير» تصريف I
١٠ صفة] ≡ ت I ٥٧٣-٣٠٥٧٤، زاد ٤٣٨-١٢-١٩.

٢ يؤخذ] - د ٥ وِج] «وزج» د ٧ بقر] «بقر» د ٩ وينفع] ≡ د، «منافعه» د ٩ البدن] «اللون والبدن»
د ٩ وهو حسنٌ نافع] - د ١٢ أفسنتين] «يؤخذ من الأفسنتين» زت ١٢ أبيض] + «القصي» ز ١٢ أربعة]
«خمس» زت ١٣ وجبليّ] «ويزر كرفس جبليّ» زت ١٣ دراهمين] «وزن دراهمين» ز، «وزن درهم» ر ١٤ درهم]
«وزن درهم» ز ١٥ ويُقرض] «ويقرض» ت، «ويقرض» ز ١٥ السكبينج] - ز ١ الشربة] «السفة» ز، «والسفة»
ت ١ مثقالين] «مثقالين» زت ١ أصول] «اصل» زت ٢ سريع] «سريع النجح» زت: + «وقد جزته والله الموفق
للصواب» ز.

١٣ وإيرسا: من] «وايرسامن | من» ب ١٥ ويُقرض] «ويقرض» ب ١٥ صغارًا] «صغار» ب.

٤ وفاحشة... البحر] «الفاحشة هي خصية البحر» سائم ٢٥-١٥٠ (ت) تلخيص [٧٦٥].

1.6

صفة سفوف

لمن كانت كبده باردة ومعدته خلقة واهية والأمرواح
ويَقْطُ الشهوة ويحسن اللون

مصطكى وقرنفل وقشر سليخة وأسارون وورد أحمر: من كل واحد مثقالين.
كمون كرمانى وبزر رازياخ وأنيسون وأفسنتين رومي: من كل واحد درهمين.
قاقلة صغار ودارصيني وزنجبيل يابس وفقاح الإذخر وورق تمام مجفف وحبق الریحان: من كل واحد
مثقال.

پ ٩٥

يُدق ويُخل ويُلْت بدهن لوز ويُخلط || بمثله سكر، ويُستف.

1.7

صفة سفوف خفيف المؤنة

يسهل الماء الأصفر وينفع المرطوبين
وأصحاب القولنج العارض من البلغم والرياح الغليظة

يؤخذ سكينج وعيدان شبرم وبزر كرفس: من كل واحد جزو. يُدق ويُخل.
الشربة: درهمين إلى مثقالين بماء حار.
وقد يُجعل بدل عيدان الشبرم أصل السوسن الأسانجوني، فيكون ألين وألطف.

١ صفة] ≅ I ٥٧٥-٢٢ → زاد ٤٣٨-٢٠-٤٣٩ «الفتة» ٩ صفة] ≅ «سفوف آخر مسهل» ت I ٥٧٤-١
(→ إسحق بن عمران) ≅ زاد ٤٣٩-١٢ (→ إسحق بن عمران).

٢ لمن... [«الفتة لرجل صاحب كبد باردة وبه أرواح وكانت معدته خلقة واهية، فانتفع به بإذن الله وأصلح مزاج كبدته وقوى المعدة وأيقظ الشهوة وحسن اللون، وهو مأمون الغائبة» ز، «غير مسهل نافع للكبد الباردة ولمن به أرواح ومن معدته خلقة واهية ساقط الشهوة ويحسن اللون وهو مامون» ت || ٤ مصطكى] «يؤخذ مصطكى» ز || ٤ مثقالين] «مثقالان» ز || ٥ درهمين] «درهمان» ز || ٦ صغار] «صغيرة» ز || ٦ وحبق الریحان] «وورق الحبق الریحاني» ت، «وورق الحبق الترنجاني» ز || ٨ بمثله سكر] «مثله وزن الأدوية سكر طبرزد» ز، «بمثل وزنها سكر طبرزد» ت || ٨ ويُستف] «السقة منه، مثقالان بالماء الحار» ز، «والشربة منه مثقالين على التزيق بماء حار» ت || ١١ العارض... الغليظة] «العارض من البلغم اللزج والرياح» ز، «من البلغم اللزج والرياح» ت || ١٢ سكينج] «من السكينج» ز || ١٢ وعيدان شبرم] «والشبرم» ت || ١٢ يُدق ويُخل] «ويُدق ويُخلط» ز، «ويُدق الجميع ويخلط» ت || ١٣ الشربة] «السقة منه» ز، «والسفة منه» ت || ١٣ درهمين] «درهمان» ت، «من درهمين» ز || ١ وقد يُجعل] «وقد جرتته وقد يُجعل» ز || ١ بدل... وألطف] «بدلاً من عيدان الشبرم أصل السوسن الأسانجوني، فيكون ألين له وألطف ويذهب مذهبه» ز، «فيه بدلا من الشبرم السوسن الاسانجوني ويكون الين والطف ويذهب» ت.

٣ ويَقْطُ] «وسقص» پ.

صفة سفوف

1.8

نافع مثل الذي قبله

يؤخذ عيدان شبرم وتريد أبيض قصبي[†] وسكبينج وأفسنتين رومي[†] وسنبل الطيب وإيرسا ووج: من كل واحد مثقال.
يُدق ويُخل ويُلْت بدهن لوز.
الشربة: مثقالين بماء حار^٥.

صفة سفوف بهضم الطعام

1.9

وينفع التخمّة والجشاء الحامض والنفخ
ويفتح السدد من الكبد والطحال
وينفع من الأرياح في أسافل الجوف
وهو ممّا يستعمله المشايخ

يؤخذ زنجبيل يابس: أربعة مثاقيل.

صعتر بريّ ومصطكى ولبان ذكّر وكراويا وكّون أبيض وفلفل: من كل واحد مثقالين.

بزر رازيانج وأيسون وبزر كرفس وبزر جزر وناخاه: من كل واحد مثقال.

يُدق ويُخل ويُلْت بشيء من شيرج | ويُخلط بمثل الجميع سكر^{٥٩٥}.

الشربة: كل يوم أربعة دراهم بماء حارّ أو بماء قد سُلق فيه حمص^٥.

٢ صفة [I ٥٧٤-٨] زاد ١٨-١٣٤٣٩ || ٨ صفة [I ٥٧٥-٣٠] (→ إسحق بن عمران) ≡ زاد ١٨٤٣٩-٦٤٤٠ (من تأليف إسحق بن عمران).

٣ قبله + «وقد جرّبه فحمدته» ت ٤ «وسكبينج... رومي» + «وأفسنتين رومي وسكبينج + [اصهباني ت]، من كل واحد وزن مثقلين. وبزر كرفس بستاني وبزر رازيانج وفقّاح الإذخر» ز ت ٦ «يُدق... لوز» «تُدق الأدوية وتُخل وتُلْت بدهن لوز حلو» ز، «تدق الأدوية وتُخل وليت بدهن اللوز الحلو» ت ٧ «الشربة» [السفة منه] زاد ٧ «حارّ مزوج بسكبينج عسلي نافع» ز، «حارّ مزوج بسكبينج عسلي جيّد نافع» ت ٨ «بهضم الطعام» [نافع بإذن الله للمعدة الباردة ويهضم الطعام] ز ٩ «والنفخ» + «في نواحي البطن» ز ١٠ «السدد من الكبد» [سدد الكبد] ز ١١ «وينفع من» [ويُنقي] ز ١٢ «يستعمله» [يستعمل ل] ز ١٢ «المشايخ» + «ومن كان بارد المزاج» ز ١ «زنجبيل» [من الزنجبيل] ز ١ «أربعة مثاقيل» [وزن أربعة دراهم او مثاقيل] ت ٢ «أبيض» - ت ٢ «مثقالين» [وزن مثقالين] ز ٣ «وناخاه» [ونانوه] ز ٣ «مثقال» [نصف مثقال] ت ٤ «سكر» + «مسحوق» ز ت ٥ «الشربة» [السفة منه] ز ت ٥ «أو بماء» [أو ماء العسل أو ماء] ز ٥ «قد سُلق» [سُلق] ز، «يطبخ» ت.

٤ وإيرسا [وارشا] پ.

فصل

في الإيارجات

2

2.1

صفة إيارج فيقرا

دارصينيّ وسنبل وأسارون وسليخة ومصطكاء وعود بلسان وحبّه وجوز بوا وقرنفل وفقّاح الإذخر
 وراوند صيتي وعصاره غافت وقصب الدّيرة: من كلّ واحد جزو.
 زعفران جيّد: نصف جزو. صبر سُطوريّ جيّد: مثل وزن الأدوية كلّها.
 يُدقّ ويُخل ويُرْفَع في إناء زجاج ويُستعمل.
 نافع، إن شاء الله، ويُستعمل منه بعد عجنه بعسل منزوع الرغوة. ويُشرب مُلأيلةً وعلى الغبّ درهم
 لمن يشربه غير معجون؛ ومَن شربه معجوناً، يشرب منه مثقالاً.
 ١٠ منافع: يُنقيّ الرأس، ويصفيّ البصر، وينفع من البلغم والمزّة السوداء ودويّ الأذنين — ومنافعه كثيرة.

2.2

صفة فيقرا آخر

دارصينيّ وسنبل وأسارون وسليخة ومصطكاء وعود بلسان وحبّه وجوز بوبواوا وقرنفل وفقّاح الإذخر
 وراوند صيتي وعصاره غافت وقصب الدّيرة: من كلّ واحد جزو.
 زعفران: نصف جزو. وصبر سقطوريّ: مثل الأدوية كلّها.
 يُدقّ ويُخل ويُرْفَع في إناء زجاج || بعد عجنه بعسل منزوع الرغوة. ويُشرب ثلث مرّات على الغبّ
 ١٠ درهم غير معجون.
 يُنقيّ الرأس، ويصفيّ البصر، وينفع من البلغم والمزّة السوداء ودويّ الأذنين — ومنافعه كثيرة.

٣ صفة] دگان ل ٢٨-١٦-٢٥ = د ٣٦-٣١-١٠؛ ت I ٤٠٣-٢٣-٢٢؛ هارونيتة ١٥٥-٩١٥٧؛ ≈ أقراباذين س
 ١٧٨٤-٢٨٥؛ ≈ فردوس ٤٥٨-١٩٢٢؛ ⇒ «*ἰερά πικρά*» XII Γ ٨٥٣٩-٨٥٤١، XIII ١١٢٩-١٠١٣٥ ||
 ١١ صفة] ≡ «إيارج فيقرا آخر» دگان ل ٣٣-٢٤-٢٣ = د ٤٢-١٥-٢١.

٦ جيّد] + «مغسول» دف || ٦ وزن] - د ٨ نافع... منه] - د ٨ الغبّ] «الغت» د ١٠ || ١٠ منافعه كثيرة] - د
 || ١٤ زعفران] + «جيد مغسول» د ١٥ بعد] «وتستعمل بعد» د ١٦ غير معجون] + «ومثقالان معجون» د
 ١٧ يُنقيّ] «منافعه ينفي» د ١٧ || ١٧ منافعه كثيرة] - د.

٤ ومصطكاء] «ومصطكاء» پ || ٨ مُلأيلةً] «ملأبلة» پ || ٨ الغبّ] «العت» پ || ٩ معجوناً] «معجون» پ.

فصل في المحبوب والأدوية المركبة

3

الحبّ الفارسيّ
وهو ينفع من أوجاع المفاصل والظهر والمخاضرة
وينريد في المنّي
ويخرج الرياح المسخنة للبدن

3.1

o

يؤخذ صبر سقطريّ ومصطكيّ وشحم حنظل وتريد أبيض وقتّه وإهليلج وحبّ رشاد وصعتر فارسيّ
وشونيز: من كلّ واحد جزو.

يُسحق الصبر والمصطكيّ في واحدٍ ويُغريلا؛ وتُدق سائر الأدوية وتُغريل وتُعجن جميعًا بماء الكرفس،
وتُحَبَّب.

ويُشرب منه وزن مثقال بعد العشاء[†] عند النوم[†]، ويُشرب عليه من العسل الطيب رطلان لمن كان
قويّ الطبيعة؛ ولمن كان رقيق الطبيعة، يُشرب منه نصف مثقال.
فإنّه نافع، إن شاء الله.

٤ الحبّ الفارسيّ] ≡ دكان^د ٤٣ ط ٣٣-٤٤ د ٨.

٦ المنّي] + «والجماع» د || ٧ المسخنة للبدن] «المتسخنة في البدن» د || ٨ صبر] «من الصبر» د || ٩ جزو] «نصف جزءة»
د || ١٢ عند النوم] «من يريد اخذه ويشرب منه وزن مثقال عند النوم» د || ١٢ الطيب] - د || ١٢ رطلان] «وزن
رطلان» د || ١٤ إن شاء الله] «بإذن الله» د.

٨ وقتّه] «وقبه» پ.

3.2

صفة البلادري مختصر للرائري

فلفل وزنجبيل ووجح وسُعد وسنبُل: أجزاء سواء. وإهليلج أسود وأملج: من كل واحد جزء. ومن عسل | البلادر: جزو. ومن الجوز المقشّر: جزو ونصف. تُدق الأدوية وتُنخل وتُعجن بعسل منزوع الرغوة. ويؤخذ منه كل يوم مثل البندقة. ينفع من النسيان ويُطلان الذّكر.

پ ٩٦

٥

3.3

صفة البلادري الصغير

إهليلج أسود وبليلج وأملج: من كل واحد خمسة عشر درهماً. ومن العسل بمقدار ما يُعجن به، ويُرفع ويُستعمل. ينفع من البهق والبرص، ويُوقف الشيب، وينفع من النسيان — وهو عجيب.

١٠

3.4

صفة استخراج عسل البلادر

يؤخذ من البلادر فتتزع أقماعه وتُجعل في قدرٍ نظيفة، ويُلقى عليه ماءٌ ويُغلى حتى يصير في قوام العسل. فتتزع حتى لا يبقى فيه شيءٌ، ويُرفع لوقت الحاجة.

١ صفة [دكان ل ٢٢-٢٩ = د ٣٠-١٤]؛ تصريف I ٤٨٨-١٨٢١ || ٧ صفة [دكان ل ٢٢-٢٨ = د ٣٠-١٤]؛ تصريف I ٤٨٨-١٥١٨؛ أفرابادين ر ١٣٦-١٤١١ || ١١ صفة [دكان ل ٢١-٢٨ = د ٣٠-١٤]؛ تصريف I ١٠٢-١٨١٠٢ = د ٣٠-١٠٧. «استخراج عسله» [«دهنه» ت] هارونية ٢٩١-٢٠٢.

١ البلادري [البلادر] د || ٢ فلفل [يؤخذ فلفل] دنت، «وخذ فلفل» دك || ٢ وسُعد [وسعدا] د، «وسعدى» دل || ٢ جزء [جزآن] ت || ٣ البلادر [البلادري] د || ٤ تُدق الأدوية وتُنخل [يجمع الكل منخولاً] د، «يجمع الجميع منخولاً» ت || ٥ البندقة [البندقة] ت || ٦ ينفع [مناجعه] د، «نافع» ت || ٧ البلادري [البلادر] د || ٨ إهليلج [يؤخذ من إهليلج] د، «إخلاطه يؤخذ من الإهليلج» ت || ٨ من... درهماً [من كل واحد ثلاثون درهماً؛ كندر ودوقوا وزنجبيل وفلفل وعسل البلادر من كل واحد خمسة عشر درهماً] ت، «بالسوية ثلاثين درهماً، كندر وزوفا وزنجبيل وفلفل وعسل البلادر من كل واحد خمسة دراهم» ق || ٩ العسل [عسل النحل] ق || ١٠ ويُوقف... النسيان [والسبت والنسيان] ق || ١٠ وهو عجيب [فاته عجيب المنفعة سريع النجاح مجرب] ت || ١١ البلادر [البلادر] د || ١٢ البلادر [البلادر] د || ١٢ في قوام [هوفى انما مثل] د || ١٣ فتتزع [فتتزع] د || ١٣ ويُرفع [تم ترفعه] د || ١٣ الحاجة [اليه] د. ١٢ نظيفة [نظيفه] پ || ١٣ فتتزع [هبرعه] پ.

صفة حبّ الذهب الكبير

3.5

- صبر ستطريّ أحمر : ثلاثة أواق.
 هليلج أصفر : أوقيتين.
 مصطكى وقتة : من كلّ واحد أوقية.
 ٥ بنفسج وتريد : من كلّ واحد أوقية ونصف.
 مُقل وقسط : من كلّ واحد نصف أوقية.
 جاوشير : أربعة دراهم.
 سمن بقر : أوقية.
 عسل منزوع الرغوة : أوقيتان.
 ٩٧٧٥^١ تُنقع الأصماغ || في ماء الكزّاث، ويُدق ما كان يابسًا، ويُسحق الصبر والمصطكى.
 ويُذاف ذلك بالسمن والعسل، ويُجمع الجميع بعد أن تُدق الأصماغ نعيمًا، ويُعجن ويُجَبّ أمثال التخص،
 ويُجفف في الظلّ.
 الشربة منه : † من تسع حبوب إلى حبة †.
 ينفع من وجع المفاصل والأمعاء والفالج ووجع الخاصرة ووجع الجوف ومن جميع أوجاع الجسد، ويُسخن
 الكلكتين، ومن الخدر والبلغم، ويُشرب في صُلب الشتاء. ١٥

١ صفة [دكان ل ٣٢ و ٣١ و ٣٢ ظ ٧ ≡ د ٤٠ ظ ١٦-٤١ و ٤؛ ≈ «حبّ الذهب الكبير على ما أصلحته» تصريف I
 .٤٠٨-٢٨٤٠٧

٢ ثلاثة أواق [ثلاث أواقي] د || ٤ مصطكى [ومن المصطكى] د || ٥ بنفسج وتريد [ومن البنفسج والتريد] د || ٦ مُقل
 وقسط [ومن المقل والفضت] د || ٧ جاوشير [ومن الجاوشير] د || ٨ سمن بقر [ومن سمن البقر] د || ٩ عسل [ومن
 عسل] د || ١١ ويُجمع [على النار ثم يجمع] د || ١١ نعيمًا [دفا ناعمًا] د || ١٣ من ... حبة [تسع حبات الى حبة] د،
 «خمس حبات الى عشر حبات» ت؛ ل* [إلى إحدى عشر حبة] (4.26) || ١٤ ينفع [مناعه] د || ١٤ والفالج [+
 والرهى ؟] د || ١٥ ومن [وينفع من] د || ١٥ صُلب [طيب] د.

٤ وقتة [وقية] پ.

صفة المغيث الجامع للعلل كلها

- يؤخذ مُرقد: أربعة دراهم.
- تأكوت وخربق أبيض وعافرقرحا وسنبل هندي وفلفل أبيض وقاقلة وزعفران: من كل واحد درهمان.
- يُسحق المرقد ويُخل ويُخلط الجميع ويُعجن بعسل منزوع الرغوة.
- ينفع من السَّلِّ إذا شرب منه قَدْرُ الحِصَّةِ بماء فاتر عند النوم وعلى الريق.
- ويُسعط منه للصداع مثلُ عدسة يُداف بماء المرزنجوش.
- ويُطلى منه لوجع الأسنان مثلُ الحَمَصَة. ويُبتلع ماؤه ويُسقى منه صاحب الفالج مثل الحَمَصَة بماء الكَمُون؛
- ولصاحب السعال القديم والحديث، بماء عنب التلب. ولوجع الفؤاد، بماء الكرفس أو بماء الكَمُون.
- ويُسقى منه للَقْوَة وأُمّ الصبيان مثل عدسة بماء شجرة مريم أو بماء البسباس.
- ولصاحب الطحال بخلّ وعسلٍ وماء بارد.
- ولوجع الجنب الأيسر بماء الكرفس، ولوجع الجنب الأيمن بماء وعسل.
- ويُطلى موضع اللدغ به بعد أن يُداف بماء الشبث فاتراً.
- وللمبطون بقَدْرِ حُسُوَّةٍ من ماء قد طُبخ فيه الريحان؛ ولمن لا ينام، بماء الكَمُون؛ ولصاحب الخاصرة من الجانين، بماء فاتر.
- وللمرأة النفساء التي قد أتر فيها الدُمُّ وتجدُّ أوجاعاً مقطعةً في بطنها، بماء الحلبه — ولا يُسقى للحامل.
- ولصاحب الكزاز بماء سخن، ويُجعل فيه ثلاثة دراهم بزر قطناء ومن الزبيب مثله.
- ولصاحب البواسير، بقدر حُسُوَّةٍ من ماء الكراث يُوالى أَيْامًا. ولصاحب البلغم بقدر حُسُوَّةٍ من ماء الكَمُون. ولصاحب الجماع بقدر رطل من ماء الحَمَصَة؛ ولصاحب النقرس، بماء السذاب.
- ولوجع الحلق مثل حَمَصَة، ويُبتلع ماؤه — نافع، إن شاء الله.

١ صفة [دكان ل ٢٥ ظ ٢٧ = د ٣٤ ٣٤ - ٧ ٣٤ = د ٣٣ ٣٣ = د ١٠٢ ١٠٢ - ١٨ ١٠٢ ظ ٢٢] ≈ «معجون المغيث... اجتمع عليه أطباء فارس والروم والهند» تذكرة ٢١ ظ ١٠٠؛ ≠ «المغيث الهاروتي» هارونبة ٣٣٥ - ١١٠.

٣ تاكوت [ومن التاكوت] د ٤ [ويعجن] «ويعجنه» د ٥ [ينفع] «منافعه» د ٥ [قَدْرُ] «مثل» د ٦ [يُداف] «تداب» دل، - د ٩ [عدسة] «حَمَصَة» د ١٠ [وماء] «او ما» د ١٢ [اللدغ] «اللدغ» د ١٢ [الدماع] دل ١٢ [يُداف] «يذاب» د ١٥ [مقطعة] «منقطعة» د ١٥ [يُسقى للحامل] «تسفاه الحامل» دل ١٦ [ولصاحب] «ويسفاه المحموم بقدر حسوّة من ماء فاتر ولصاحب» دل، «ويسفا للمحموم...» د ١٧ [يُوالى أَيْامًا] «يُوالى به أياما» د ١٧ [ولصاحب البلغم] «ولصاحب البلغم في لسانه بماء فد طبخ فيه السطاق. ولصاحب البلغم» د ١٧ [من ماء] «بماء» د ١٨ [ماء] - د.

١٢ اللدغ [اللدغ] پ ١٢ [الشبث] «للشبت» پ ١٣ [يقدر] «يقدر» پ ١٣ [حُسُوَّةٍ] «حسوه» پ ١٥ [يُسقى] «يسقا» پ.

صفة حبّ المرجان

3.7

- إهليلج أصفر: خمسة دراهم، إهليلج أسود: درهم.
نوار الأفسنتين: ثلاثة دراهم. صبر سقطري: عشرة دراهم.
٩٨٠٥ زعفران: درهمان. || ورق ورد أحمر: درهمان.
٥ يُدق كل واحد على حدة ويُخل ويُعجن بالماء، ويُجَبب أمثال الفلفل.
الشربة منه: ثلاثة دراهم للقوي، ودرهمان لغيره.
ينفع من البرسام وحرارة الكبد والوجع والحز في الرأس والبخار، ويُسكن الصداع، ويكثر الجماع،
ويذهب بالحصى والتخم والريح التي تكون في البطن، ويُنزل المزة السوداء والحام، ويُصقي البواسير،
ويقطع الحرارة، ويطرد الرياح، ويُطعم بالشيب.
١٠ وهو يُشرب في كل وقت وزمان، وهو أوفق في الصيف، إن شاء الله.

صفة حبّ المنتن

3.8

ينفع بإذن الله من ضيق النفس بسبب البلغم المنحلب إلى أنابيب الرئة
يؤخذ منه عند النوم ليلتين ويغب أخرى
وهو مجرب

- ١٥ يؤخذ سكينج جيد ووشق وجاوشير ومقل وصبر وحرمل وشحم حنظل: من كل واحد درهم.
يُنقع في ماء الكراث النبطي ويُدق الباقي ويُجمع ويُعجن ويُجَبب حبًا صغارًا.
ويؤخذ منه درهم عند النوم ليلتين ويغب الثالثة.
وفي نسخة أخرى يُزاد فيه تيزد أبيض قصبي وسقمونيا.
٩٨٠٥ الشربة | منه: درهمان للقوي؛ وللضعيف، مثقال.

١ صفة] دكان ل ٣٥-٧-١٥ = د ٤٤-١٦-٤٥-٢٥ || ١١ صفة] ≡ «الحبّ المعروف بالمنتن» دكان ل ٣٦-١٢-١٩ =
د ٤٥-٢٢-٤٥-٢٥ ط ٦؛ ≡ أقراباذين س ١٨-٧-٩٩؛ ≈ تصريف I ١٧-١٠-١٥.

٤ أحمر] «بايس» د || ٧ ينفع] «منافعه» د || ٨ بالحصى] «الحصى» د || ١٢ ينفع...] ق || ١٥ يؤخذ] «أخلاطه» د ||
١٥ ومقل] «ومقل أزرق» ق || ١٦ يُنقع] «ينفع ما انفع» د || ١٦ الكراث] «الكرنب» ق || ١٧ يؤخذ... الثالثة] -
ق || ١٧ الثالثة] «ليلة» د || ١٨ وفي... أخرى] - ق || ١٩ درهمان] «كيلا» د.

٨ بالحصى] «الحما» پ || ١٦ صغارًا] «صغار» پ.

3.9

صفة حبوب لبحة الصوت
ويذيب البلغم وينقي الحلق
مأخوذ من كتاب أهرن

يؤخذ خردل مقلو : ثلاثة دراهم.

فلقل : درهم.

يُدق ويُسحق ويُعجن بعسل منزوع الرغوة، ويُصنع حَبًّا كالحَمَص، ويوضع[†] منه[†] تحت اللسان حتى يذوب.

فأته جتيد للبلغم.*

١ صفة [≡ دواء ينفع من بحة الصوت] دگان ل ٣٣٣ ظ ١٢-٧ = د ٤٢ و ٤٢-٦.

٣ أهرن [«أهرون» د، «هرون» دل || ٤ يؤخذ] «اخلاطه يوخذ» د، «اخلاطه» دل || ٦ ويوضع [«وتوضع» د || ٦ منه] «حبة» دل، «حبا» د || ٧ يذوب [«تذوب» د.

٣ أهرن [«هون» پ.

فصل

في المعجونات واللحوقات

4

والجوارشونات والمرتبات

صفة مرتب الثوم البستاني

4.1

- ٥ تأخذ من الثوم المنثى من قشره: مَكُوْگا، واجعله في قَدْرٍ نظيفة، واجعل عليه من السمن البقريّ الجيد رطلين. واطبخه فيه بنار لينة حتى يشرب الثوم السمن ويبرو ويعظم وتزول رائحته. ثم تصب عليه من العسل المزروع الرغوة المعقود قَدْر ما يغمره، وأوقد تحته بنار لينة حتى يغلي ويخلط بعضه ببعض. ثم أنزله عن النار ودعه يبرد، وارفعه إلى وقت الحاجة. فهو نافع من سموم الهوامّ كلّها^١ ومن العقرب وما يُعادلُه في ذلك دواءً^٢.

صفة مرتب الصعتر

4.2

١٠

٩٩٦^٣ تأخذ رؤوس الصعتر في شهر أغسطس (وهو إكمال نواره) فتملاً منه زُبْراً. ثم تغمره بالعسل الرطب || الطيب المزروع الرغوة والمعقود عقداً جيّداً. ثم تُعلّقه للشمس أربعين يوماً وتتفقده في كلّ خمسة أيام: فإن رأيت العسل قد رق، صَفَيْته منه وعقدته ثانيةً وأعدته عليه حتى يَرْتَب، ثم تستعمله. ينفع من المزاج، ويُنقي الرياح، ويُسَخّن المعدة، ويهضم البلغم، إن شاء الله.

٤ صفة] ≡ دگان ل ١٨ ظ ١٠١ = د ٢٦ ظ ٢٠-٢٧؛ ≈ «جوارشن الثوم» هارونيتة ١٠٣٠٩-١٠ || ١٠ صفة] ≡ دگان ل ١٨ ظ ١١-١٦ = د ٢٧-٢٨؛ ≈ معدة ٢٦١٨٠-٢٦١٨١.

٥ الثوم] + «الشقري» ه || ٥ مَكُوْگا] «رطل» ه || ٦ ويريوا] «ويروي منه ويربوا» د || ٨ وارفعه... الحاجة] «واودعه خنتا» د، «او دعه خنتا» د || ٩ فهو] - د || ٩ العقرب وما يُعادلُه] «العرب وينبع من البرد والحصا وأوجاع الأرحام وكثرة البول ولكلّ علة تتولد من البرد والرطوبة وفد جزبناه في لدغ [«من لدغ» د] «العرب فلم يغدله» د || ١١ وهو... نواره] «وفد كمل نواره» د، «وفد يكمل نواره» د || ١١ الرطب] - د || ١٢ جيّداً] «حسننا» د || ١٤ المزاج] + «السو» د.

٦ ويريوا] «ويربوا» پ.

4.3

صفة مربا القرع

تأخذ من القرع الأخضر فتزنع حبه وقشره الأعلى، وتُخرج شحمه وتقطعه مثل الدراهم. وتجعله في الملح ثلثة أيام حتى يُدخاله الملح ويشربه. ثم تغسله وتبدل له الماء حتى يطيب، ثم تجعله على غربال في الظل حتى ينشف.

وتأخذ من العسل الصافي مقدار ما يكفيه، وتجعله على النار وتزنع رغوته وتطرح فيه قليل زعفران وقرنفل ومصطكى مسحوقًا. واطرح فيه ذلك القرع المقطوع وتوقد تحته بنار لينة حتى ينعقد ويدخله العسل.

وتودعه قدرًا مطلقًا، وتستعمله عند الحاجة إليه.

ينفع من لهيب الصفراء والحز، ويأكل البلغم، وينفع المحرورين، إن شاء الله.

4.4

صفة مربا الفجل

تأخذ الفجل فتقشره من خارج ومن داخل، وتسلقه سلقًا خفيفًا من غير ملح. ثم تُصقيه من المائية قليلًا | وتلقي عليه من العسل المعقود المنزوع الرغوة وتطيه بالأفويه — وهي زنجبيل وخولجان وقرفة حارة ودارفلفل وقرنفل وعاقرقرا: كل ذلك مدقوقًا منخولًا، ويكثر من العاقرقرا.

وإن شئت، صبغته بالزعفران وتركته ساذجًا.

ينفع للإبردة كلها ولوجع الخاصرة والأمغاص في الجوف، ويُنقي المصارين، وينفع لأوجاع المعدة والبلغم الذي يُفسد المعدة، ويُصقي اللون، ويُشهي للطعام، ويُذهب التخمة والرياح السوء من المعدة، ويُخرج البلغم. وهو نافع من أدواء كثيرة: يؤخذ منه كل يوم قطعة أو قطعتان — نافع، إن شاء الله.

١ صفة [دكان ل ١٥ ظ ٢٠-١١ = د ٢٣+٢٢+٢٣ ظ ٧ = د ٩٩ ظ ١٠٠-١٨+٣] صفة [١٠ صفة] (-) «مرتب الفجل»
دكان ل ١٧ ظ ١٠-٩ = د ٢٥ ظ ٢١-٢٦+١٤.

٢ الأخضر [+ الرخص] دلح [٣ يُدخاله] «يتدخاله» دلح [٣-٤ في الظل] «الظل» دلح [٥ وتأخذ] «ثم تأخذ»
د [٥ الصافي] «الأحمر الصافي» د [٥ على النار] «في قدر وتجعله على النار» دلح، + «حتى ينش» د [٩ ينفع ...
والحز] «مناجعه يبرد ويطفي الصبرا ويغمها» د، «نفعه مبرد ويطفي الصبرا ويغمها» دلح [١١ الفجل] + «الأخضر»
د، «الرخص» دلح [١١ فتقشره] «فتنفيه من فشره الأعلى وتقطعه مدورا ومستطिला قدر الاصابع وتنفيه» د [١١ من
خارج ومن داخل] «من داخ وخارج» د [١١ وتسلقه] «ان كان [...] ويصنع ايضا تسلقه» د [١٢ المنزوع الرغوة] -
د [١٢-١٣ وهي ... العاقرقرا] - د [١٤ صبغته] «لونه» د. [١٥ ينفع] «مناجعه» د [١٧ قطعتان] «قطعتين» د.

٥ وتزنع [«وينزع» پ ٨ قدرًا مطلقًا] «قدرًا مطلقًا» پ.

صفة مرطب الزنجبيل

4.5

- يؤخذ من الزنجبيل اليابس ما أحببت، فتدفنه في الرمل وتصب عليه ما يغمره من الماء، وتركه ثلاثة أيام ولياليها مدفوناً حتى ينبل. واغسله وقشره وقطعه صغاراً على قدر ورق الریحان الصغير محدوداً. وتأخذ من العسل الأحمر الصافي مقدار ما يكفيه، واحمله على النار في قدر نحاس حتى ينش. وتزج رغوته واطرخ عليه قليل زعفران وقرنفل وقرفة وسنبل وفلفل ومصطكى، واطرخ فيه الزنجبيل المقطع.
- وتوقد تحته بنار لينة حتى يتعقد، وارفعه في آنية مطلية.
- ب ١٠٠ فهو نافع للباه يُعزّره، ويأكل البلغم الذي في حَمَل المعدة وهو ج(تيد) في الشتاء.

صفة جوارشن السّماق

4.6

النافع من الاستطلاق

١٠

١٥

- يؤخذ سّماق: جزوين.
 وحبّ الآس: جزو.
 وحبّ رمان حامض مقلو: جزو.
 وخرنوب نبطي: ثلاثة أجزاء.
 وصمغ عربيّ وجلنار: من كلّ واحد نصف جزء.
 تُجمع منخولة، ويُستعمل منها عند الحاجة.

١ صفة] «مرطب الزنجبيل» دگان ل ١٦ ظ ١٠٠-١٧ = د ٢٤ ظ ٨-١٥ || ٩ صفة] ≡ أقراباذين س ١٥٠-١٦٠٢٠.

٢ يؤخذ] «تأخذ» د || ٢ فتدفعه] «وادينه» د || ٣ ينبل] «ينتل» دل || ٣ محدوداً] «مجردوا» د || ٨ فهو نافع] «منافعه» د || ٨ حمل] «حمل» د || ١٣-١٥ مقلو... نصف جزء] «وخرنوب نبطي وجلنار وصمغ عربيّ من كلّ واحد درهمين ونصف» ق || ١٦ ويُستعمل منها] «وتستف» ق.

٣ ينبل] «نبل» پ || ٣ صغاراً] «صغار» پ || ٧ مطلية] «مطله» پ ||

٨ حمل] «وحمل المعدة: خشكريشة في باطنها تُمسك الطعام بخشونتها إلى أن ينهضم؛ فإذا تملست. حدث عن ملاستها المرض المعروف فزلق المعدة، «محيط ٢٥٦ ١٠-١٣».

4.7

صفة جوارشن الكمّون

النافع من شدة برد المعدة
والجشاء الحامض والشهوة الكلبيّة
والحمّيات البلغميّة والسوداويّة وبرد الحمّي

يؤخذ كمّون كرمانّي منقوع في خلّ خمرٍ يومًا وليلةً مجفّف مقلوّ. ◦
وورق السذاب المجفّف في الظلّ، [†]وقاقليّ [†]وزنجبيل: من كلّ واحد خمسة أساتير.
بورق أرمنيّ: خمسة دراهم.
تُجمع بعد النخل وتُعجن بعسل منزوع الرغوة، وتُرفع وتُسعمل.

١ صفة [«جوارش كمّون آخر» دكان ل ٢٠-١٩-٢٥ = د ٢٨-٣٧؛ ≈ تصريف I ٤٨٢-٨١١؛ ≈ «الكمّونيّ» منصوريّ ٤٢٠-٤٦٠؛ ≈ «جوارشن كمّونيّ» أقرابادين س ١٣٧-٢٢١٣٨؛ ≈ «الجوارشن الكمّونيّ على النسخة المعروفة» كتاش س ١٣٣ ظ ٩-١٣٤؛ → «τὸ Διοσπολιτικὸν φάρμακον» VI Γ ١١٢٦٥-١٢٦٧.

٢ النافع [«مناجعه» د، «ينفع» دل] ٢ شدة برد المعدة [«البرودات الكثيرة في المعدة» ك] ٢ شدة - د || ٤ وبرد الحمّي [Σ - ٥ كرمانّي] «Αιθιοπικόν» Γ ٥ منقوع... خمر [«منقوع في خلّ» ت، «ينفع في خلّ» د، «ἐμβρέχεσθαι τὰ τοῦ πηγάνου φύλλα» δ] «δὲ... ὄξει δριμυτάτω» Γ ٥ مجفّف مقلوّ [«ويجفّف ويفلّ» د] ٦ وورق... الظلّ [«αὐαقي» دت] ٧ بورق أرمنيّ [«προανεξηραμμένα» Γ ٦ وقاقليّ] «وفلفل» Σ، «πεπέρεως» Γ ٦ أساتير [«أواقي» دت] ٧ بورق أرمنيّ [«وبورق الخبز» م، «νίτρον» Γ: «ملح اندراني او نفضي» ت] ٧ خمسة [«عشرة» د] ٨ تُجمع بعد النخل [«تدف وتنخل» د، «تجمع هذه الأدوية مسحوقة منخولة» ق] ٨ وتُرفع [«في اناء» د] ٨ وتُسعمل [«عند الحاجة اليه» دل].

٣ الكلبيّة [«الكلبة» پ] ٤ والحمّيات [«والحميات» پ] ٤ وبرد الحمّي [«ورد الحمّي» پ] ٥ يومًا [«يوم» پ].

صفة الجوارشن الجوزي
النافع من استطلاق البطن
وسوء الاستمراء
وضعف المعدة وبردها

4.8

- ٥ يؤخذ قسط وقرفة وسنبل الطيب وحبّ بلسان وسليخة: من كلّ واحد عشرة دراهم.
جوز بوا: خمسة عددًا.
وقافلة وقرنفل وأيسون وإكليل الملك وشيطرح هندي: من كلّ واحد أربعة دراهم.
بسباسة: ثلثة دراهم.
١٠ ويرنج، ثمنية | دراهم. وناغيشث: أربعة دراهم.
وزراوند وراوند وأشنه: من كلّ واحد درهمين.
وسعد وزنجبيل: من كلّ واحد عشرة أساتير.
وقصب الدّرية ولفل ودارفلل: من كلّ واحد خمسة دراهم.
هليلج أسود منزوع النوى: أستران.
وبليلج: عشرة عددًا، منزوع النوى.
١٥ وحبّ الآس جندي سابوري.
تُجمع بعد النخل وتُعجن بعسل نخل منزوع الرغوة، ويُستعمل.

١ صفة] ≡ «جوارشن الخوزي» أقراباذين س ١٣٨-١٩؛ ≡ «جوارشن الجوزي اللطيف ... معروف مختصر» تصريف I
٤٨٤ ١٠-٣؛ ≈ فردوس ٤٧٤-٢٤٧٥-١٦؛ ≈ «جوارشن خوزي» كتاب س ١٣٧ ظ ١٤-١.

٤ وضعف ... وبردها] - ق، «ومن رياح البواسير زايد في الباه نافع للمعدة الباردة الزلقة» ت || ٥ وسنبل الطيب
«سنبل» ك || ٦ عددًا] «عددًا» فت، «اعداد» ك، «جوزات عدد» ق || ٩ ويرنج] «ارنج» ك، - تم || ٩ وناغيشث
«وناغيشث» ق، «نارمشك» ك ف، - تم || ١٠ وراوند] - ق || ١٤ منزوع النوى] - ق || ١٥ وحبّ الآس جندي
سابوري] «وحبّ الآس نصف قفيز جندي سابوري» ق، «ومن حبّ الآس مكول» ف، «حب اس مجفف مد بمد
النبي» ت || ١٦ بعد النخل] «هذه الأدوية مسحوة منخولة» ق || ١٦ بعسل ... الرغوة] «بعسل قصب السكر» ق ||
١٦ ويُستعمل] «ويرفع في إناء ويستعمل بعد شهرين» ق.

١ الجوزي] «الحوري» پ || ٦ عددًا] «عدد» پ || ٩ ويرنج] «ورنج» پ || ٩ وناغيشث] «وناغيشث» پ ||
١٣ النوى] التّوا] پ || ١٤ عددًا] «عدد» پ || ١٤ النوى] «النوا» پ || ١٥ جندي سابوري] «حيد سابوري» پ
|| ١٦ نخل] پ.

4.9

صفة معجون نافع للطحال

وكلّ فضل غليظ، منقّ للرياح، نافع للبواسير الباطنة والترهل
وبرد الأحشاء والريح في المفاصل، ويدحر في الأسفامر من البرد

زنجبيل يابس وقشر أصل الكبر وشيطرج وعافرقرحا وبسبايج ودرونج وأصل السوس المجرود وأيسون :
من كلّ واحد أربعة مثقالين.

راوند صينيّ وخولنجان وأسارون ومصطكى ودارصينيّ ووجّ وسنبل هنديّ وبقّاح الإذخر وقسط
وكّون كرمانّي : من كلّ واحد مثقالين.

يُدقّ ويُنخل ويُعجن بعسل مصفى، ويُصير في بزنيّة ملساء ويُحفظ به.
الشربة منه : مثقالين.

وينفع من البرد والحصى وأوجاع الأرحام وكثرة البول، ولكلّ علة تتولد من البرد والرطوبة — فقد جرّبناه
فحمدناه.

4.10

صفة لعوق الكثيراء

النافع للسعال الشديد وخشونة الصدر وبحة الصوت

ب 101r

تأخذ (من) كثيراء وصمغ عربيّ وحب الصنوبر منقى وفانيد وقر منقى : من كلّ واحد جزو.
ومن عرق السوس المقشر ومن زبّه : من كلّ واحد جزو.

يُدقّ ما كان يابسًا، ويُنخل ويُعجن بالجمع بالسمن والعسل (ويكون السمن جزوًا والعسل ثلاثة أجزاء)
حتى يصير بمنزلة العسل الخائر.

الشربة منه : مثل الجوزة بالغداة والعشيّ.

ينفع من السعال الشديد وخشونة الصدر وبحة الصوت.

١٢ صفة ≡ دگان ل ٣٤-١٦ = د ٤٢ ظ ٢-٦ || ١٩ ينفع... ⇒ «كثيراء [معجون بالعسل]» حشائش ١٦-١٧
≡ «تراγάκωνθα [ἐν ἐκλεικτῶ σὺν μέλιτι]» Π Δ ٢٦-٥.

١٣ للسعال... الصوت] - د || ١٦ ما] «كلّ ما» د || ١٨ الجوزة] «الجوزة» د || ١٩ من... الصوت] ≥ «و للسعال
ولخشونة قسبة الرئة واقتطاع الصوت» Δ || ١٩ الصدر] «الحلق والصدر» د.

٢ منقّ] «منقّ» پ.

صفة لعوق بنهر الكتان

4.11

يؤخذ بزر الكتان مقلو وفلفل: على قدر ما تُريد. يُدق ويُنخل ويُعجن بعسل منزوع الرغوة. ويؤخذ منه على الريق بالعدة والعشي. فإته نافع من السعال المتولد من البرد.

صفة لعوق الفانيد

4.12

لسعال الصبيان

يؤخذ رب سوس وصمغ عربي وفانيد: من كل واحد أربعة دراهم. ومن لباب حب السفرجل ولب بزر قنأ وبزر بطيخ: من كل واحد درهم. تُجمع مسحوقة وتلت برُبع أوقية دهن لوز حلو طري، وتُعجن بثلاثة أمثاله (من) عسل منزوع الرغوة. نافع بإذن الله.

صفة فودنج مختصر للرازي

4.13

تأخذ (من) ورق السذاب وفودنج يابس وفلفل وناخاة | وكراويا وكاشم وزنجبيل ودارفلفل: أجزاء سواء. تُعجن بعد الدق والنخل بعسل منزوع الرغوة، ويؤخذ منه مثل البندقة ويُستعمل. نافع مسخن للمعدة، محلل للرياح، محقق لما فيها من الرطوبات، إن شاء الله.

١ صفة [دكان ل ٣٤٠-١٧٠ = د ٤٢ ظ ٨-٦ || ٥ صفة] ≡ دكان ل ٣٤٠-٣٠٤ = د ٤٢ ظ ١٨-١٥ || ١١ صفة [دكان ل ٢٢٠-٣٠٤ = د ٢٢ ظ ٣-١٠ = د ٢٩ ظ ١١-١٥] ≡ «فودنج مختصر للرازي» تصريف I ٤٨٢-١٧٠؛ → «معجون الخبث الفوتنجي» منصورى ٤٣٤-١٧٠؛ ⇒ «τὸ διὰ τῆς καλαμίνθης φάρμακον» San.tu Γ ١٢٤-٢١٠٥٠٤.

٢ يؤخذ... مقلو [زريعة الكتان مقلو] د ٢ شريد [تريده] د ٣ منه - د ٤ فإته نافع [منافعه] د، «نافع» د ٨ وبزر [ولب بزر] د ٩ وتلت [وتلت] د ٩ من [د ١٠ نافع... الله] - د ١٢ تأخذ [يؤخذ] ت || ١٢ وفودنج يابس وفلفل [وفودنجا يابس وفلفل] د ١٢ وناخاة [وناخوة] م ١٢ وكراويا [وكرويا] د ١٢ وكاشم [وكاشا] د، «καὶ σεσέλευς» [وسيساليوس] Γ ١٢ وزنجبيل [وزنجبيل] د ١٢ ودارفلفل [ودارصيني ودارفلفل] م ١٣ سواء [بالسوية] د، «متساوية» م ١٤ تُعجن... ويُستعمل [تُعجن بعسل] م ١٤ ويؤخذ [تم يجعل في زجاجة ويؤخذ] د ١٤ ويُستعمل [ويشفي منه] د، «فإته عجيب وعلى قدر الحاجة» ت ١٥ نافع... الله [م ١٥ نافع] «منافعه» د ١٥ إن شاء [بإذن] د.

١٢ وفودنج [وفودنج] پ ١٥ للمعدة [المعدة] پ.

4.14

صفة جوارشن جالينوس

ينفع من برد المعدة والكلية
وينفع الرياح الغليظة من المعدة ويضم الطعام ويفتق الشهوة
ويحلل ما غلظ من البلغم في المعدة
ويؤذي الدهن ويذهب بالنسيان ويطيء بالشيب
وينفع من السعال البلغمي
وهو نافع لكل بارد المزاج إن شاء الله

يؤخذ فلفل أبيض وأسود، ودارفلفل وزنجبيل وخولنجان ودارصيني وسليخة وسعد وقرنفل وزعفران
وأيسون: من كل واحد أوقيتان.

سنبل[†] وهندباء وقاقلة[‡] وأسارون[†] وعود بلسان وحب آس يابس وقسط حلو: من كل واحد نصف
أوقية.

ومن قصب الذريرة وعود الطيب وبسباسة وجوز بوا: من كل واحد ربع أوقية.

يُدق ذلك ويُنخل ويُعجن بعسل منزوع الرغوة، ويُرفع.

الشربة منه: مثقال بالعادة وعند النوم وعند الطعام.

جيد مجرب. ١٥

١ صفة] ≡ «جوارش جالينوس» دكان ل ١٨ ظ ٢٨-١٩ = د ٢٧-١٧ ظ ٢٧؛ ≡ تصريف I ٤٨٤-١٥-٢٢ (→ جالينوس) ≡ معدة ١٢٠-١٩ (→ جالينوس)؛ ≡ SecMont ψΓ ٣٧٦-٥٢-٣٧٧؛ ≡ «τὸ δὲ τριῶν πεπερέων» San.tu Γ ١١٧-٢٩-٣٣١١٩.

٢ ينفع] «مناجعه» د ٣ وينفع] «ويؤذي» Σ ٣ من المعدة]- م ٣ ويفتق] «ويقبل» م ٤ البلغم] «الطعام» د ٤ في المعدة]- م ٥ بالنسيان] «الفساد» م ٥ ويطيء] «ويؤذي» م ٥ بالشيب] «الشيب» دت ٨ يؤخذ] «أخلاقه يؤخذ» م، «تأخذ» د ٨ فلفل أبيض وأسود] «فلفل أسود وفلفل أبيض» م ٨ وزنجبيل] + «يابس» م ٨ وسعد] «وسعدا» د ٩ من... أوقيتان] «من كل واحد أوقية. ومصطكى وفاونية، من كل واحد أوقيتين» م، «من كل واحد اوقية مصتكي وفانيد من كل واحد اوقيتان» ت ١٠ سنبل[†] وهندباء] «وسنبل هندي» م، «وسنبل هنديا» د، «سنبل» ت ١٠ وقاقلة] + «صغيرة» م ١٠ وعود... يابس] «وعود بلسان وحب بلسان وحب الآس اليابس» د، «وحب بلسان وعوده وحب الآس اليابس» ت، «وحب بلسان وحب الآس اليابس» م ١٣ ويرفع] «وتحط في بستوقة ملساء» م، «ويجعل في بستوقة ملسا» ت ١٤ وعند] «وبعد» م ١٥ جيد] «فإنه نافع» م.

٣ وينفع] «وسفع» ب.

صفة معجون القرنفل

4.15

النافع لضعف المعدة والكبد والمثانة ويقوي القلب والدماغ
ويعين على الهضم وينزله في الباه ويذكي الذهن ويقطع سلس || البول

ب ١٠١

يؤخذ قرنفل ملقوط: أوقية ونصف. خولنجان: نصف أوقية. (قرفة) قرنفلية: ثلث أوقية.

وزنجبيل نقي غير مُستاس: ربع أوقية. دارفلفل: ثلثة دراهم.

سنبل هندي وجوز بوا وبسباسة وعافرقرحا وقسط حلو: من كل واحد درهم. زعفران شعر: مثقال.

يُدق كل واحد حدةً ويُسحق ويُنخل ويُعجن بثلثة أمثاله من عسل منزوع الرغوة، ويُرفع.

الشربة منه: مثقال.

نافع إن شاء الله.

صفة لعوق البزركتان

4.16

النافع من السعال اليابس

١٠

يؤخذ بزركتان مقلوًا، يُسحق ويُعجن بعسل نخلٍ. ويُرفع ويُستعمل.

صفة لعوق العنصلان

4.17

النافع من عسر النفس واللهث ووجع الجنبين والصدر

يؤخذ من عصارة العنصلان وعسل منزوع الرغوة، ويُعقدان جميعًا. ويُعلق منه قبل الطعام وبعده.

١٥

١ صفة] ≡ دگان ل ٣٤ ط ١٩-٢٨ = د ٤٣ ١٠-١٠٠ || ١٠ صفة] ≡ أقرباذين س ١١٩-١٢١٤؛ ≈ «لعوق الكتان» دگان ل ٣٤ ط ١٧-٢٠ = د ٤٢ ط ٦-٨؛ ≡ كتاش س ١٤٩، ١٠٠-١١١؛ «بزر الكتان» حشائش ٤٢ ط ١٧-١٨ (≡ «λινόσπερμον» I Δ ١١٧٧-١٢٠١) || ١٣ صفة] ≡ أقرباذين س ١١٦-١٢١٦؛ ≡ «لعوق بصل العنصلان» كتاش س ١٤٩، ١٢٠-١٤٩؛ «إسقیل» حشائش ٥٢ ط ٣-١ (≡ «σκιλλα» I Δ ٢٣٩-٤٠١).

٢ النافع] «منافعه» د، «ينفع» دل || ٤ يؤخذ] - د || ٤ قرفة] د || ٧ حدة] «على حدة» د || ٨ منه] + «عند الحاجة» د

٩ نافع... الله] - د || ١١ النافع... اليابس] «لمن يسعل ولا ينفث شيئًا» ك || ١٢ يُسحق... نخل] «ويعجن بعسل»

ق، «يُدق ويُعجن بعسل» ك || ١٢ ويُرفع ويُستعمل] «ويرفع في إناء» ق، «وُيُستعمل» ك || ١٤ النافع... والصدر]

«النافع من الربو وانتصاب النفس» ك || ١٥ منزوع الرغوة] - ك || ١٥ ويُعقدان جميعًا] «ويعصران جميعًا» ق، «يُطبخ

بالنار حتى يصير له قوام» ك || ١٥ قبل... وبعده] «على الريق بعد الشبع» ق.

4.18

صفة لعوق للصبيان
يستقى مع ألبان النساء وألبان الأتق
في الصدر للحراصة والحشونة

يؤخذ ربّ السوس و صمغ وكثيراء وفانيد : من كلّ واحد أربعة دراهم.
ولعاب سفرجل يابس : درهم.
تُجمع منخولةً وتُعجن بعسل منزوع الرغوة ودُهْن لوز حلو و سمن ، ويُرفع ويُستعمل .^٥

4.19

پ ١٠١ ط

صفة لعوق الحشخاش
النافع من انزف الدم
والحمى الحادة والسعال ووجع الصدر والشوصة

يؤخذ ورد أحمر منزوع الأقماع، و صمغ : من كلّ واحد أربعة دراهم.
ونشاسنج الحنطة وكثيراء وحبّ الحشخاش : من كلّ واحد درهمن.
طباشير وزعفران : من كلّ واحد نصف درهم.
ربّ السوس : درهمن.
تُجمع بعد النخل بمثلث معقود، وتُرفع.
وتُشرب مع ماء الترنجبين أو طبيخ الزوفا .^{١٥}

١ صفة] أقراباذين س ١١٧-٢٠١؛ ≡ «مطحناً [≡ مصلحاً] وهو لعوق السعال للصبيان» كتاش س ١٤٧، ١٤٠-١٤١ ||
٧ صفة] أقراباذين س ١١٨-٥١٢؛ ≈ «أقراص الحشخاش» تصريف II ١٠٩-١٣٠.

٢-٣ يستقى ... في الصدر] «ويُعطي منه مقدار حصّة مداف بلبن امرأة» ك || ٢ يستقى] «منتقى» ق || ٥ ولعاب
سفرجل] «حبّ السفرجل» ك، «لعاب حبّ السفرجل» ق || ٥ يابس] «مقشّراً» ك || ٦ تُجمع منخولة] - ك || ٦ منخولة] «مسحوقة منخولة بحريّة» ق || ٦ منزوع الرغوة] - ك || ٦ ودُهْن لوز حلو] - ك || ٦ ويُرفع ويُستعمل] - ك || ٨ انزف]
«قذف» ق، «بول» ت || ٩ والشوصة] - ق || ١٤ بعد ... وتُرفع] «هذه الأدوية مسحوقة منخولة بحريّة ما انتخل منها
وتعجن بمثلث معقود» ق.

٩ والحمى] «والهما» پ || ٩ الحادة] «الحادثه» پ.

صفة لعوق الصنوبر
النافع من قروح الرئة والسعال واللهث
المخرج لما في الصدر من الفضول النزرجة

4.20

يؤخذ لوز الصنوبر مقشّر وكثيراء وأصول السوسن الأسانجويّ وصمغ: من كلّ واحد جزو.
بزر كتان مقلّي وتمر^١ أميدون مقشّر: من كلّ واحد نصف جزو.
ويُنخل منها ويُعجن الجميع في عسل منزوع الرغوة عجيجًا لينا، ويُرفع ويُستعمل.»

صفة لعوق الحلبة

4.21

النافع من البحوحة

يؤخذ بزر كتان: أستارين.
وحلبة ولوز حلو مقشّر من قشريه: من كلّ واحد أربعة دراهم.
كثيراء وأصول السوسن ولوز الصنوبر الكبار مقشّر ولوز مقشّر من قشريه ونشاستج الحنطة وصمغ: من كلّ واحد درهمنين.
ب ١٠٢: تُجمع بعد النخل وتُعجن بمثلث || معقود، ويُرفع ويُستعمل، إن شاء الله.»

١ صفة] أقرأ باذين س ١١٥-١٢-١٨؛ ≈ «لعوق حبّ الصنوبر» كتاش س ١٤٦ ط ٢-٥ || ٧ صفة] أقرأ باذين س ١١٥-٢١-١١٦.ع.

٢ قروح الرئة] «للربو» ك || ٢ واللهث] «اللهث» ق، «والذين يغلظ عليهم النفث» ك || ٣ المخرج... النزرجة] - ك ||
٤ لوز الصنوبر] «اسطروفوليا (وهو حبّ الصنوبر)» ك [≡ σπυροφύλλοι > στροβίλοι || ٤ مقشّر] «الكبار» ق،
- ك || ٤ وكثيراء] + «وبندق» ك || ٥ مقلّي] «مقلو» ل ق || ٥ أميدون] «هيرون» Σ (+ فردوس ١٢٠٤) || ٥ مقشّر]
«متقى» ك || ٦ ويُنخل... عسل] «تجمع هذه الأدوية مسحوقة منخولة بحريّة وتعجن بسمن وعسل» ق || ٦ ويُرفع
ويُستعمل] «ويصير في إناء زجاج ويلحق منه بلبن الأثن أو بماء حارّ» ق || ١١ السوسن] «السوس» ق || ١١ مقشّر] «متر
مقشّر» ق || ١٣ بعد النخل] «منخولة بحريّة» ق || ١٣ ويُرفع ويُستعمل] - ق.

٢ واللهث] «واللهب» ب || ٥ وتمر^١ أميدون] «وممرميديون» ب || ١٠ قشريه] «قسر» ب || ١١ السوسن] «السوسن»
ب || ١١ ولوز] «وترفع ولوز.»

٥ أميدون] «هيرون: صرّب من التمر مغزوف» تلخيص [٢٨٥] (→ أبو حنيفة): σπυροφύλλοι.

4.22

صفة كَتُونِيَّة تنسب إلى أبقرات

تنفع من البرد والتخم والبلغم اللزج المالح الذي يعرض من كثرة شرب الماء، وتمضم الطعام، وتفتح السدد الذي في الكبد والطحال، وتُسَخِّن الكلى والمعدة والمثانة، وتُحَسِّن اللون، وتنفع من الحميات الباردة والجشاء الحامض، وتُطَيِّب النكهة، وتنفع من عسر البول، وتُدْفئ الكلى

يؤخذ كَوْنٌ مَجَّبٌ أبيض ويُتَقِع في رطل خلٍّ خمرٍ يوماً وليلاً. ثم تُخْرَجُه من الخلِّ، تبسطه على غربال وتُنَشِّفه في الظلِّ. ثم تُثَلِّقُه^١ في مقلا حَافٍ حتَّى يجمي ويجمّر ولا يَحْتَرِق. ثم يُدَقُّ ويُغْرَبَل بِشَقِيْق . ثم يؤخذ من الزنجبيل اليابس الغير مسوس، ومن الفلفل: من كل واحد أربع أواق. ومن الدارصيني وزريعة الفيجن البستاني والنانخة ودقاق القرنفل^٢ وبورق^٣: من كل واحد مثقالان. ومن السكر الطبرزد: ثمانية أواق.

تُدَقُّ جميع هذه العقاقير وتُنخل. ثم يؤخذ من عسل الشهد بعد نزع رغوته، قَدْر الكفاية؛ فإذا صار فاتراً، فاطرح فيه العقاقير، إلا البورق والزعفران — فإنها يطرحان فيه آخر. ثم يُخْرَك حتَّى يصير لعوقاً، ويُعجن | ناعماً ويُفَع. ويؤخذ منه مقدار القسطة الصغيرة؛ وعلى الرقيق، مثل الجوزة. ويُشرب عليه الماء الفاتر والطلاء الرقيق. فإنه جليل القدر، نافع.

١ صفة [دگان ل ٢١-١٨^ط ٢٢-٢١ = د ٢٩-٢٨^ط ٢٣-٢٢]؛ «الكوتية الكبرى التي تُنسب إلى أبقرات» تصريف I ٤٨١-١٨^ط ٢٧؛ ≈ «كوتية» (> الأباخرة الحكيمة) هارونية ٣٢٧-١٨^ط ٨؛ ≈ «جوارشن الكوتية = دياسقوليپوس» فردوس ٤٧٤-١١^ط ٢٤؛ ⇒ «*San.tu Γ* «*τὸ Διοσπολιτικὸν φάρμακον*» ١١٧-٢٨^ط ٢٨؛ [> Διοσπολίτης] .

٣ تنفع [«ينعم» دل، «منافعه» د^٢ || ٣ البرد] «الأبردة» دت || ٤ الذي [- د || ٥ النكهة] «النكهة» د || ٦ كَوْنٌ... أبيض [«من الكون المحبب الأبيض رطل» د، «من الكون الأبيض المحبب رطل» ت || ٧ ثلثيه] «يلقي» ت، «تفليه» د، «ثم يقلى» هف، «*φρυγέσθω*» Γ || ٧ مقلا] «مقلا» د^٢، «مقلاً» ت || ٧ يجمي ويجمّر [«يجمر» دت || ٧ بشقيق] «بشقيق» د || ٩ والنانخة] «والنانخة» د || ٩ بورق [- دل، «وبورق [وزعفران]» د^٢، «وبورق من كل واحد نصف اوقية ومن الزعفران وجوز^٢ وبوز وقافه وحب العروس من كل واحد مثقالان» ت || ٩ مثقالان] «مثقالين» د || ١٢ عسل... رغوته] «العسل المنزوع الرغوة» ت || ١٤ القسطة] «القسطة» ت || ١٤ والطلاء الرقيق] «أو شراب مزوج» ف || ١٥ القدر] «المنفعة» ت.

٣ تنفع [«نفع» پ || ٧ وتُنَشِّفه] «وتنسه» پ || ٧ بشقيق] «سسيق» پ || ١٤ والطلاء] «الطلى» پ.

صفة جوارشن البلادر

4.23

يؤخذ فلفل ودارفلفل وهليلج كابلّي وبليج، وقشر أملج منزوع النوى، وجندبادستر: من كلّ واحد أربعة دراهم.

ومن عسل البلادر وذرّونج وقسط وسكر طبرزد وحبّ غار: من كلّ واحد اثنا عشر درهما.

يُدقّ الجميع ويُنخل ويُعجن بعسل منزوع الرغوة وسمنٍ بقرّي. ويُستعمل بعد ستة أشهر.

الشربة منه: وزنٌ درهين بماء الكرفس.

ويُداف عسلٌ نخلٍ وشيءٌ من سمن بقر، وتُلتّ به الأدوية قبل عجنها حتى يستوي.

وفي نسخة أخرى — يُداف على البلادر شيءٌ من دهن لوز، وتُلتّ به.

وذكر **حنين ابن إسحق** أنّ الشربة من جوارشن البلادر، بعد تركها ستة أشهر: وزنٌ درهم بماء الرازيانج وماء الكرفس.

ويجذر شاربه من الكد والتعب وشرب الشراب والجماع، وليكن طعامه من قروح.

نافع، إن شاء الله.

١ صفة [«جوارش البلادر» دكان ل ٢١: ١٥-٢٧ = د ٣٠: ٢١-٣٠؛ ≅ تصريف I ٤٨٧: ٢٧-٣٣.

٢ يؤخذ [«تأخذ» د ٢ وهليلج [«واهليلج» د، «ولحا الاهليلج» ت ٢ وقشر... النوى [«وشير املج» ت ٢ وقشر]
— د ٤ وذرّونج [«واترج» ت ٤ وحبّ غار [«وحبّ الغار وسعد» ت ٤ اثنا عشر درهما [«واستارين» ت ٥ يُدقّ
الجميع [«تجمع وتدق» ت ٥ وسمنٍ بقرّي [«وسمن البقر ودهن لوز حلو» ت ٧ ويُداف [«وليذاب» د، «وليذاب» ت
«وليذاب» دل ٧ عسل... [«عسل البلادر بشيء من دهن اللوز وتلتّ به الادوية حتى يستوي» ت ٧ بقر [«بقرّي»
د ٧ وتلتّ [«وتلتّ» د ٧ يستوي [«تستوي» د، «يستوي» ت، «تستوي» دل ٨ يُداف [«وليذاب» د،
«وليذاب» دل ٨ وتلتّ [«وتلتّ» د ٩ جوارشن البلادر [«جوارش البلادر» د ٩ تركها [«تركة» د ١١ من...
الشراب [«من الكدر [«الحرد» ت] والغضب وشرب الشراب والتعب» دت ١٢ نافع] — د.

٤ وذرّونج [«وذرونج» پ ٤ غار [«عار» پ ٧ وتلتّ [«ويلت» پ ٧ يستوي [«يستوي» پ ١١ والتعب [«والغيب» پ.

4.24

صفة جوارشن الحلتيت

ب ١٠٣

يؤخذ حلتيت طيب، وفلفل أسود وخردل وحرف: من كل واحد جزو.

يُدق ويُنخل ويُجَن بعسل || منزوع الرغوة.

الشربة منه: مثل البندقة.

نافع من برد المعدة والنافض المتطاوول والسعال المتولّد من البرد، ويُخرج حبّ القرع.

وإذا عالجَتْ به مَنْ به سعال، حَبَّبَتْ منه حبًّا وأمرتْ بإمساك الحبة تحت اللسان.

وإن أردتْ به قتل حبّ القرع والديدان، فاسق منه بماء طبيخ الشيح الأرمي والشونيز والترمس

والقسط — فإته مجزّب.

وإن أردتْ به تسخين المعدة، فاسق منه بشراب غير ممزوج — فإته مجزّب.

4.25

صفة معجون الخرايب

١٠

محمودة: أربع خرايب.

وحبّ الأفيثون: جزو.

صبر يماي: ثلث خرايب.

تاكوت: جزو.

تُدق العقاقير وتُنخل وتُعجن.

وتُشرب على حمية واحتراس.

ينفع من الحمراء الظاهرة على البدن والحزازات والقروح الغليظة التي يخرج منها الماء الأصفر.

١ صفة [«جوارش الحلتيت» دكان ل ٢٠٠-٣١٠-٢٠ ظ ٩ = د ٢٨-١١-١٨؛ ≡ تصريف I ٤٨٢-٢٨-٣٣؛ ≡ «دواء الحلتيت» فردوس ٤٦٠-٤٦٠-٦ || ١٠ صفة [دكان ل ٣٤-٣٨-٨ = د ٤٢-٢١-٤٢ ظ ١.

٢ وفلفل أسود [وفلفل وشونيز » ت، «وشونيز وفلفل» ف || ٤ البندقة [«الجلوة» ف || ٥ نافع [«منافعه» د، «ينفع»

دل || ٥ والنافض المتطاوول [«ومن الحمى النافض العتيقة» ف || ٥ ويُخرج حبّ القرع [«ومن الحيات (التي) تكون في

البطن» ف || ٦ وإذا...] - ف || ٦ الحبة [«الحبة منه بعد الحبة» دت || ٩ أردتْ به تسخين [«أردته لتسخين» د ||

١١ محمودة [«سقمونيا» دل || ١٢ جزو [«من كل واحد جزء» دل، «من كل واحد ستة دراهم» دل || ١٤ تاكوت [«سقمونيا

تاكوت» د || ١٧ ينفع [«منافعه» د || ١٧ الحمراء [«المرّة الحمراء» دل، «كثرة الحمراء» د || ١٧ والحزازات [«والحزازات» د،

«والحرارة» دل.

١٤ تاكوت [«تاكوت» ب || ١٧ والحزازات [«والحرارات» ب.

صفة حب الكية
النافع لتنقية المعدة والرأس، ويجلب ما فيه من الفضول
وهو الحب القديم
يؤخذ في كل وقت ويسهل إسهالا قويا

4.26

- ٥ يؤخذ صبر سقظري أحمر: ثلاثة دراهم.
 مصطكى: درهم.
 يُسحق ويُغريل ويُعجن بشيء من ماء، ويُجَبب أمثال الفلفل.
 ويؤخذ عند النوم من تسع حبوب إلى إحدى عشر حبة (وذلك وزنُ درهم) على العَبّ ليلةً وليلةً. ^{١٠٣ ط}

صفة الجوارشن المعروف بالجامع
وهو مسهل

4.27

- ١٠ تريد أبيض قصبِيّ مثقَب: ثلثون درهماً.
 لحاء إهليلج كابلِيّ، نوار بنفسج وورق ورد أحمر: من كل واحد عشرة دراهم.
 أصل السوس المجرود الأعلى، وأفسنتين روميّ: من كل واحد ستة دراهم.
 زنجبيل يابس ودارصينيّ وبزر رازياخ عريض وأيسون وسنبل هنديّ وأسارون وقرنفل ومصطكى: من كل واحد أربعة دراهم.
 ١٥ وفقّاح الإذخر وسُغد مقشّر وخولنجان وصندل أصفر وطباشير أبيض: من كل واحد ثلاثة دراهم.
 بزر كرفس وناخحة وقشر سليخة ودارفلفل وحبّ بلسان وعوده وزعفران وقسط حلو: من كل واحد درهماً.

١ صفة [دكان د ٤٣ ظ ٢٢-١٨؛ ≈ «حب الشيبان = حب الكية» تصريف I ٤١٤-٢٤-٢٦؛ ≈ وساد ٢٩٧-١١-١٣ ||
 ٩ صفة [«الجوارش المعروف بالجامع» دكان ل ٢٣-٢٧-٢٣ ظ ٢١ = د ٣١ ظ ٢٢-٢٣-٢٠؛ تصريف I ٤٣١-١٤-٣٣
 (→ ابن الجرّار: كتاب المعدة) → معدة ١٢٩-٩-١٣٠ ١٥ («صفة جوارشن يُسهل ألفته سمّيته «الجامع»»).

٢ النافع [«منافعه» د || ٤ يؤخذ [«ويؤخذ» د || ٥ صبر [«من الصبر» د || ٦ مصطكى [«ومن المصطكى» د || ٧ الفلفل
 «الهلج الحمص» د || ٨ حبوب [«حبات» د || ٨ العَبّ [«العَب» د || ١٠ وهو مسهل [«وهو مأمون الغوائل أيضاً [ت.]،
 بما ينبغي أن يتعالج [«يعالج» ت] به السادة والأشرف [«القادة» ت]، فينتقي الفضول من أبدانهم في أمن ولطافة» مت
 || ١١ مثقَب [«الملتوت بدهن اللوز الحلو» مت || ١٢ كابلِيّ [«اصبر وكابلِي» د || ١٣ أصل [«أصول» د || ١٦ وسُغد
 مقشّر [«وسعدا/وسعدى مقشرة» د || ١٧ وناخحة [«وناخواه» م.

١ الكية [«الكنه» پ || ٨ العَبّ [«العَب» پ.

قافلة صغيرة وكبيرة وبسباسة ووج وسادج هندي وحاما وعود هندي وقصب الذريرة: من كل واحد درهم.

تُدق الأدوية وتُنخل، ويُخلط معها وزن أربعين درهماً طبرزد سكر، ويُعجن الجميع بعسل منزوع الرغوة، ويُرفع.

ب ١٠٤

ويؤخذ منه عند الحاجة وزن درهمين، || وأربعة دراهم بماء حار.

فهو نافع من أوجاع المعدة، ويُخرج العفونات الغليظة والفضول البلغمية والفضول المتولدة فيها. نافع للكلى الباردة والرياح الزائدة والقراقر والتخم والأرواح الباطنة والقلس والتخليل والقولنج ووجع الخاصرة والجشاء الحامض والفواق الحادث من الفضول البلغمية وغيرها.

ويُعدّل الطبيعة، ويُصفي اللون، ويُخرج من الجسد كل طبع فاسد.

ويُستعمل مثل الجوارشونات قبل الطعام وبعده، ويؤخذ منه في الربيع والخريف وزن ثمانية دراهم على حمية واحتراس بعد أن يُجعل في الشربة منه وزن ربع درهم محمودة إلى دانيقين (وهو ثلاثة دراهم) على قدر القوة للمستعمل له.

وقد عمدت إلى وزن أدويته، فأضفتها مرتين من عسل وعالجته به المزاج[†]: فما رأيت دواءً قطاً لطف منه ولا أسرع[‡] من تنقيته[†] ولا أكمل في علاج الأدوية التي ذكرنا، إن شاء الله.

١ وكبيرة [«وكبابة» ١ || ووج] + «وجوز بوا» مت ١ || وحاما [«وحامة» د ١ || وعود هندي] + «غير مطرى» مت ١ || ٣ طبرزد سكر [«سكر طبرزد» د، «سكر طبرزد مسحوق» مت ٤ || ويُرفع] + «في برنية ملساء الداخل - م» مت ١ || ٥ ويؤخذ... [«يؤخذ منه من مثقال إلى مثقالين بماء فاتر للنفخة والتخمة والقولنج ووجع الخاصرة» مت ٥ || وأربعة دراهم] «أو أربعة» د ٦ || فهو نافع [«منافعه» د، «ينفع» دل ٦ || المعدة] + «الباردة» مت ٦ || ويُخرج [«مخرج» مت ٦ || والفضول... فيها] «والفضول البلغمية المتولدة في المعدة» مت ٧ || نافع [«وينفع» د ٧ || للكلى الباردة] «من أوجاع الكلى الباردة» ت ٧ || الزائدة [«الدائرة» مت ٧ || والقراقر] «والبخار» م ٧ || والأرواح الباطنة [«والروائح الباطنة» م، «والرياح الزطبة» ت ٧ || والتخليل] «والتخليل» د ٨ || الحادث من الفضول [«الكائن من امتلاء الفضول» مت ٩ || ويُعدّل الطبيعة] + «تعدلاً حسناً» مت ٩ || طبع - ت ١٠ || ويُستعمل... [«ويؤخذ مثل الجوارش» م، «ويؤخذ منه» ت ١٠ || وزن ثمانية دراهم] «أربعة مثاقيل» مت ١١ || ربع درهم [«أربعة دراهم» م ١١ || محمودة] «سقمونيا» ١١ || وهو ثلاثة دراهم - مت ١٢ || القوة للمستعمل [«قوة المستعمل» ١٣ || وقد... [«وقد عملته في بعض الأزمنة» + «اعني ابن الجزار» ت] وعمدت» ت ١٣ || وزن... عسل [«مثل وزن جميع الأدوية مرتين عسلاً» مت ١٣ || وعالجته به المزاج] «وأعدته إلى النار مع نصف رطل من ماء السميرجل، وطبخته بنار لت. يبة حتى يرجع إلى فوام العسل، وعالجته به المزاج» د، «... من ماء الهندباء وماء الرازيانج وماء الكرفس ونصف رطل من ماء الرمانين ونصف رطل من ماء السفرجل... وطبخته بنار لينة... وعجنت به المراح» مت ١ || من تنقيته [«منفعة» د، «منفعة منه» ت ١١ || أكل] «انجح» ت ١ || الأدوية] «الأدوية» د.

٣ درهماً [«درهم» پ.

صفة ديبيد ورد
 نافع من وجع الكبد والمعدة
 ومن أنواع الصفراء والحُميات وسوء الهضم
 وهو عجيب

4.28

- ١٠٤٥ ط — سنبل هندي وزعفران وأسارون وقشر سليخة وقسط | حلو وفقاح الإذخر ودارصيني وطباشير أبيض ومصطكى: من كل واحد جزو.
 ومثل وزن الأدوية من ورق ورد أحمر.
 يُدق الجميع ويُعجن بعسل منزوع الرغوة.
 الشربة منه: من درهم إلى مثقال.
- ١٠ **وفي نسخة أخرى** — يُراد فيه عود بلسان وقرنفل وقاقلة وراوند وأفسنتين: من كل واحد جزو.
 ومن الأطباء من يزيد فيه صندلاً أصفر وسكر طبرزد: من كل واحد جزو. ويعجنه بالجلاب الرفيع،
 ويُسقى من ماء الرمانين أو من ماء التفاحين لأصحاب الحرّ والحدة والحُميات وسوء الهضم — فيكون
 نافعاً، وقد جرّبته فحَمَدْتُهُ.

صفة ديبيد الراوند العشامري

4.29

- ١٥ يؤخذ قسط هندي وزعفران ودارصيني وسنبل هندي: من كل واحد أوقية.
 راوند صيني، ثلثة أواق.
 قشر سليخة وأسارون ومترّ أحمر وفقاح الإذخر وزراوند مُدَخَّرَج: من كل واحد نصف أوقية.
 يُدق ذلك فينخل ويُعجن بمثل وزن العقاقير مرّة ونصف من العسل المنزوع الرغوة، ويُرفع.
 ويُسقى منه نصف مثقال بماء الأنبسون أو بمطبوخ الأصول.
- ٢٠ نافع من ضعف الكبد والسدد وريح الأحشاء وسوء الهضم، إن شاء الله.

١ صفة] «ذبيد ورد محكم» دكان ل ٢٧ ط ١٣-٢ = د ٣٥ ط ١٨-٣٦؛ زاد ٤٢٥-١٣؛ هارونبة ١٦٥-١٠-٦ ||
 ١٤ صفة] «دكان ل ٢٧ ط ١٠-٢ = د ٣٥ ط ٢-٣٥؛ تصريف I ٣٦٦-٣٠٣٦٧؛ زاد ٤٢٣-١٥-٤٢٤.

٢ نافع] «وهو نافع» د ٣ أنواع] «لذع» ز ٨ ويُعجن] «وينخل ويعجن» د ١٠ وفي نسخة أخرى... - ه ||
 ١٥ يؤخذ] - د ١٥ وسنبل هندي] «والسنبل» ز ١٦ ثلثة] «ثلث» دل، «أربعة» دمت ز ١٨ العقاقير] «الدواء»
 تز ١٩ نصف مثقال] + «إلى درهم إلى مثقال» ز ٢٠ نافع] + «مجرّب منبعته» دل.

١١ صندلاً] «صندل» پ (= دل).

4.30

صفة جوارشن العود

يؤخذ عودٌ طيبٌ وجوز بوا وقرنفل ملقوط وسكٌ ممسكٌ || وبسباسة وصندل: من كل واحد أوقيتة. پ ١٠٥
يُدق ويُخل ويُعجن بعسل منزوع الرغوة.

4.31

صفة دبيد لك

پ ١٠٥ ط

يؤخذ لك: ستة دراهم.
فوة وزعفران وسنبل وأسارون وسليخة: من كل واحد درهمان.
دارصيني ومتر وقسط وققاح إذخر: من كل واحد درهم.
(— —)

١ صفة] ≡ «جوارش العود النافع من الورم الرطب في المعدة» تذكرة^{٢٠} ٢١-٢٥؛ ≠ «جوارشن العودِي» فردوس
٤٧٩-٤٨٠.

٢ عودٌ طيبٌ] «العود الطيب» ت || ٢ وقرنفل ملقوط] «والقرنفل الطيب» ت || ٢ ممسك] «والسك المسك» ت ||
٣ الرغوة] + «ويؤخذ منه اربعة درهام ان شاء الله» ت.

٢ ممسك] «مسك» پ || ٦ فوة] «فوه» پ.

صفة ديبد لك
على نسخة إسحق بن عمران

4.32

وهو ديبد لم يُعالج المعالجون بمثله: يُفتح سدد الكبد والمعدة الباردة ووجع الطحال ولكل ما يُتخوف حدوث الاستسقاء والرياح الشَّرَاسِيفِيَّة ولكل فضل غليظ — وقد جرَّبته مرارًا فحَدَّثته، وما رأيتُ دواءً أسرع منه نَجْحًا.

يؤخذ من اللِّك المنقى من عيدانه: وزن عشرة مثاقيل.
وقسط حلو هنديّ وحبّ بلسان وعوده وقشر سليخة وأسارون ودارصينيّ وزعفران وفقّاح إذخر وراوند صينيّ ومصطكى وزراوند مدحرج: من كلّ واحد ستة مثاقيل.
ومرّ أحمر وجنطيانا وبزر رازياخ وأنيسون وبزر كرفس وجعدة وقرنفل وكّون كرمانيّ وأفسنتين روميّ وحشيش غافت وجوز بوا وقاقلة وكبابة: من كلّ واحد مثقالان.
تُدق الأدوية وتُنخل وتُعجن بعسل منزوع الرغوة، ويُرفع في إناء.
الشربة منه: من درهم إلى مثقال، بماء البقول أو بمطبوخ الأصول.
نافع، إن شاء الله.

١ صفة [دكان ل ١٧٠٢٧-١٢٧ ط ١ = د ٣٥ ط ١٧-٦ = د ١٠٤ ط ١٩-٤؛ تصريف I ٣٦٦-٢٤٣-٢١٣؛ زاد ٤٢٤-١٠٤٢٥؛ هارونبة ١٠٦٣-١٠٠؛ ديبد لك الأصفر» فردوس ٤٥٩-٢٤٦٠-٣٤٦٠.

١ ديبد [ذبيد» دلز ه ١ لك] [لكا» دلجت، «اللک» د ٢ على... عمران] «من كتاب إسحق بن عمران ت، «على ما وصفه إسحق بن عمران في كنبه بخطه، مجزّب صحيح» ز ٣ ديبد [ذبيد» دلز ٣ يُعالج المعالجون] [بتعالج المتعالجون» دلجت، «يُعالج المتعالجون» زد ٣ يُفتح [لتفتيح» تز ٣ الكبد... الباردة] [الكبد الباردة المزاج جدًا] [الباردة والمزاج ز] [والصلاية والأورام في الكبد والمعدة الباردة» تز ٣ يُتخوف] + «منه» دز، «معه» ت ٤ الشَّرَاسِيفِيَّة [الشَّرَاسِيف] ت، - ز ٤-٥ وقد... نجحًا] «قال مسيح بن الحكم وقد جرَّبته مرارًا فلم أر أفضل منه» ه ٦ يؤخذ [أخلاطه يؤخذ د ٦ عيدانه] «عيدانه وقشره» ه ٦ وزن... مثاقيل] - ز ٦ مثاقيل [دراهم] ت ٧ وقسط حلو هنديّ [وقسط هنديّ] ه، «وقسط حلو وسنبل هنديّ» تز ٨ مدحرج [طويل] ت، «مدحرج وطويل» ه، «مدحرج وزراوند طويل» دز ٨ ستة [ثمانية» ز (ستة» ز ٩ وأنيسون] - ه ١١ منزوع الرغوة [«مطبوخ» ه ١١ إناء] «انا جتم» د، «إناء حتم» د ه، «إناء ختم» دل، «إناء أملس الداخل» ز، - ت ١٢ درهم [درهمين» د ١٢ مثقال] «مثقالين» ده ١٢ بماء [بمياه» تز ١٣ إن شاء] «بإذن» د.

٤ الشَّرَاسِيفِيَّة [الشَّرَاسِيفيه» پ.

4.33

صفة دبید ومرد محکم
نافع من وجع الكبد والمعدة ومن أنواع الصفراء
والحميات وسوء الهضم
وهو عجيب

- ٥ سنبل هنديّ وزعفران وأسارون وقشر سليخة وقسط حلو وفقّاح الإذخر ودارصينيّ وطباشير أبيض ومصطكى: من كلّ واحد جزو. ومثل وزن الأدوية من ورق ورد أحمر. يُدقّ الجميع ويُنخل ويُعجن بعسل منزوع الرغوة. الشربة منه: من درهم إلى مثقال.
- ١٠ وفي نسخة أخرى — يُزاد فيه عود بلسان وقرنفل وقاقلة وراوند وأفسنتين: من كلّ واحد جزو. ومن الأطباء من يزيد فيه صندلاً أصفر وسكر طبرزد: من كلّ واحد جزو. ويعجنه بالجلّاب الرفيع ويُسقى من ماء الرمانين أو من ماء التفاحين لأصحاب الحتر والحدة والحميات وسوء الهضم — فيكون نافعاً وقد جرّبته فحمدته ٥

4.34

صفة معجون الصندلين

- ١٥ صندل أحمر وأصفر وورد وسعد: من كلّ واحد نصف أوقية. سنبل ومصطكى: من كلّ واحد ثلاثة دراهم.
- ب ١٠٦ بزر حمّاض وبزر رجلة: من كلّ واحد || ربع أوقية. زراوند: درهم. يُعجن بعسل. نافع، إن شاء الله ٥
- ٢٠

١ صفة [4.28 ↑].

١١ صندلاً [«صندل» ب].

صفة معجون البروم
وهو يذفي المعدة الباردة
ويتقي الرياح من الجوف

4.35

بزر رازيانج عريض وبزر كرفس بستانيّ وبزر شبتّ وأيسون وناخاة وزنجبيل وقرفة وعافرقرحا ولفل
وشونيز ومون وكراويا: من كلّ واحد أوقية.
يُدقّ كلّ واحد على حدة ويُخل، ويُعجن الجميع بثلاث أمثاله عسل منزوع الرغوة دافئًا.
فهو نافع مجزّب.

صفة معجون خبث الحديد

4.36

يؤخذ هليلج أسود ولبليج وأمليج: من كلّ واحد خمسة دراهم.
سنبل طيب وإذخر وسعد وزنجبيل ولفل وناخاة وكندر: من كلّ واحد درهمان.
خبث الحديد منقوع في خلّ خمّر أسبوعًا: خمسة عشر درهماً.
يُعجن الجميع بعسل قد طُبخ فيه أمليج.
فإنه نافع، إن شاء الله.

١ صفة] دكان^٣ ٤٣-١٨-١٨ || ٨ صفة] ≡ «دواء الخبث المعجون» منصورى ٢٤٤٥-٧.

٤ بزر] «يؤخذ بزر» د || ٤ وناخاة] «وناخاة» د || ٦ دافئًا] «دفي» د || ٧ فهو... مجزّب.] «ويرفع» د || ٩ خمسة] «خمسة
عشر» م || ١٠ سنبل طيب] «سنبل» م || ١٠ وناخاة] «وناخواه» م || ١٠ درهمان] «خمسة عشر درهماً» م || ١١ في
خلّ خمّر] «بالخلّ» م || ١١ أسبوعًا] + «والمغلي بعد ذلك» م || ١٢ الجميع] «كلّ ذلك» م || ١٢ أمليج] «ماء الأمليج» م ||
١٣ فإنه... الله] - م.

٢ يذفي] «يدفي» پ || ١١ أسبوعًا] «اسبوع» پ.

فصل

5

في الأشربة
والربوبات

5.1

صفة شراب الفاكهة

- ٥ يؤخذ سفرجل وتَفَّاح وحمّاض الأترج وكمثرى ورمّان وحصرم (إن وُجد) ويُنقع فيها شيء من السمّاق وزعرور ونبق وحبّ آس وغيره يومًا وليلاً أو يومين وليلتين. ثم يُعصر ويُصَفّى الماء عنها، ويُطبخ بنار لينة حتى يصير له قوامٌ، ويُصَفّى ويُستعمل عند الحاجة إليه. ينفع المرّة الصفراء والإسهال المرّي، ويُشهي المحرورين للطعام، ويُقوي المعدة، بإذن الله. ^{ب ١٠٦ ط}

5.2

صفة شراب النعناع

- ١٠ يؤخذ من عصارة الرمانين الحلو والحامض المدقوقين مع قشرهما: وزنين. ومن عصارة النعنع الرطب وعسل نخلٍ منزوع الرغوة أو سكر: من كلّ واحد نصف وزنٍ ما أخذت من ماء الرمانين. يُطبخ الجميع حتى يبقى منه الثلثُ ويصير له قوامٌ معتدل. ويُسقى من ذلك ملعقة بماء بارد أو بماء الشعير. وينفع المعدة التي فيها العثيانُ وتُحسّ فيها حرقة شديدة، ويعقل البطن، إن شاء الله. ^{١٥}

٤ صفة [دكان ل ٩ ط ١٨-٢٢] ٩ صفة [دكان ل ٩ ر ٨-٩ = د ٩ ط ١٢-١٧ = د ٨٨٨ ٤-١٠] ≈ «ربّ النعنع» أقراباذين س ١٨٣-١١١-١٧.

٨ ينفع [نافع] د ل ٨ المرّة الصفراء [لني المعدة] د ل ٨ للطعام [الطعام] د ل ٨ بإذن [ان شاء] د ل ١٥ المعدة ... حرقة [من المعدة التي يعرض فيها العثيان [العشيان] د] ويحسّ فيها حرقة [خرقة] د [د] دل، «العيان التي تكون في المعدة ويجبس خرقه» د.

شراب الفاكهة
لجالينوس

5.3

- يؤخذ من الرمان الحلو المتوسط القدر والسفرجل: من كل واحد عشرين درهماً.
ومن الكمثرى والعتاب: من كل واحد مائة عددًا.
ومن السمحاق: ستون مثقالاً. ٥
ومن حب الآس الغض: مائتا مثقال.
يُرص الجميع ويُجعل في قدرٍ برامٍ، ويُصب على ذلك عشرون قسطًا من الماء، واطبخه طبخًا جيدًا
حسنًا.
واعصر الثفل، وخذ الصفو، وصره على النار. وخذ ثلاثة أرتال عسل وصيِّره مع ذلك وأوقد تحته بنار
ليّنة حتى يصير في قوام العسل الخائر. ١٠
وصقه وارفعه.
ب ١٠٧: واسق منه ملعقةً بماءٍ بارد.
ينفع من ضعف المعدة والقيء والبلغم واستطلاق البطن والحرقنة التي تكون في المعدة.

١ شراب] ≡ «رب الفاكهة لجالينوس» دكان ل ٩ ١١-١٨ = د ١٠ ٨-١٥؛ ≡ «رب الفاكهة لجالينوس» تصريف I
٥٤٠-٣٢٠٤١؛ ⇒ «rob de fructibus» ψΓ SecMont ٣٦٧-٥٦٣٦٨.

٣ الرمان الحلو] «ماء الرمان الحامض» ت ψΓ || ٣ عشرين درهماً] «عشرون درهماً» د، «عشرون عددًا» دلت ||
٦ مائتا] «مائة» ت || ٩ وخذ الصفو] - ت ψΓ || ٩ وصيِّره مع ذلك] «واجعله في ذلك الماء» ت || ٩ وأوقد] «وقد»
د || ٩-١٠ بنار ليّنة] - ت || ١٠ في قوام] «بمزلة» دل || ١٣ ينفع] «منافعه» د || ١٣ والبلغم] - ت ψΓ.

5.4

صفة شراب سكينجين سكري
ينفع الأبدان الحارة والحُميات الحادة الدموية والصفراوية
وعلل الكبد والطحال الحارة السبب
ويفتح السدد

- ٥ يؤخذ لحاء أصل الرازيانج ولحاء أصل الكرفس ولحاء أصل الهندباء: من كل واحد عشرين درهماً، بعد أن يُغسل من ترابه.
- ورق ورد أحمر وبزر (الرازيانج العريض: من كل واحد عشرة دراهم.
- سنبل هندي وبقاق الإذخر وبزر كرفس: من كل واحد خمسة دراهم.
- يُجمع ذلك فينقع في ستة أرطال خلّ خميرٍ ثقيفٍ ممزوج بأربعة أرطال ماء صافٍ مقترٍ حتى تعتدل حموضته، ويُترك فيه يومين. ثم يُطبخ بنار لينة حتى يصير على النصف، ثم يُمرس ويُصنّى ويُروَّق ذلك الصفو يوماً وليلاً.
- ثم يُعاد إلى النار ويلقى عليه مثله سكر طبرزد أو سليمانّي، ويُطبخ بنار لينة حتى يصير له قوام الأشرية. وتُنزع رغوته ويُترك حتى يبرد.
- الشربة منه: أوقيتة بأربعة أواق ماء.
- ١٥ فإن أردت تحسين لونه، صبغته بوزن نصف درهم زعفران.
- وإن أردت الزيادة في تبريده، فاجعل مكان الماء الذي أمرنا ماء البطيخ المعصور أو ماء القرع المشوي أو ماء الرمانين، ويُطبخ على حسب ما تقدّم، ويُفتق بوزن درهم كافور.
- وإن أردته مسهلاً، زدّ فيه سقمونيا.

١٠٧ ط

١ صفة] ≡ زاد ١٣٤٤٤-١٣٤٤٤؛ ≈ فردوس ٤٨٥-١٢-١٨.

٢ الحادة] «الحارة» ز || ٩ مقترٍ] «معين» ز || ٩ تعتدل] «يعذب وتعتدل» ز || ١٠ يومين] + «منقوعاً» ز || ١٣ رغوته] + «الأول فالأول» ز || ١٣ حتى يبرد] + «وجعل في النوم» ز || ١٦ أمرنا] + «أن يُمزج به الخل» ز || ١٧ الرمانين] «الرمان الحامض» ز || ١٨ وإن... سقمونيا] «وإن أراد مُريد أن يُصير هذا السكينجين مسهلاً — فإذا تمّ طبخه وأراد أن يبرد، فليأخذ من السقمونيا من درهمين إلى مثقالين، فيُسحق ويُصير في خرقة خفيفة، ثم يلقى في الشراب وهو على النار يغلى — فيكون مسهلاً [...]» ز.

٢ والحُميات] «والحميات» پ || ٩ صافٍ] «صافي» پ || ١٠ ويصنّى] «وصفاً» پ || ١٥ تحسين] «تحسن» پ || ١٨ أردته] «اراده» پ || ١٨ مسهلاً] «سهل» پ.

صفة شراب متخذ من خبث الحديد

5.5

يؤخذ بزر كرفس وبزر رازياخ وأنيسون وأهبل وبزر سذاب وبزر الجزر وكُمون كرمانّي وكراويا وبزر اللّفت وبزر الكزّاث وبزر خشخاش وأنجدان أسود وبزر بصل ومصطكى ولّبان: من كلّ واحد أربعة مثاقيل.

فُسط وعيدان سليخة أو سُعد فارسيّ وكزبرة وسنبل الطيب وإكليل الملك وفرنجمشك وهال وقاقلة وجوز جُنْدَم أو سودا وأشنة وقرفة وبزر الرطبة وبزر الأجرّة وبهمن أحمر وبهمن أبيض وفودنج وشيطرج هنديّ وهليلج أسود وأصفر وأملج وبليج منزوع النوى: من كلّ واحد مثقال.

ومن خبث الحديد: مائة مثقال.

تُطبخ هذه الأدوية بخمسة عشر رطلًا نبيذ حتى يبقى الربع ويُزل عن النار ويُصقّى.

ويُشرب منه كلّ يوم ثلاثة أواق.

فإنه نافع مجرب من استرخاء المعدة والبواسير وسوء الاستمراء وقلة الشهوة.

١ صفة] «شراب معمول بخبث الحديد» د دگان^٢ ١٩٠١٨-١٩٠١٨: ≡ «خبث الحديد المطبوخ» أقراباذين س ١٧١٤٧-١٧١٤٨: ≈ «إطريفل الحديد» هارونيتة ١٦٣٣١-٣٣٣٣ (→ جالينوس).

٣ وأهبل] + «ورشاد» ق || ٣-٤ وبزر الجزر... الكزّاث] «وبزر الجزر وبزر الجرجير الكزّاث» د، «وبزر الجزر وبزر الجرجير وبزر الشبث وكُمون كرمانّي وكراويا وبزر السلجم وبزر الكزّاث» ق || ٦ فُسط] «ومن الفسط» د || ٦ وعيدان سليخة] «وعيدان بلسان وسليخة» ق || ٦ وسُعد فارسيّ] «والصعتر الفارسي» د، «وسعتر فارسيّ ونبطي» ق، «وسعتر» ه || ٦ وفرنجمشك] «والمحشمك» د || ٧ جُنْدَم] «شندم» د || ٧ وسودا] «وسودا» د || ٧ وفودنج] «وتودرج أحمر وأبيض» ق || ٨ وهليلج أسود وأصفر] «واهلبيج كابلّي واهليلج اسود وهليلج اصفر» د، «وهليلج أسود هنديّ وكابلّي وأصفر» ق || ٨ وأملج... النوى] «وبليج وشير أملج منزوع النوى» ق || ١٠ تُطبخ... نبيذ] «تجمع هذه الأدوية فتطبخ بشراب أو بجمهوريّ أو بنبيذ زبيب وعسل خمسة عشر رطلًا» ق || ١٢ نافع... الشهوة] «غاية» د || ١٢ المعدة والبواسير] «المقعدة» ق || ١٢ الاستمراء] «الهضم» ق.

٧ وسودا] «وسودا» پ || ١٠ رطلًا] «رطل» پ.

5.6 **صفة ربّ التوت لجالينوس**

يؤخذ من عصارة التوت: (خمسة) أجزاء. ومن العسل: جزو.
ويطبخ الجميع حتى، إذا قارب الانعقاد، أُلقي فيه من الزعفران (والمتر) لكلّ || رطل من كلّ واحد مثقال ١٠٨ پ
ونصف. ويُنزل ويُرفع، ويُستعمل — وهي أفضلُ الصناعات في ربّ التوت على رأي جالينوس.

5.7 **صفة شراب الحصرم**

تأخذ من عصير العنب الحامض ما شدّت فتوقد تحته حتى يصير على النصف، ثمّ تضعه يبرد. فإذا بُرد،
أغله، ثمّ صَفّه ثانيةً. ثمّ خُذْ منه خمسة أرطال، ومن العسل المنزوع الرغوة رطلًا. ثمّ أعدّه على النار
حتى يصير بمنزلة العسل الرقيق، ووضعه في إناء زجاج في الشمس أربعين يومًا، ثمّ ارفعه.
الشربة منه: ملعقة بماء بارد.
ويُستعمل فيه ضربٌ آخر بغير عسل، وصفته:

5.8 **شراب الحصرم من الساذج**

يؤخذ من ماء الحصرم قبل أن يتناهي ويقارب الحلاوة، ويُلقى في قَدْرٍ جديدة. ثمّ يُحمل على النار ويُطبخ
حتى يبقى الخمس، ويُرفع ويُستعمل.
فإن أردته سكرًا، عقدته بالسكر؛ وإن أردته عسلًا، فعلت به كذلك على قَدْرٍ ما تريد من حموضته
وحلاوته.

وهو ينفغ (من) الحمى الحادة واستطلاق البطن والعطش الذي يكون من المزة الصفراء.

١ **صفة** [دگان ١٥ ظ ١٣-١٠ = د ٣٠٣٩٢-١٠٠٣٩٢؛ تصريف I ٤٥٤١-٦؛ هارونية ١٨٣٠٥-٢٣٠٧ (→ جالينوس
تدج)؛ ≈ «ربّ التوت - ديامرون» فردوس ١٨٤٨٢؛ → «τὸ διὰ μόρων» XII Γ ١٧-١٣٩١٢ «Hραc ó z»
Kαππάδοξ: ٧٩١٢-١٠٩١٤، ١٠٩١٤-٣٩٢٩) || **صفة ٥** [دگان ١٤ ظ ٥-١٠ = دگان ١٣٩٠-١٩٠؛ حشائش
١١٢ ظ ٦-٤ (⇒ «ὀμφακόμελι» III Δ ٢١-١٧٢٠) || **شراب ١١** [دگان ١٤ ظ ١٠-٥ = د ١٩٠٠-١٩٠٠ ظ ٤؛
«ربّ الحصرم» تصريف I ٥٣٧-٢٦-٢٦؛ ≈ «ربّ الحصرم الساذج» أقراباذين س ١٨١-١٦٠.

٢ **خمسة** [د || ١٣ الانعقاد] «الانقطاع» ه || ٣ والمتر] Σ، «καὶ συμύρνης» Γ || ٤ ويُنزل ويُرفع] «ويبرد ويرفع» ت || ٤ وهي
... **جالينوس** [XII Γ ١٣٩١٢ «ἐμοὶ δὲ ἀρέσκει» || ٤ الصناعات في] «الصناعات» د || ٦ تضعه يبرد] «ضعه» د،
«صيه» د || ٨ في الشمس] - د || ١٠ فيه] «منه» د || ١٠ وصفته] - د || ١٢ جديدة] + «مقصرة كما قلنا» ت ||
١٤ بالسكر] + «على قدر ما تريد» د || ١٦ وهو ينفغ] «منافه» د، «ينفغ» د || ١٦ (من) || د.

٦ تضعه يبرد] «يصعه يبرد» پ || ١٢ يتناهي] «تناهي» پ.

صفة مربب التين

5.9

يؤخذ من أبيض التين وأنضجه وأغظله وأحلاه والبعيد من العفن والسوس، فيشقق ويُلقي في قدرٍ
 جديدة مقصّرة بالماء. ويُلقي على كلّ رطل خمسة أرطال ماءً عذبًا صافيًا، ويُطبخ حتى يتهرأ، ثم يُصقّى
 (ويُلقي) على ذلك الماء نصف التين الأول. ثم يُطبخ على ذلك الماء على حسب طبخ الأشرية حتى
 يصير في قوام الأشرية، ويؤمن عليه من الفساد، ويصقّى ويرفع.
 يؤخذ منه كلّ يوم عند تعذّر الطبيعة، ويُلين باعتدال، وينفع من علل الرئة والكلبي والمثانة، ويزيد في
 الإنعاط والجماع، ويدرّ البول، إن شاء الله.

صفة شراب الحشخاش

5.10

تأخذ زريعة الحشخاش الأبيض: ثلاثين درهماً.
 ومن الأسود (وهو بزر شقائق النعمان): عشرين درهماً.
 ومن الورد المنزوع الأقماع: عشرة دراهم.
 جلنار وقاقيا: من كلّ واحد ثلاثة دراهم.
 يُطبخ بأربعة أرطال ماء حتى يبقى النصف، ثم يُصقّى ويُطرح عليه رطل فانيد ساذج حتى ينعقد مثل
 الجلّاب، ويُجعل في إناء زجاج.
 فهو جيّد نافع لتقطع السهر وتؤم المريض، ويقطع المواد من الصدر.

١ صفة] دكان ١٦ ط ١٥-٢٢ || ٨ صفة] دكان ل ٩-١٤ = د ٩ ط ١٧-٢٣ = د ٨٨٨-١٧٠.

٢ أبيض] «اطيب» د ٣ رطل] + «منه» د ٣ صافيًا] «صافي» د ٤ (ويُلقي) د ٥ عليه] «معه» د ٦ الطبيعة] «منه من ربع رطل الى ثلث مناجعه من جبوب الطبيعة» د ٩ زريعة] «من زريعة» د ١٠ الأسود] «بزر الحشخاش الاسود» دل، «زريعة الحشخاش الاسود» د ١٤ إناء] «ظرب» دل ١٥ فهو] «إنه» د ١٥ نافع] «ربع مناجعه» د ١٥ لتقطع] «ينقطع» د.

٦ والكلبي] «والكلا» پ.

5.11

صفة مرب السفرجل الساذج النافع من استطلاق البطن والقيء والحرايرة

يؤخذ سفرجل مَرَّ عذب ويُقشَّر ويُتقى جوفه ويُدقَّ ويُعصر. ويُطبخ بنار لينة حتى يبقى منه الربع. ثم يُجْرَك ويُصْفى ويُترك حتى يسكن، ويُصْفى أيضًا. ويُردُّ إلى القدر ويُطبخ حتى يبقى منه الربع، ويُصْفى يُستعمل.

5.12

ب ١٠٩

صفة مرب الرمان الساذج النافع من الغمّ والتلهب والعطش الشديد والحمايات || الحاذة

يؤخذ رمان مَرَّ، يُنثر حبه ويُعصر ويُصْفى، ويُطبخ حتى يبقى منه الربع، ويُستعمل.

5.13

١٠

صفة مرب الآس النافع من القيء والاستطلاق وضعف المعدة

يؤخذ حب الآس نضيجًا طريًا، فيدقُّ ويُعصر ماؤه. ويُصْفى ويُطبخ في قدرٍ نظيفة حتى يبقى منه الربع. ثم يُنزل عن النار ويُصْفى ويُستعمل.

١ صفة] ≡ أقراباذين س ١٨٠-١٥٠؛ ⇒ «صنعة الشراب الذي يُقال له ميلومالي» حشائش ١١٢-٣٣-١١٢ ط ١
«μηλόμελι = κυδωνόμελι» III Δ (١٠٠-٨٢٠) || ٦ صفة] ≡ أقراباذين س ١٨٠-٢٢١٨١؛ ≡ دكان ل ١١١-٣٢-٣٢
= د ١٣-٣٣-٤١٤؛ = د ٨٩-١٠٠-١٦؛ ⇒ «شراب الرمان» حشائش ١١٢-١٣-١٤ (≡ «ρότης οίνος» Δ
III (١٥-١٣٢١) || ٩ صفة] ≡ أقراباذين س ١٨١-٨٠؛ ≈ تصريف I ٥٣٩-٢٠-٢٤؛ ⇒ «شراب حب الآس» حشائش
١١٢-٣١-٣١٣ III Δ (١٧-٩٢٢).

٢ والقيء والحرايرة] - ق || ٣ مَرَّ عذب] ق، - Δ || ٣ ويُتقى جوفه] «فُتتقى جوفه» Δ (≡ «ἐξαίρεθέντων τὰ
«σπέρματα» || ٣-٤ ثم ... ويُصْفى] «وينزل عن النار ويصْفى ويُترك حتى يسكن» ق || ٧ النافع] «منافعه» د،
«ينفع» دل || ٧ الغمّ] ≡ ق، «البلغم» د || ٧ والتلهب... الحاذة] «والالتهاب والحمّ الحاذة» د ٨ رمان مَرَّ] «الرمان
المز» دل، «الرمان المر» د، «الرمان الذي ليس له عجم وهو نضيج» Δ (≡ «ρόας άπυρήνους [...] ώρίμους» ||
٨ يُنثر حبه] «وينشر حبه» د، «ويبين حبه» دل، «ويترك حبه» ق، - د؛ «فيخرج حبه» Δ (≡ «τῶν κόκκων»
«άπόθου» || ٨ ويُعصر] + «ماؤه» د || ٨ ويُستعمل] «ثم ينزل عن النار [...]» د؛ - Δ || ١١ نضيجًا طريًا] «μέλανα»
«παρακμάζοντα»: «ما كان أسود نضيجًا» Δ || ١١ ويُعصر] + «بلولب» Δ (≡ «δι' όργάνου» || ١٢-١١) ويُطبخ
... الربع] «فمن الناس من يأخذ العصارة فيطبخها حتى يذهب الثلثان ويبقى الثلث» Δ (≡ «οι δὲ καὶ άφείψουσιν εις»
(«τὸ τρίτον»).

٣ مَرَّ] «مر» ب || ٨ مَرَّ] «مر» ب.

صفة مربّ التفاح

5.14

النافع من المرّة الصفراء وغلّيان الدم والاستطلاق والقيء والغث.

يؤخذ تفاح مَرّ نقيّ الجوهر، ويُنقى من جوفه، ويُدقّ ويُعصر ماؤه، ويُصير في قدرٍ نظيفة. ويُطبخ بنار لينة حتى يبقى منه الربع. أو يُنزل عن النار ويُصقى ويُستعمل. ومتى ما ذهب منه الربع، فليُنزل عن النار ويُترك حتى يبرد، ويُصقى ويُستعمل.

صفة مربّ الأترج

5.15

النافع من السموم والعطش إذا شرب

والقواحي إذا طلي عليها

وبياض العين إذا اكتحل به

يؤخذ حمّاض الأترج الحامض ويُعصر ويُصقى ماؤه. ويُطبخ حتى يبقى منه الربع، ويُترك ويُصقى ويُستعمل.

صفة مربّ الحشخاش

5.16

النافع من السعال والنزلات من الرأس | في الصدر

ب ١٠٩ ط

تؤخذ مائتا خشخاشة بُيض سمان كبار جيد، ويُخرج حبّها ويُنقع بأربعة أفساط ماء عذب نقيّ يومًا وليلة. وبعد ذلك يُصير في قدرٍ نظيفة ويُطبخ نعيمًا بالماء. ويُنزل عن النار ويُترك حتى يمكن، ثم يُمرس ويُصقى. ويُلقى عليه من الماء العذب الصافي قسطين، ومن العسل قسط، ويُطبخ بنار لينة حتى يصير كاللعوق، ويُنزل عن النار ويُرفع في إناء زجاج أو غُضار.

١ صفة] أقراباذين س ١٨١-٢٣؛ ≈ «شراب التفاح» هارونيتة ١٥٣-١٠. ٦ صفة] تصريف I ١٥٣٩-٤؛ ≈ أقراباذين س ١٨٣-٩؛ ≈ هارونيتة ٣٠٧-٩؛ ≈ «شراب الأترج المرتفع» دكان د ١٤ ط ١٩-٢٢؛ ≈ ٩٠ ط ١٧-٢٠. 5-19 ↓ ١٢ صفة] «ربّ الحشخاش الساذج» أقراباذين س ١٨٦-٤-١١.

٤-٥ ويُنزل... يبرد] «ويُنزل عن النار ويُترك حتى يبرد» ق [٧ والعطش] - ت [١٠ حمّاض الأترج] «من الأترج» ت [١٠-١١ الربع... ويُستعمل] «الترج أو الحمس على قدر ما يبقى ولا يفسد وينزل عن النار ويُصقى ويصير في إناء ويستعمل...» ت [١٤ بُيض سمان] - ق [١٤ ويُخرج حبّها] «ولا يخرج حبّها ويقشرها» ق [١٤ يومًا] «يوم» ق [١٥ يمكن، ثم يُمرس] «حتى يمكن مرسه ويمرس» ق [١٧ إناء... غُضار] «ظرف زجاج» ق.

٤١ مائتا] «مائي» ب [١٤ يومًا] «يوم» ب [١٥ ويُترك] «تترك» ب [١٦ ويُصقى] «بصفا» ب.

5.17

صفة شراب شاهترج

يؤخذ الهليلج الأصفر والأسود الهندي ونوار بنفسج: من كلّ واحد نصف أوقية. يُطبخ جميعاً في رطلين ماء عذب حتى يعود إلى رطل، ثم يُصنّى ويُترك ويُردّ إلى قِدْرٍ مع رطل ونصف من عصارة شاهترج مغلى ومصنّى ورطلٍ ونصف من سكر أو ربّ عنب أملس جيّد. ثمّ يُطبخ جميعه حتى يصير في قوام الأشرية، ثمّ يُصنّى ويُرفع. الشربة منه: أوقية ونصف بمثله من ماء فاتر — وإن كان الماء قد طبخ فيه عُتَاب ومخيطة، كان أفضل. وهو نافع للجرب والحكة. ٥

5.18

صفة شراب مريحان

ب ١١٠

١٠

تأخذ من ريجان فتدقّه وتُصَفِّيه في قِدْرٍ نظيفة، || وتطبخه حتى يبقى منه الربع. ويُصنّى ويُستعمل، إلا أنّه يُضَرّ بالصدر جدّاً. وهو نافع من استطلاق البطن وضعف المعدة. ٥

5.19

صفة شراب الأترج المرتفع

(تأخذ) من حمّاض الأترج فتعصره وتُصَفِّيه، وتطبخه حتى يبقى منه الربع، ويُصنّى ويُستعمل. نافع من السموم والقوايئ إذا طُلي عليها، وبياض العين إذا اكْتُحِلَ به. ٥

١ صفة] دكان^د ١٨ ط^٥ ١٠-٥ = د^٣ ٩٣ ط^٥ ٢-٩٤ هـ || ٨ صفة] ≡ «شراب ريجان ثاني» دكان^د ١٥ ط^٣ ٥-٣ || ١٢ صفة] ≡ دكان^د ١٤ ط^٥ ٢٢-١٩ = د^٣ ٩٠ ط^٥ ٢٠-١٧؛ ١5-٥.

٣ رطلين] «رطلين» د^٥، «رطل» د^٣ || ٣ يُصنّى ويُترك] «يترك ويصبي» د || ٧ وهو نافع] «منافعه» د^٥ || ٩ من ريجان] «الريجان» د || ١١ وهو نافع] «منافعه» د || ١٣ (تأخذ) ≡ د || ١٤ نافع] «منافعه» د^٥، «ينفع» د^٣.

٣ رطلين] «رطل» پ || ٦ بمثله] پ^٥، «من مثله» پ.

صفة شراب الريحان
على مذهب ديسقوريدس
أقوى من غيره
إلا أنه يضّر بالصدر

5.20

تؤخذ أطراف الريحان الأسود الغضة مع ورقه وحبّه، وتُدْرَس وتُعَصْر. ويُصَقَّى عَصِيرُهُ وَيُلْتَقَى عَلَيْهِ مِثْلُهُ من عصير العنب الشديد الحلاوة — وقد يُلْتَقَى أَكْثَرُ وَأَقَلُّ عَلَى قَدْرِ مَا تُرِيدُ مِنْ قُوَّةِ الشَّرَابِ وَعَلَى قَدْرِ مَا تُرِيدُ مِنْ نَفْعِ الصَّدْرِ وَالسَّعَالِ. ثُمَّ تَطْبَخُهُ حَتَّى يَصِيرَ لَهُ قِوَامُ الْأَشْرِيَّةِ، وَيُرْفَعُ وَيُسْتَعْمَلُ. وَالَّذِي يُعْمَلُ مِنَ الْوَرَقِ الْغَضِّ وَحْدَهُ، أَقْوَى عَلَى حَبْسِ الْبَطْنِ؛ إِلَّا أَنَّهُ يُضَرُّ بِالصَّدْرِ جَدًّا — وَلَا بُدَّ مِنْ رَبِّ الْعَنْبِ أَوْ السَّكَّرِ.

صفة شراب الرمانين

5.21

تأخذ الرمان الحلو والمزّ فتعصره وتُخْرَجُ مَاءُهُ، ثُمَّ تَطْبَخُهُ بِنَارٍ لَيِّنَةٍ بَرَفَقٍ وَلطَافَةٍ لئَلَّا تَأْخُذَهُ النَّارُ. وَيُرْوَحُ كَمَا يُفْعَلُ فِي شَرَابِ الرِّيحَانِ حَتَّى يَصِيرَ فِي قِوَامِ الْعَسَلِ. فَمَنْ أَرَادَ اسْتِعْمَالَهُ وَشَرِبَهُ سَرِيْعًا، فَلْيَجْعَلْهُ (سَادِجًا)؛ وَمَنْ أَرَادَ آخِرَهُ مَدَّةً طَوِيلًا، طَرَحْ فِيهِ شَيْئًا مِنْ سَكَّرٍ وَيُطَالِبْهُ بِالنَّارِ حَتَّى يَصِيرَ فِي قِوَامِ الْأَشْرِيَّةِ، وَيُسْتَعْمَلُ عِنْدَ الْحَاجَةِ إِلَيْهِ[†].

١ صفة] «رب الريحان على مذهب دياسقوريدوس» دگان^د ١٥٣-١٩ = «شراب ریحان على مذهب دياسقوريدوس»
د^د ٩١٥-١٥؛ «رب الآس» تصريف I ٢٥٣٩-٣٠؛ «شراب الآس» حشائش ١١٣-٧٤ (≡ «μυρσινίτης»
Δ III ٢٢-٢٣) (١٠ صفة] دگان ل ١١٥-٢٧ = د^د ١٣٥-١٦٣ = د^د ٨٩-٢٢٥ = د^د ٨٩-١٠٥؛ هارونيتة
١٥٣-١٧٥٣.

٣ غيره] «الاولى» د^د، «الاول» د^د || ٤ يضّر بالصدر] «يؤذي الصدر بعض الإذاية» د، «يؤذي الصدر بعض الاذناء»
ت || ٥ الريحان] «الآس» Δ || ٥ الغضة] - د^د، - Δ || ٥ وتُدْرَس... عَصِيرُهُ] «فيدق ويؤخذ منه عشرة اربال» ت ||
٦-٧ الشديد... والسعال] - Δ || ٨ والذّي يُعْمَلُ] «يعمل» د^د، «يصنع» د^د، «وقد يصنع رب العنب» ت؛ - Δ ||
٨ الغض] «الغض الاخضر» د^د، «الاخضر الناعم» ت || ٩ أو السكر] «عند طبخه او السكر» د، «عند طبخه او
سكر» ت || ١١ والمزّ] «المز» د، «الحامض» ه || ١٣ سادجًا] «سادجا» د^د، «ساجرا» د^د || ١٤ ويطالبه] «وطالبه»
د^د، «وطالبه» د^د || ١٤ عند... إليه] + «عند الحاجة إليه. منافع» يذهب الصبراء، ويطهي الحرارة، ويفطع العطش،
ويحلّ أقرص المكبودين [«الافراص المكبودية» د^د] في مائه. وينفع من الحميات من قبل الصبراء ووجع الدم وحدته
[«وحده» د^د]، يحلّ بالماء ويشرب عند الحاجة إليه» د (≡ ه).

٨ يُعْمَلُ] «يستعمل» پ || ١١ ماء] «ماوه» پ (= د^د) || ١٣ شيئًا] «شي» پ || ١٤ ويطالبه] «وطالبه» پ.

5.22

صفة شراب ومرد من الورد اليابس

يؤخذ ورد يابس: رطل، فيلقى عليه الماء العذب: عشرة أرتال.
ثم يُجعل على النار ويُغلى حتى يعود في قوام الأشربة^٣، ثم يُنزل ويُروّق، ويلقى على الماء مثله سكرًا
وعسلًا، ويُطبخ حتى يعود في قوام الأشربة^٤.

5.23

صفة مربّ التفاح الحامض

يؤخذ من مائة التفاح الحامض ما شئت بعد تقشيره ونزع حبه. ثم يُطبخ برفق حتى يبقى الخمس أو
الربع، ويُرفع.
وصناعة الحلو كذلك؛ فإن أردته بسكر، فاصنعه على ما تقدّم.

5.24

صفة شراب التفاح

هو كشراب السفرجل في عمله: تأخذ خمسة أجزاء من مائه. ومن عسل النحل: جزو.
فنطبخه حتى ينعقد، وتضعه في الشمس أربعين يومًا، وترفعه.

١ صفة [دكان^٥ ٧١٠١٧٠٢٠؛ تصريف I ٥١١٠٢؛ صفة] ٥ صفة [دكان^٦ ١١٠١٨٠٢٠؛ تصريف I ٥٣٨٠١] ||
٩ صفة [دكان^٧ ١١٠١١٠١٤ = د^٨ ١٣٠٧٠١٠ = د^٩ ١٣٠٨٩٠١٧٠١٧.]

٢ رطل [«رطلا رطلا» د || ٣ يُجعل] «يحمل» ت || ٣ حتى [«الأشربة» حتى تخرج فوة الورد] د، «حتى يخرج فوة
الورد في الماء» ت ٣-٤ مثله سكرًا وعسلًا [«سكر أو عسل» ت || ٦ يؤخذ] «تأخذ» د || ٦ الحامض] - ت || ٦-٧ أو
الربع] - ت || ٨ كذلك] + «سواء» د || ٨ أردته... فاصنعه] «فإن استعمل فيه السكر، صنعت» د || ٨ بسكر] «بعسل
أو سكر» ت || ١٠ في عمله] + «حرقًا بحرف» د || ١٠ جزو] «جزأ» د || ١١ وترفعه] + «مناجعه» [«ينقع» دلج] من
الصبراء وغيلان الدم واستطلاق البطن» د (≡ 5.14 f).

٣ الأشربة] پ^٤.

صفة شراب نافع

5.25

بيرد المزاج ويقمع الصفراء ويسكن العطش ويقطع القيء المرّي وينفع من الحنفقان

پ ۱۱۱

يؤخذ ماء الرمان الحامض: رطل. ومن ماء الرمان الحلو: نصف رطل.

ومن ماء الإخاض الحامض: رطل. ومن ماء التمر هندي: رطل.

يُخلط جميعًا ويُطبخ حتى يصير له قوام.

الشربة منه: أوقيتين بماء بارد، إن شاء الله.

صفة شراب شاهترج

5.26

النافع من احتراق المرّة الصفراء والجرب والقروح

ويفتح السدد من الكبد وينفع اليرقان ويصفي البدن — وهو مسهل مختصر

يؤخذ لحاء إهليلج أصفر ونوار بنفسج وأفسنتين رومي وبزر كشوث: من كلّ واحد أوقيتين. يُهشّم في ثمانية أرتال ماء حارّ قويّ الحرارة، ويترك فيه يومًا وليلاً. ثمّ يُطبخ بنار لينة حتى يذهب الثلثان، ثمّ يُمرس ويُصقّى. ثمّ يؤخذ مثل وزن الماء أو مثل كيله بالسواء من الشاهترج الرطب المعصور بعد أن يُصقّى، ويُخلط معه ويُعاد إلى النار في قدرٍ نظيفة. ويُلقى عليه مثل أوزان الجميع سكرًا، ويُطبخ حتى يصير له قوامًا، ويترك حتى يبرد ويُرفع في إناء.

الشربة منه في الفصول: ثلث رطل مع مثله ماء | حارّ وزرع درهم سقمونيا وقطرات دهن لوز، ويؤخذ على حمية واحتراس. وفي غير الفصول: يؤخذ منه أوقيتين ويقدر الحاجة من السقمونيا — فإنّه يُسهل.

۱ صفة] ≅ معدة ۱۹۴-۱۰-۱۷. ۷ صفة] ≅ تصريف I ۲۲۵۵۱؛ زاد ۴۴۷-۱۶-۱۶.

۲ بيرد... الحنفقان] «يقوي المزاج، ويقمع الصفراء، ويسكن العطش والقيء، ويقطع القيء المرّي ويسكنه، ويزيل الغثي والحنفقان» م ۴ التمر] «حمّاض الأترج نصف رطل. ومن ماء التمر» م ۵ «يُخلط... ويُطبخ» [يُطبخ ذلك جميعًا بنار لينة» م ۵ قوام] + «ويُرفع» م ۶ بارد] «على ريق النفس أو أوقية» م ۸ النافع... الصفراء] «المسهل للصفراء التي قد استحالَت سودًا» ت ۹ مختصر] «مختصر مأمون الغائلة» ز، «مامون» ت ۱۰ «يُهشّم» [يُهشّم الجميع» ت، «يُهشّم ثم ينقع» ز ۱۱ حتى يذهب الثلثان] + «ويبقى الثلث» ت ۱۲ كيله] «كله» ز ۱۲ الشاهترج] «ماء الشاهترج» ز ت ۱۳ نظيفة] «جديدة» ت ۱۳ سكر] «سكر سلجاني» ز ت ۱۴ له قوامًا] «في قوام الأثرية» ز ۱۴ إناء] «النيم» ز ۱۵ ثلث رطل] «ثلاثة أرتال» ت ۱۵ وزرع درهم سقمونيا] «ومن السقمونيا على قدر الطبع» ت ۱۵ لوز] «لوز حلو» ت ۱۵-۱۶ ويؤخذ... يُسهل] «وربما جعل بدل الهليلج الاصفر اسود على حسب الحاجة» ت ۱۶ السقمونيا] + «ودهن اللوز» ز.

۱۰ يُهشّم] «مشم» پ.

5.27

شراب تفاح آخر

تأخذ تفاحًا نقيًا مقشور القشر الداخل والخارج، منقى من حبه: خمسة أرطال. يُدق ناعمًا ويُلقى عليه عسل ويسير خلّ، ويُضرب حتى يختلط جدًا. ويُلقى عليه ماء صاف، ثمانية أرطال، ويُضرب جيّدًا ويُلقى في إناء زجاج، ويُشدّ رأسه ويُترك في الشمس شهرًا ونصف شهر وتستعمله عند الحاجة إليه.

5.28 هـ

صفة شراب السفرجل

تأخذ السفرجل، تقطعه أثلثًا وأرباعًا، وتُخرج حبه وتنزع عنه قشره الغليظ الداخلي، ولا تنزع قشره الأعلى. ثم اجعله في مفراس حجارة أو عودٍ واحمل عليه اللدق والمرس حتى يصير كالعجين. ثم يُجعل في مفرز حلفاء كالذي يُعصر فيه اللبن، ثم يُعصر بلطف حتى يخرج جميع مائته. ثم يُحمل على النار ويُطبخ في قدرٍ برامٍ أو قدر فخار جديدة.

١٠ فإن أردته ساذجًا، طبخته حتى يصير في قوام الأشرية، ويُرفع في إناء زجاج؛ وإن أردته أن يزيد في قبضه وتقويته للمعدة، طرحت فيه مصطكى وطباشير وقرنفلًا وشيئًا من زعفران. الشربة منه: أوقيتة || بثلاثة من ماء.

ب ١١٢

ينفع لضعف المعدة، ويقطع القيء والإسهال — وكذلك فعل السفرجل المرثاء.

١ شراب] دگان ١٤١١-١٨؛ هارونيتة ١٥٣-١٣١٦؛ أقراباذين ١٧٨-١٠. ٥ صفة] دگان ١١١-٢٢ = د ١٢ ظ ٢٢-١٣ = د ٨٨ ظ ١٨-٥؛ «الشراب السفرجلي» حشائش ١١٢-١٨-٢١ (= «κυσάνιτης = μηλίτης» III Δ ٢٢١٩-٥٢٠).

٢ القشر] - د ٢ ناعمًا] «نعا» د ٢-٣ ويلقى ... عليه] - ق ٣ عسل] + «مطبوخ» ه ٣ ويضرب] - د ٣ ماء صاف] «ماء المطر صافي» ق ٤ ويلقى] «ويصبيه» د، «ويصقى» ه ٤ إناء زجاج] «ظرف غضار أو زجاج» ق ٤ شهرًا... شهر] «خمسة وأربعين يومًا» ه، «شهرًا ويصقى» د، «شهرًا واحدًا ويصقى» ق ٦ تأخذ السفرجل] «تأخذه» د ٦-٧ تقطعه ... الأعلى] > «فيقور حبه ويقطع بمنزلة ما يقطع الشلجم» (= «καὶ τὸ σπέρμα καὶ ἐξελών» || ٣٠. ١٣٥ I Collect «περιαρθέντα χρῆ τοῦ τε φλοιοῦ καὶ τῆς ἐντεριώνης» (Δ. «τεμών» ὡς γογγυλίδα) ٨ ثم مائته] «ويترح على صفيحة رخام أو مائدة مسوحة بدهن ورد أو بدهن شيرج ويبسط بالمرقاق أعني الشوتق وهو المرزاق [...] حتى يصلب» ق ٨ ومفرز] «مفدار» د ١٠ أردته أن يزيد] «وإن أردته سكرًا، فيطبخ حتى يذهب الثلثان ويبقى الثلث، فيبلى] «فيتلفي» د ٣ عليه من السكر أي جنس أمكنك] «أردت» د ٣ ويطبخ حتى يصير في قوام الأشرية، ويرفع في نيم الزجاج؛ وإن أردت أن تزيد» د ٣ ١٢ بثلاثة] «ثلاث» د ٣ ١٣ ينفع لضعف] «ينفع من ضعف» د ٣، «منافعه لضعف» د ٣، «منبعته لضعف» د ٣.

٢ مقشور] «مقشورا» ب ٢ ويلقى] «ويغلى» ب ٤ شهرًا] «شهر» ب ٨ ومفرز] «ممرز» ب ١١ وشيئًا] «شيء» ب.

شراب العين بقر
لإمساك الطبيعة

5.29

يُطبخ بالماء حتى ينضج، ويُمرس ويُصقَى ويُضاف إليه العسل أو السكر. ويُعاد إلى الطبخ ويُؤخذ له قوام الأشربة.

صفة شراب جلاب سكري

5.30

تأخذ من السكر الجيد رطلًا، فتصبّ عليه ٦ من الماورد^١ ربع رطل. ويُطبخ حتى يخثر ويصير بمنزلة العسل المتخاثر، ثم يُنزل عن النار ويُترك في القدر حتى يبرد نعيمًا. وقد يُجعل أيضًا لكل رطل سكر رطل من ماء، ومن الماورد الثلث — وهو أجود. ومما يُبيضه ويردّ لونه أبيض: أن يُصبّ عليه (بعد أن تُنزع رغوته وقبل أن يُصبّ عليه الماورد) من لبن الماعز والضأن الحليب، نصف أوقية. فهو نافع للحقّى والحرارات.

١٠

١ شراب [دكان ل ٦ ط ١٠-٨] || ٥ صفة [دكان ل ٤ ط ١٥-٢٣ = د ٤ ط ١٥-٢٣] ≈ فردوس
٥٨٦-٣٧؛ هارونيتة ١٥-١٣-١٦.

١ العين بقر [العيون بقر] د ٣-٤ ويُعاد... الأشربة [ويعد نافع] د ٦ من الماورد [من الماء العذب رطلين، ثم يطبخ بنار لينة وتنزع رغوته أولًا فأولًا، ثم تصبّ عليه من الماورد] د ٧ المتخاثر [الخاثر] د ٧ حتى [ويغلى حتى] د^٢، «ويترك حتى» د^١، «ويشدد رأس الإناء شدًا شديدًا» ف ١٠ والضأن [أو الضأن] د ١١ فهو... والحرارات [ينفع من الحرزات والحمي بأذن الله تعالى] د^١، «منافعه من الحرارة والحاما ان شا الله» د^٢.

5.31

صفة شراب العناب والمخيطا

يؤخذ من العناب والمخيطا المنزوعة الأقماع: من كلّ واحد مائة عددًا.
 وعود السوس المجرود الأعلى: عشرون درهمًا.
 وكزبرة البئر ونوار بنفسج غير مستعمل وبزر الخطمي: من كلّ واحد عشرة دراهم.
 حبّ السفرجل وبزر بطيخ وبزر خشخاش أبيض | وبزر خس وكثيراء بيضاء وشعير مقشور: من كلّ ١١٥^ط
 (واحد) ستة دراهم.
 تُرَضُّ الأدوية ويُجمع ذلك كلّهُ ويُطبخ في عشرة أرتال ماء بنار لينة بعد أن يُنقع ثلاثة أيام في الماء
 الحارّ. ويُطبخ حتى يذهب الثلثان ويبقى الثلث، ويُمرس ويُصَفَّى بمخل. ويُعاد الثقل إلى النار مع ستة
 أرتال ماء، ويُطبخ حتى يبقى الثلث.
 ويُجمع الماء الأوّل مع الثاني ويُعاد إلى النار بعد أن يُلقى عليه أربعة أرتال فانيد أو سكر أو ربّ عنب،
 ١٠ ويُطبخ بنار لينة حتى يصير في قوام الأشرية. ويُترك حتى يبرد، ثم يُرفع.
 الشربة منه: أوقية محلولًا بمثله ماء بارد.
 وينفع لأصحاب السعال، ويُلطّف الصدر من قبل الحرّ والالتهاب، ولبدو البتلّ — مجرب.

١ صفة] ≡ دگان ل ٦ ط ١٠ - ٢٢ = د ٧ - ٢٤ = د ٨١ - ١٨٢ ٨١ ط ١٢ ≡ زاد ١١٢٢٨ - ١٢٢٩ («ألفته وأصلحته»).

٢ والمخيطا] «والسبستان» ز [٣ الأعلى] - ز (ز) ٤ [غير مستعمل] - ز ٥ [خس] «خص» د [٧ تُرَضُّ الأدوية]
 - ز [٧ - ٨ ثلاثة ... الحارّ] «يومًا وليلاً» ز [٨ الحارّ] «وهو حار» دلد [٩ الثلث] «رطلان» د [١٠ أو سكر ...
 عنب] «وسكر سلوماني وربّ العنب» د، «سكر [أو فانيد] وربّ عتاب» ز [١١ يُرفع] + «في النيم» زد [١٢ أوقية]
 «افويتان» دلد، «افويتين» د [١٣ وينفع] «ينفع» دلج، «مناجعه» د [١٣ ويُلطّف] «ويس» د.

١ والمخيطا] «والمخيط» ب.

فصل في الأقراص والبختجات

6

من ذلك:

صفة بختج لطيف

6.1

يحدث الصفراء المحترقة والسوداء

5

وهو مأمون غير مستكره

لابن النداء

يؤخذ هليلج هندي وكابلي ونوار بنفسج: من كل واحد ربع أوقية.

عُتاب ومخيطة وعيون بقر: من كل واحد خمسة عشر عددًا.

ترنجبين خراساني أبيض وتمر هندي: من كل واحد ربع أوقية.

10

ب 113 خيارشنبر || في قصبه: أوقية. بسبايج: ثلاثة دراهم.

ورق لسان الثور وشهترج وسريس: من كل واحد قبضة.

يُرض الهليلجان ويُطرحان في قدرٍ جديدة، ويُرمى فيها نوار البنفسج والعتاب والمخيطة وعين البقر.

ويُنقى البسبايج ويُغسل ويُقشر (ويُطرح) في القدر أيضًا مع الشهترج والسريس ولسان الثور. ويُطرح

على العقاقير في القدر رطل ماء حار، ويُطبخ حتى يرجع إلى النصف.

15

وتببت كذلك القدر ليلةً، ثم يُمرس من الغد ويُصقى.

ويُجَلّ الترنجبين في شيء من ماء حارّ ويُصقى ويُلقى على البختج المصقى، وكذلك التمرهندي.

ويُستخرج لباب الخيارشنبر ويُجَلّ ويُصقى. ويُضاف إليه مثقال دهن ورد عند شربه بالغداة على ريق

النفس.

فإنه غايةً في إحدار المرّتين، وقد جرّبته فحمدته.

4 صفة] ≡ دكان ل 37 ط 38-8 = د 247-10.2 ≈ «بختج يُسهل السوداء» تصريف I 448-29-24.

6 وهو] - د 6 مستكره] «مسكرة» د 8 يؤخذ هليلج] «أخلاقه هليلج» د 9 ومخيطة] + «من كل واحد خمسة

عشر حبة» د 9 من 9 عددًا] «من كل واحد خمسة عرجة» دل، «خمس» دل 12 وشهترج] «وشهترج» د 14

ويُغسل ويُقشر] «ويغسل ويغسل» د 14 (ويُطرح)] ≡ د 14 الشهترج] «الشهترج» د 16 وتببت] «وتببت»

د 17 التمرهندي] «التمر هندي» د 18 ويُجَلّ] + «هي البختج» د، «المبيخج» دل 1 غايةً] «محبب غاية» دل.

9 ومخيطة] «ومخيطة» ب 12 وشهترج] «وشهترج» ب 13 الهليلجان] «الهليلجات» ب 16 وتببت] «وسب» ب.

6.2

صفة أقراص الطباشير
النافعة من الحمى الحادة المطبقة
مع استحرام الكبد مع دوام العطش

يؤخذ من ورق الورد الأحمر: أربعة مثاقيل.
طباشير أبيض وبزر رجلة وربّ السوس: من كلّ واحد مثقالين.
كثيراء بيضاء ونشا: من كلّ واحد درهم.
سكر طبرزد: مثقالين.

ب ١١٣ ط

تُدق وتُنخل وتُعجن بماء البزرقطونا، ويعمل | أقراص من وزن درهم.
الشربة: فُرّص بماء الرمانين.

6.3

صفة قرص طباشير
يُلين الطبيعة وينفع من حمى المرّة الصفراء
ويقطع العطش

طباشير أبيض وورد أحمر وزعفران: من كلّ واحد مثقالين.
نشا وكثيراء بيضاء وصمغ عربيّ وبزر هندباء وبزر الخيار المقشّر وبزر فقاء وحبّ قرع حلو وبزر رجلة: من
كلّ واحد مثقال.
تُدق وتُنخل وتُعجن بماء الخيار، ويُقرّص أقراصًا.
ويُسقى منه بماء الترنجبين أو شراب بنفسج.

١ صفة [دكان ل ٣٨ ط ٩-٤ = د ٤٧ ط ٢١-١٨؛ زاد ٤٣٢-١٠٤٦؛ 6.10 || ١٠ صفة] ≡ تصريف II ٢٦٢-٣٠
(→ يوحنا ابن ماسويه) ≡ زاد ٤٣٢-١٧٤٣٣ (→ يوحنا ابن ماسويه، كتاب النجج)؛ ≈ «أقراص الطباشير بالترنجبين»
أقرباذين س ١٢٢-٩١٦.

٢ النافعة [وهي نافعة] د ٢ الحنى [الحميات] د ٢ الحادة [الحادثة] ز ٢ المطبقة [اللطيفة] د ٣ استحرام [حرارة] ز ٣ مع دوام [ودوام] د ٣ العطش [وهي مجربة لذلك] د ٤ يؤخذ من [د ٤ مثاقيل] «دراهم»
دت ٥ مثقالين [د ٦ كثيراء... واحد] - د ٧ طبرزد [أبيض] د ٧ مثقالين [مثقالين] د، «وزن مثقالين
ونصف» ز ٨ ويعمل [ويعمل من ذلك] د، «ويتخذ» ز ٨ من... درهم [كلّ فرص من درهم] د، «كلّ قرص زنة
درهم» ز ١١ الصفراء [والخالصة] ز ١٢ ويقطع العطش [وتؤثر حز الكبد والمعدة] ز ١٣ وزعفران [ت ١٤
وبزر فقاء] - ت، «وبزر الفقاء المقشّر وبزر البطيخ المقشّر» ز ١٦ تُدق [ومن السقمونيا درهم يدق الجميع] ت ||
١٦ وتُنخل وتُعجن [ويعجن] ت ١٦ بماء الخيار [او بماء الفقاء] ت.

صفة أقراص الكافور
المبرّدة للالتهاب والسعال وحرارة الكبد
والحمّات الحادة

6.4

- يؤخذ ورد أحمر: ستّة دراهم.
طباشير وصمغ عربيّ وكثيراء بيضاء: من كلّ واحد أربعة دراهم.
لبّ بزر القثاء ولبّ الخيار وبزر البقلة الحمقاء وأصول السوس: من كلّ واحد ثمانية دراهم.
زعفران: درهين. نشا: أربعة دراهم. كافور: نصف درهم.
يُدقّ الجميع ويُنخل ويُعجن بلعاب البزر قطونا، ويُقرّص ويُستعمل.

صفة أقراص برّباريس
لسدد الكبد والطحال

6.5

- يؤخذ أميرباريس: وزن سبعة دراهم.
ورد أحمر وطباشير ولكّ منقّي من عيدانه وزعفران: من كلّ واحد خمسة دراهم.
فوفل وسنبل وقرنفل وقسط حلو ومترّ || وزهر الإذخر: من كلّ واحد أربعة دراهم.
راوند صينيّ وصندل وبزر رازياخ: من كلّ واحد أربعة دراهم.
بزر كشتوت: خمسة دراهم.
يُدقّ ويُنخل ويُعجن بماء، ويُقرّص أقراصًا من وزن درهم.
ويُسقى بالرازياخ وماء الهندباء وقلوب الفجل والسكنجبين.

١ صفة [6.12] ≡ ٩ صفة [دكان ل ٣٨٠-١٧ = ٢٤-١٧] = د ٤٨٠-٥١١ (→ إسحاق ابن عمران); زاد ٤٣٣-١٧٤٣-٤٣٤
(→ إسحاق بن عمران).

٢ [السعال] ⊕ «والاشتعال» Σ ٩ برّباريس + «تأليب إسحاق ابن عمران» د || ١٠ لسدد [وهي تنبع لسدد] د،
«وهو ينفع لسدد» د || ١٠ والطحال + «والإشراف على الحين وظهور دلائل الحرارة» د || ١١ يؤخذ [«أخلاقه» د
|| ١١ أميرباريس] «برباريس» د || ١١ وزن - د || ١٣ فوفل وسنبل وقرنفل [«فرنبل وسنبل ووفول» د، «وقرنفل»
ز || ١٣ ومترّ] - د || ١٣ وزهر [«ودهن» د || ١٣ أربعة] «خمسة ثلاثه» د، «ثلاثة» ز، - د || ١٥ كشتوت
«كشتوتا» د || ١٥ خمسة [«أربعة» د || ١٦ يُدقّ] + «كلّ ذلك» د || ١٦ أقراصًا... درهم [«كلّ فرص من درهم» د،
«وزن كلّ قرص درهم» ز || ١٧ بالرازياخ] «بماء الرازياخ» د.

٣ والحمّات [والحمّات] پ || ٦ ثمانية [پ*، «لثه» پ || ٧ نشا] «نسا» پ || ١١ أميرباريس [«امبرباريس» پ ||
١٣ فوفل] «فوفل» پ.

6.6

صفة مجتج لطيف لمن لم يتعود شرب الدواء

إهليلج أصفر: عشرة دراهم.
خيارشمبر: أوقية.
عيون بقر وعُتَاب: من كلّ واحد عشر حبات.
ومن الزبيب المنزوع العجم: أوقية.
سكر طبرزد أو سُلجانيّ جيّد نقيّ: ربع أوقية.
يُطبخ ويصْفى، ويُجَلّ فيه وزن سُدس درهم سقمونيا أو ربع درهم.
نافع.

6.7

صفة حبّ المأمون

إهليلج أسود وصبر يمانّي وحُرف وتريد: من كلّ واحد جزو.
سكبينج منقوع في ماء الكزّاث حتّى يلين، ثمّ يُدقّ دقًّا ناعماً حتّى يصير كالدماع.
ويُلقي عليه سائر العقاقير بعد أن يُدقّ ويُنخل ويُعجن حتّى يُمكن تحبيبه، ويُجَبّ كالحمص.
الشربة منه: مثقالان على توحشٍ وحميةٍ وعلى الموالات.
ينفع من الرياح | في المعدة والصدر ويُجَلّل البلغم الغليظ ومن الخام ورياح القولنج، ويُطلق إطلاقاً^{١١٤} ط
لطيفاً من غير إذاء ولا مَشَقَّةٍ في كلّ حين في الشتاء والصيف.

١ صفة [دگان ل ٣٧-٢٦-٣١ = د ٤٦-٩-١٣ || ١٠ صفة] = دگان ل ٣٦-٣١ = د ٤٥-١٦-٢٢؛ «حبّ يُسْتَقى المأمون» تصريف I ٤١٤-٢٨-٣٠.

٥ وعُتَاب [وزفير] د («العتاب هو الزفير» ابن عمران د جامع س III ١٠١٤٥ ≡ تلخيص [١٧٣٦]) || ٩ نافع + «مجرّب» دل || ١١ أسود [الأصفر] ت || ١١ وحُرف [وسكبينج وحرف] د || ١٢ سكبينج منقوع [وينفع السكبينج] د || ١٥ ينفع [مناجعه] د.

٥ عشر [پ، + «ه» پ^٢ || ١٥-١٦ ويُجَلّل... لطيفاً] پ^٣.

صفة حب المؤلف

6.8

ينفع من الحام والصفراء

إهليلج وصبر سقطري ومقل ومصطكى: من كل واحد أربعة دراهم.
ومن التريد والسقمونيا والعزروت وشحم الحنظل والتمرهندي: من كل واحد درهمان.
يُدق ويُنخل ويُعجن بماء بارد، ويُجَبَّب.
الشربة منه: درهمان ونصف على توخُّش — نافع إن شاء الله.

صفة حب الكية

6.9

يؤخذ صبر سقطري: نصف أوقية. هليلج أصفر: ربع أوقية. مصطكى: ثلثة دراهم. مقل أزرق: درهمين.
يُسحق الجميع ويُنخل ويُعجن بماء السريس، ويُجَبَّب كالتحص.
الشربة منه: ربع أوقية على حمية واحتراس.

صفة قرص طباشير

6.10

النافعة من الحميات الحادة واللطفية مع استحرام الكبد ودوام العطش

وهي مجربة

يؤخذ ورق ورد أحمر: أربعة دراهم. طباشير أبيض وبزر رحلة ورب سوس: من كل واحد درهم.
سكر طبرزد: مثقالان.
يُدق ويُنخل ويُعجن بلعاب البزرقطونا، وتعمل من ذلك أقراص كل قرصة من درهم إلى مثقال.
الشربة: قرصة بماء الرمانين.

١ صفة [دكان ل ١٠-٦٣٥ = د ١٦-١٢٥٤٤] ٧ صفة [د ٤-١٦٠٠٠] ١١ صفة [د ٦-١٦٠٠٠] ١٢ صفة [د ٦-١٦٠٠٠] ١٣ صفة [د ٦-١٦٠٠٠] ١٤ صفة [د ٦-١٦٠٠٠] ١٥ صفة [د ٦-١٦٠٠٠] ١٦ صفة [د ٦-١٦٠٠٠] ١٧ صفة [د ٦-١٦٠٠٠] ١٨ صفة [د ٦-١٦٠٠٠] ١٩ صفة [د ٦-١٦٠٠٠] ٢٠ صفة [د ٦-١٦٠٠٠] ٢١ صفة [د ٦-١٦٠٠٠] ٢٢ صفة [د ٦-١٦٠٠٠] ٢٣ صفة [د ٦-١٦٠٠٠] ٢٤ صفة [د ٦-١٦٠٠٠] ٢٥ صفة [د ٦-١٦٠٠٠] ٢٦ صفة [د ٦-١٦٠٠٠] ٢٧ صفة [د ٦-١٦٠٠٠] ٢٨ صفة [د ٦-١٦٠٠٠] ٢٩ صفة [د ٦-١٦٠٠٠] ٣٠ صفة [د ٦-١٦٠٠٠] ٣١ صفة [د ٦-١٦٠٠٠] ٣٢ صفة [د ٦-١٦٠٠٠] ٣٣ صفة [د ٦-١٦٠٠٠] ٣٤ صفة [د ٦-١٦٠٠٠] ٣٥ صفة [د ٦-١٦٠٠٠] ٣٦ صفة [د ٦-١٦٠٠٠] ٣٧ صفة [د ٦-١٦٠٠٠] ٣٨ صفة [د ٦-١٦٠٠٠] ٣٩ صفة [د ٦-١٦٠٠٠] ٤٠ صفة [د ٦-١٦٠٠٠] ٤١ صفة [د ٦-١٦٠٠٠] ٤٢ صفة [د ٦-١٦٠٠٠] ٤٣ صفة [د ٦-١٦٠٠٠] ٤٤ صفة [د ٦-١٦٠٠٠] ٤٥ صفة [د ٦-١٦٠٠٠] ٤٦ صفة [د ٦-١٦٠٠٠] ٤٧ صفة [د ٦-١٦٠٠٠] ٤٨ صفة [د ٦-١٦٠٠٠] ٤٩ صفة [د ٦-١٦٠٠٠] ٥٠ صفة [د ٦-١٦٠٠٠] ٥١ صفة [د ٦-١٦٠٠٠] ٥٢ صفة [د ٦-١٦٠٠٠] ٥٣ صفة [د ٦-١٦٠٠٠] ٥٤ صفة [د ٦-١٦٠٠٠] ٥٥ صفة [د ٦-١٦٠٠٠] ٥٦ صفة [د ٦-١٦٠٠٠] ٥٧ صفة [د ٦-١٦٠٠٠] ٥٨ صفة [د ٦-١٦٠٠٠] ٥٩ صفة [د ٦-١٦٠٠٠] ٦٠ صفة [د ٦-١٦٠٠٠] ٦١ صفة [د ٦-١٦٠٠٠] ٦٢ صفة [د ٦-١٦٠٠٠] ٦٣ صفة [د ٦-١٦٠٠٠] ٦٤ صفة [د ٦-١٦٠٠٠] ٦٥ صفة [د ٦-١٦٠٠٠] ٦٦ صفة [د ٦-١٦٠٠٠] ٦٧ صفة [د ٦-١٦٠٠٠] ٦٨ صفة [د ٦-١٦٠٠٠] ٦٩ صفة [د ٦-١٦٠٠٠] ٧٠ صفة [د ٦-١٦٠٠٠] ٧١ صفة [د ٦-١٦٠٠٠] ٧٢ صفة [د ٦-١٦٠٠٠] ٧٣ صفة [د ٦-١٦٠٠٠] ٧٤ صفة [د ٦-١٦٠٠٠] ٧٥ صفة [د ٦-١٦٠٠٠] ٧٦ صفة [د ٦-١٦٠٠٠] ٧٧ صفة [د ٦-١٦٠٠٠] ٧٨ صفة [د ٦-١٦٠٠٠] ٧٩ صفة [د ٦-١٦٠٠٠] ٨٠ صفة [د ٦-١٦٠٠٠] ٨١ صفة [د ٦-١٦٠٠٠] ٨٢ صفة [د ٦-١٦٠٠٠] ٨٣ صفة [د ٦-١٦٠٠٠] ٨٤ صفة [د ٦-١٦٠٠٠] ٨٥ صفة [د ٦-١٦٠٠٠] ٨٦ صفة [د ٦-١٦٠٠٠] ٨٧ صفة [د ٦-١٦٠٠٠] ٨٨ صفة [د ٦-١٦٠٠٠] ٨٩ صفة [د ٦-١٦٠٠٠] ٩٠ صفة [د ٦-١٦٠٠٠] ٩١ صفة [د ٦-١٦٠٠٠] ٩٢ صفة [د ٦-١٦٠٠٠] ٩٣ صفة [د ٦-١٦٠٠٠] ٩٤ صفة [د ٦-١٦٠٠٠] ٩٥ صفة [د ٦-١٦٠٠٠] ٩٦ صفة [د ٦-١٦٠٠٠] ٩٧ صفة [د ٦-١٦٠٠٠] ٩٨ صفة [د ٦-١٦٠٠٠] ٩٩ صفة [د ٦-١٦٠٠٠] ١٠٠ صفة [د ٦-١٦٠٠٠]

٢ الحام والصفراء [الصبرا والحام] دل [٣ إهليلج] أخلاطه يؤخذ إهليلج أصبر [د ٤ والتمرهندي] والزعبران والتمر
الهندي [د ٥ بماء بارد] بما ورد [د ٦ نافع] - د [٨ صبر سقطري] من الصبر الطيب [د ٨ هليلج أصفر] ومن
الإهليلج الأصبر [د ٨ مصطكى] ومن المصطكى [د ٨ مقل أزرق] ومن المقل الطيب الأزرق [د ٩ كالتحص]
«أمثال التحص» [د ١٠ حمية واحتراس] الحمية [د ١٢ النافعة] وهي نافعة [د ١٢ واللطفية] اللطفية [د ١٣
ب مجربة] + [لذلك] [د ١٤ يؤخذ] - د [١٦ بلعاب البزرقطونا] ببزرقطونا [د ١٦ قرصة] قرص [د ١٦ إلى
مثقال] - د [١٧ قرصة] قرص [د ١٧ قرصة] د.

٧ الكية [للكه] پ.

6.11

صفة أقراص ومرد
وهي مقوية للمعدة والكبد

ورد أحمر: عشرة دراهم. أصل السوس مجرود الأعلى منخول: ستة دراهم.
فَقَّاحٍ إِذْخِرْ حَرْمِيَّ وَسَنْبِلَ هِنْدِيَّ وَبِزْرَ رَازِيَانِجٍ بَسْتَانِيَّ وَطَبَاشِيرَ وَكَثِيرَاءَ بِيضَاءَ: مِنْ كُلِّ وَاحِدٍ مِثْقَالَانِ.
يُذَقُّ وَيُنْخَلُ وَيُعْجَنُ بِمَاءِ السَّرِيْسِ[†]، وَيُقْرَصُ — كُلُّ قَرِصَةٍ دِرْهَمٍ.
وَتُشْرَبُ وَاحِدَةٌ بِمَاءِ الرَّمَانِيْنِ.

6.12

صفة أقراص كافور على نسخة سابورم
وهي نافعة للالتهاب[†] والسعال[†] وحر الكبد والحُمَيَاتِ الحَاذَةِ
وهي جيدة محذقة

يؤخذ ورق ورد أحمر: ستة دراهم. طباشير وصمغ عربي وكثيراء بيضاء: من كل واحد أربعة دراهم.
لَبِّ بَزْرِ الْفَتَّاءِ (وَلَبِّ) بَزْرِ الْخِيَارِ وَبِزْرِ رَجَلَةٍ وَأَصْلِ السُّوسِ الْمَجْرُودِ: مِنْ كُلِّ وَاحِدٍ ثَمَانِيَةَ دِرْهَمٍ.
زَعْفَرَانٍ: دِرْهَمَانِ. نَشَاسْتِجِ الْخِنْطَةِ: ثَلَاثَةَ دِرْهَمٍ. كَافُورٍ: نِصْفَ دِرْهَمٍ.
يُذَقُّ وَيُنْخَلُ وَيُعْجَنُ بِلِعَابِ الْبِزْرِ قَطُونًا، وَيُقْرَصُ.
الشربة منه، قرصة واحدة، إن شاء الله.

١ صفة [دكان ل ٣٨-٣٨ ط ٣ = د د ٤٧ ط ١٨-١٤؛ زاد ٤٣٢-٤٩؛ هارونيتة ١٦٥-١١١٥ || ٧ صفة]
«أقراص الكافور على نسخة سابورم» دكان ل ٣٨ ط ١٦-٩ = د د ٤٧ ط ٢١-٤٨؛ نصريف II ١٨-٥؛ زاد ٤٣٣-٩٣
هارونيتة ١٦٣-١٦٥-٥؛ أقرباذين س ١٣٦-١٣٢٠؛ 6.4 †

٣ ورد [«ورق الورد» زه ٣ عشرة [«خمسون» ه ٣ أصل... دراهم] - ز ٣ منخول [«منخولا مرارا» دل، «المنخول
مرار» د ٤ حرمي [«حرمي» د، - ه ٤ متقالان] «وزن درهين» ز ٥ السرييس [«السرييس» ده، «الهندباء» ز ||
٥ قرصة درهم] «فرص من درهم» د ٦ بماء الرمانين] + «أو مياه البقول» ز ٧ سابورم [«سابورم بن جوازاد» ه) ||
٨ والسعال] ق، «والاشتعال» س ٨ وحر الكبد [«والتقود» ق ٨ الحاذة [«الحازة» ز ٩ محذقة [«محذقة» دزه
|| ١٠ يؤخذ] - د ١٠ ورق ورد أحمر [«ورد أحمر منزوع الأقماع» ق ١٠ طباشير] - ه ١٠ وصمغ... بيضاء
[«وصمغ وكثيراء» ق ١١ بزر الفتاء [«الفتاء مقشر» ق ١١ (ولب) بزر الخيار [«وحت الخيار مقشر» ق ١١ ولب]
د ه ١١ رجلة [«البقلة الحما» ق ت ز ١١ وأصل [«واصول» د ١١ المجرود [«المجرود الاعلى» د، «مجرود الأعلى»
ه، - ز ق ١٣-١٤ يذق... الله] «تجمع هذه الأدوية منخولة وتقصر وتحقق» ق ١٤ الشربة... واحدة] - ز ||
١٤ قرصة [«فرص» د.

٥ السرييس [«الوس» پ ٧ سابورم] «كافور» پ.

صفة أقراص بنفسج

پ ۱۱۵ ط

6.13 يؤخذ بنفسج: عشرون درهماً.

كثيراً ونشاً: من كل واحد درهماً. محمودة: درهماً. رب سوس: أربعة دراهم.
يُدق ويُخل ويُعجن بلعاب البزرقطونا، وتُصنع من الجميع أربعين قرصة وتُجفف في الظل.

صفة أقراص مراوند

6.14

النافعة من سدد الكبد والطحال والمعدة تقويها
تأليف إسحق — وقد جربتها وحمدتها

ورق ورد أحمر وأفسنتين روميّ وراوند صينيّ: من كل واحد مثقال.
طباشير أبيض وسنبل هنديّ وفقّاح الإذخر ولكّ منقّي من عيدانه وعصاره غافت: من كل واحد درهم.
صندل أصفر وزعفران وقشور سليخة وكثيراء بيضاء ومصطكى: من كل واحد مثقال.
تُدق الأدوية وتُنخل وتُعجن بماء الرازيانج، وتعمل أقراصاً كل قرصة درهم.
وتُشرب بماء البقول أو سكنجيين.

صفة أقراص أفسنتين

6.15

يؤخذ أفسنتين روميّ وأسارون[†] وأئيسون، وتُجفف وتُستعمل[‡].

نافع من سدد الكبد والمعدة والطحال والحمى العتيقة، ويُدرّ البول — نافع، إن شاء الله.

٥ صفة [دكان ل ٣٨ ٢٢ ٢٩ = د ٤٧ ط ٩ ١٤؛ زاد ٤٣٠ ١٠ ١٧ - (إسحق بن عمران)؛ أقرباذين س ١٢٤ ٦ ١٣ ||
١٣ صفة [دكان ل ٣٨ ٩ ١٣ = د ٤٧ ط ٣ ١؛ هارونيتة ١٦٧ ١ -؛ أقرباذين س ١٢٥ ٩ ٢٣ = كتاش ١١٣ ٤ ٧.

٥ مراوند [الراوند الصيني] د ٦ النافعة [ينبع] د ٦ والمعدة تقويها [ويقوي المعدة] د، «المقوية للمعدة» ز ٧ جربتها وحمدتها [جربناها أيضاً] ز ٨ ورق... صينيّ [راوند وورق ورد احمر وافسنتين رومي] د ٨ مثقال [وزن مثقالين] ز ٩-١٠ وعصاره... وزعفران] - د ١٠ وقشور [وفشر] د ١٠ مثقال [نصف مثقال] د، «وزن نصف مثقال» ز ١١ قرصة درهم [فرص من درهم] د ١٢ أو سكنجيين [وسكنجيين] ز ١٤ يؤخذ] - د ١٤ روميّ] - ه ١٤ وأئيسون [وأئيسون وبزر كرفس ولوز مقشر من فشرية، أجزاء سواء [ممتساوية] د؛ يُدق ويُعجن ويُقرص] د، «وأئيسون وبزر الكرفس ولوز مقشر من القشرة الأعلى والأسفل، يُدق الجميع ويُعجن بعسل مطبوخ، ويُقرص ويُستعمل» ه، «وأئيسون وبزر كرفس ولوز مرقّ من القشرين أجزاء سواء؛ تُجمع هذه الأدوية مسحوقة منخولة وتُعجن ويُقرص» ق ١٥ نافع [مناجعه] د، «ينبع» د ١٥ سدد... والطحال [برد المعدة [...]] وسدّة الكبد والطحال» ق ١٥ نافع... - د.

1.1.1

قول جالينوس في الأغذية

قال جالينوس في المقالة الرابعة من كتاب الأغذية إن إضافة الأشياء بعضه إلى بعض، وما يكون منها حراً ولطيفاً ومعتدلاً || ما بين الحرارة والرطوبة بإضافتها الحار منه اللطيف [وإلى مزاج بدن الإنسان. 116 ط].
ولحوم الحيوان من الدواب التي تدب على أربع تختلف على قدر اختلافه ولطفه وحرارته ورطوبته. 1.1

1.1.1

حم الحمل الفتيّة

أقوم لجميع الأجسام وأخصبها في الجسم. والمستعمل منه: مقدّمه، أقرب للمرعى. وأخف ما فيه وأسرع انضماً وانحدراً من المعدة: لحوم المفاصل التي عليها الحركة والمشى — وكذلك في البقرى والمعزى. 5

1.1.2

حم البقر

أقوى من المعزى لأهل الحركة والتعب، وأقل أخلطاً في الجسم. وهو قليل الحزّ لعظم خلقه وخشونة عظمه وقلة حركته. وإنما استحقّ التبريد الذي فيه، لأنه لحم الشعر، وجميع لحوم الشعر كلها أقل حرارةً من لحوم الحملان وسائر اللحوم، لأن مسام الشعر الذي في الجلد مفتوحة يسيل منها العرق وتخرج معه الحرارة الغريزية — فإذ ذلك استحقت ما وقع عليها من البرد المنسوب إليها بجميع القياس. 10

1.1.3

حم المعزى

يؤاد الهمة، ويفسد الدم، ويورث السوداء والأرواح، ويؤدي إلى المنامات الرديّة، ويشرّد الأخلاق. 15

1.1.4

حم الغزال وبقر الوحش والأيل

يقرب من المعزى في المضار. والأيل أبطأها هضماً وأردى للمعدة والكبد، ويفسد الدم بالجملة. والطري من جميع اللحوم أحسن من البابت؛ | والقديد الجاف أكثرها مضرّة. 116 ط

1.1.5

وأغذى في الجسم: حم المجدي الرضيع.

٢ في... الرابعة [٥ أغذية^١ IV.

٢ إضافة [«اصفاط» پ || ٣ حراً... ومعتدلاً [«حار ولطيف ومعتدل» پ || ١٩ أكثرها [«اكرها» پ.

والفرايح المحتملة

1.1.6

أَلطَّف من سائر اللحوم الطائِرة وغير الطائِرة، لأنَّها معتدلة ملتيبة الطبيعة. تُوافق المرضى، ولا سبياً أصحاب البرسام والشوصة ٥

لحم الحجل

1.1.7

٥ حاز يابس، مُنشَّف عاقلٌ للبطن، مانعٌ من الإسهال. وهو يُضَرّ بالمبرودين ٥

لحم الغرنوق والونز

1.1.8

أغلظُ من لحوم الطير كَلِّها، وأقلُّ حرارةً. وكلِّما دقَّ الطائرُ وخفَّ طيرائه، كان حرُّه أكثرَ. وأحرُّ الطير كَلِّها: العصافير الدِّقَّة، والحمام، والفواخيت؛ ولذلك استعمل في أغذية المفلوجين وفي تسخين الكلاء ٥

فراخ الحمام

1.1.9

١٠ أقواها كَلِّها حرارةً ٥

العصافير الدقة

1.1.10

إذا طُبخت بالطلع الذي في النخل، والبيض، واللحم، والكمون، والزنجبيل، وأُكلت: قوت الجماعة. قال جالينوس: «وينفع أيضاً من برد الكلى» ٥

لحم النعام

1.1.11

- ١٥ قريبٌ من لحم الغرنوق؛ وهو أَميلٌ إلى البرد من لحم الغرنوق لقلة الأغذية والرطوبة في الأغذية، لأنَّ معيشته من الرمل والحشَف ونبات الشَّجَر وأُمِّ عَيْلان والحَسَك — ولذلك استوجب قلة الحرِّ، إلا أن في شحمها خاصية: أنه ينفع المفلوجين وأصحاب الرياح. بإضافتها إلى المعزِّي (و) لحم الأيِّل ودواب الوحش، أخفَّ حرًّا منها، لأنَّها أخفُّ منها حركةً وأسرعُ اضطراباً لانتسابها || إلى الطير وإلى الدواب التي تدب على رجلين. ١١٧ ٥
- ٢٠ ولو علَّت في الهواء، لكان حرُّها بيئاً بالجملة: فهي بالإضافة إلى أفراخ الحمام والعصافير الدقة (و) الزرزور، بارد(ة)؛ وبالإضافة إلى لحم النَّعْر، حارة ٥

١ والفرايح [«الفرايح» پ || ٢ المرضى] «المرضا» پ || ١٧ [«لأن» پ || ٢٠ الهواء] «الهوي» پ || ٢٠ بيتاً [«بين» پ || ٢١ وبالإضافة] «وباظلافه» پ || ٢١ النَّعْر [«المعز» پ || ٢١ حارة] «حراره» پ.

١٦ الشَّجَر [«αγγουσα»].

1.2

القول في الألبان

1.2.1

اعلم، وفقك الله، أن الألبان تختلف باختلاف المراعي واختلاف الحيوان. و**جالينوس** يقول إن جميع الألبان كلها حارة رطبة، إلا أنها دون الحز والرطوبة في درجة. وكذلك أن اللبن حار رطب، وهو لين في أوله؛ فإن أوصل من المعدة إلى الكبد، تغير بطبخ الكبد وصار دماً — ولذلك استحق الحرارة والرطوبة. ومن الأطباء من يجعله حاراً رطباً في الدرجة الأولى.

وهو يُغذي الجسم غذاءً حسناً، وهو أوفق الأغذية وأحسنها؛ إلا أنه مستحيل ميثال مع الطبع الغالب على الجسم: إن أصاب صحته، مال معها؛ وإن أصاب علة، مال معها. ومنه يتولد الاحتراق والحرب. وهو غير مضر للناشئين عليه والمعتادين له والمغتدين به، بل يزيد في قوتهم ويرطب أجسامهم. و**جالينوس** يشتهه طعمه بمطعم الماء.

1.2.2

وهو ينقسم على ثلاثة أجزاء: فالجزء الأول منه حار دسيم مودك، ومنه يكون الزبد والسمن. والجزء الثاني بارد، وفيه شيء | من حر الدسم الخارج منه: (والجزء الثالث منه)، وهو ما أخرج دسمه وغلبت عليه الحموضة، وهو بارد جداً ليس فيه حرارة.

1.2.2

والجبن

عاقلاً للطبيعة.

1.2.3

والزبد الطري

لطيف الحرارة، يُوافق الأجسام كله. وينفع من السعال وخشونة الرئة وبجوحة الصوت، وهو كثير الرطوبة.

١ القول في الألبان [«اللبن» أغذية Γ ٢٩^١ - ٣١^{١٣}] ≡ «Π. γάλακτος» XII Γ «٣٤٥ - ٣٥٣»، «اللبن كله» حشائش ١٣٥ ≡ «Γάλα κοινῶς» I Δ «١٤٣ (٥) | ١٣ والجبن» ≡ «الجبن الرطب» حشائش ٣٥^{٧-٨} ≡ «τῆρος νεαρὸς» I Δ «١٤٦ (٥).

٢ الألبان ... الحيوان [«διαφέρον μὲν ... ἔτι δὲ μείζων τὴν κατ' αὐτὰ τὰ ζώωα» Γ ٦ وهو ... حسناً] «جيد الكيموس مغذي [τρόφιμον] Δ ١٤ عاقلاً للطبيعة [«وإذا طُبِخَ وعُصِرَ وشوي، عقل البطن» Δ.

٣ إلا أنها [«لأنها»] ٣ الحز [«الحر»]، «الحرره» ٣^٢ وكذلك [«ولذلك»] ٣ اللبن [«الدم»] ٥ حاراً رطباً [«حارز رزطب»] ٨ مضر [«مضر»] ٨ عليه ٨^٢ ٨ والمغتدين [«والمغتدن»] ٨.

والسمن

1.2.4

- حارّ، أقلُّ رطوبةً من الزبد.
- وأفضلُ الأسان والأزباد: زُبْدُ البقرِ وسممه. وأغلظُ الألبان: لبنُ البقرِ، وهو موافق لأصحاب الذبول والنحافة. وأخفُّ الألبان وأقواها: لبنُ النوق، وهو موافق للمكبودين وأصحاب الاستسقاء والمنفوخين.
- وأعدلُ الألبان: لبنُ الضأن، وهو موافق للأصحاء إذا عبَّ فيه. وألطفُ الألبان: لبنُ المعز، وهو موافق لأصحاب الشوصة وذات الجنب والمعدة، ويُسهل خلطًا بلغميًا وسودويًا.

٣ وأغلظُ... البقر] «ولبن البقر أغلظ الألبان كلها وأدسمها» .Γ.

٥ لبن] پ^{هـ}.

فصل في البقوليات

1.3

1.3.1

الكُنْبُرَةُ الرطبة

باردة يابسة.

تذهب بزهومة اللُّحوم.

وهي منقومة.

وإن أُكثِرَ من أكلها أو شُرب من ماءها من غير طبخ، كانت من النبات القاتلة.

وهي تُجمَد الدم في العروق، ولذلك تنفع من الرعاف إذا قُطرت || في الأنف ٥.

ب ١١٨

1.3.2

البقلة الحمقاء

(وهي الرجلة)

١٠

وهي باردة (ردة) رطبة، بطيئة الانهضام لكثرة لزوجتها.

وتنفع من الصداع إذا دُقَّت ومُحلت على الجبين؛ وتنفع من الرمَد إذا دُقَّت ومُحلت على العين ٥.

٩ **البقلة الحمقاء** [] ≙ «ذكر البقلة الحمقاء» مفردة^١ ٢٩٩ (≡ «Π. ἀνδράχνης» XI Γ «١٢-١١٨٣٠»)، «بقلة الحمقاء» حشائش ٤٥^٢ (≡ «ἀνδράχνη» I Δ «١٩٦-٥»).

٤ باردة يابسة [] ≡ فردوس ٣٨٧ || ١١ وهي رطبة [] «باردة مائية [ὕδατώδης] المزاج» Γ || ١٢ وتنفع... العين [] «و إذا تُضَمَدَ بها مع السويق [μετ' ἀλφίτου]، نفعت من صداع الرأس وأورام العين الحارّة [ὀφθαλμῶν φλεγμοναίς]» Δ؛ «أن رسول الله ﷺ قال: «الرجلة شفاء من تسعين داء، أدناها الصداع» عمدة ٢١٥-٢١٠ (→ طبّ العرب).

٢ **البقوليات** [] «البقوليات» ب^٥، «البقول» ب || ٧ كانت... القاتلة [] «امن من الالتهبات القاتلة» || ١١ باردة [] «با» ب || ١٢ وتنفع [] «وينفع» ب.

١٠ وهي الرجلة [] «الفرخ هو البقلة الحمقاء، وهي الرجلة» أبو حنيفة ٧٥١ []، «الرجلة (وهي البقلة الحمقاء في بعض الكتب)» طبّ العرب ١٠٨٥، «اندرخني: أي "رجل واحدة"، وهي البقلة الحمقاء» تفسير^٣ ٣٧، «وبعضهم يُسمّيه "الرجلة"، وهكذا يُسمّى في الأندلس» عمدة ١٣٢١٥-١٤.

البقلة اليمانية

1.3.3

(وهي البريوز)

وهو بارد رطب، معتدل لطيف، سريع الهضم. ينفع من الحمى والبرسام. ويقطع العطش، ويُدّر البول، ويُلين الطبيعة، ويُفتح السدد، ويُصلح المعدة، وينفع من القولنج ورياح الشراسيف.

الفُجُل

1.3.4

سريع التغيير والاستحالة؛ ولكنّه يُعين على الهضم، ويُدّر البول ويُفتت الحصى ويُنقي الكلى والمثانة، ويقطع البلغم، ويطرد الرياح ويُبيح الجشاء. وإذا دُقّ وشُرب من مائه أوقيتان بأوقيتين عسل، أسهل الخام.

البصل

1.3.5

حارّ في الدرجة الرابعة، رطب في الثانية. يكثر المني، وينفع من البرد في الجوف، ويُشهي الطعام، وينفع من العطش. وإذا اكتحل بمائه، جلا البصر.

١ البقلة اليمانية] ≙ «ذكر البقلة اليمانية» مفردة^{١٠٢} ١٠٢ ط ١٦-١٥ (≙ «Πι. βλίτου» XI Γ «١٠٨٥١-١٠٨٥٠)، ≙ «بقلة يمانيّة» حشائش ٧-٦٤٥ (≙ «βλίτου» I Δ «٣١٩١-٣١٩٠): البصريّ د جامع س II «١٨١٤-١٨١٣» ٦ الفُجُل] ≙ «الفجل» حشائش ١١١-٤٤ ط ١١١-٤٤ (≙ «ῥαφανίς» I Δ «١٨٦-١٨٧») ١٠ البصل] ≙ «ذكر البصل» مفردة^{١١٩} ١١٩ ط ١٠٩-١٠٨ (≙ «Π.» II Δ «χρόμου» XII Γ «١٣-١٢ ٤٨»)، «بصل» حشائش ٢١-٢٠ ط ٢١-٢٠ (≙ «χρόμου» I Δ «١١٦-١١٥»).

٣ وهو بارد رطب] «ومزاجها بارد رطب في الثانية» Γ ٤ ويقطع العطش] «خاصّتها: قطع العطش الكائن من المزة الصفراء» البصريّ ٤ ويُلين الطبيعة] «ويُلين الطبيعة» البصريّ، «وهي مليّنة للبطن» Δ ٧ سريع التغيير] «سريع التغيير في المعدة» طبّ العرب ٨٧ ط ٧ يُعين على الهضم] «ويُعين في نفوذ الغذاء» Δ ٧ ويُدّر البول] «مدّر للبول» Δ ٨ ويُبيح الجشاء] «ويُبيح الجشاء المنتنة» طبّ العرب ٨٧ هـ، «مجشّي» Δ ١١ حارّ... الرابعة] «هذا في الدرجة الرابعة من التسخين» Γ ١٢ ويُشهي الطعام] «يُشهي الطعام» فردوس ١٨٣٧٨ ١٣ وإذا... البصر] «ويُكتحل من ماء الأبيض منه، فيجلو البصر» فردوس ٢١٣٧٨ ٢٢-٢١ «وماء البصل، إذا اكتحل به مع العسل، نفع من ضعف البصر، ومن القرع العارض في العين الذي يُقال له "أرغامن" [ἀργάμοις]، والتي يُقال لها "نافاليون" [νεφελίσις]، وابتداء الماء» Δ.

٢ البريوز] «الريوز» پ ٧ الحصى] «الحصا» پ ٨ الجشّي] «الجشّي» پ ٩ بأوقيتين] «ناوقيتين» پ.

٢ وهي البريوز] «والريوز بكلام أهل الشام هو البقلة اليمانية» جامع س II «١٣١٣»، «بقلة يمانيّة: هي البريوز» عمدة ٢٧٨٢؛ > يريوز (١٣١٥٥١).

1.3.6

الثوم

حاز يابس في الدرجة الرابعة.
 وخاصته: قطع العطش الكائن من البلغم المالح.
 ويطرد الرياح، وينفع المفلوجين | والمبرودين، ويزيل النخمة، وينفع من الفواق والهبيضة، ويقتل الديدان^{ب ١١٨}
 التي في البطن وحب القرع، وينفع من أوجاع الجوف والكليتين والحاصرة، ويُدّر البول، وينفع من
 البواسير ورياح القولنج.
 ويحفظ الصحة، إلا أنه يُضّرّ بالبصر.
 وجالينوس سماه «ترياق الفقراء».

1.3.7

الكُرَات

حاز يابس في الدرجة الثانية.
 وخاصته: الأحلام الرديّة.
 وهو يُضّرّ بالبصر ويُعقّن الأسنان؛ إلا أنه ينفع القولنج ولسع الهومّ وعضة الكلب لكلاب).
 وينفع من جميع العلل التي للمعدة، كالبواسير والأرواح والقروح والشقاق.

١ الثوم] ذكر الثوم البستاني مفردة^{١٣٣} غ ٣-٤ (≡ «Π. σκορδίου» XII Γ «١٢٦-١٧١٢٥»)، «البصل والثوم والكراث» أغذية^{١١} غ ١٧ (≡ «Π. κρομμύων και σκορόδων και πράσων...» Γ «١٣٠-١٨»)، «ثوم» حشائش^{٤٩} ٧-٦ (≡ «σκόρδον» I Δ «٢١٨-٤٢١٩») ٨ وجالينوس] X Meth.med Γ «٥٨٦٦-٦» ٩ الكُرَات] «الكراث الشاميّ النبطي» حشائش^{٤٨} ١٥-٦ (≡ «πράσον κεφαλωτόν» I Δ «٢١٤-٢٠٢١٥»).

٢ حاز... الرابعة] «حاز يابس في الجزء الرابع من الحرارة واليبس» طبّ العرب ٧٨٦، «هذا يُسَخّنهُ ويُجَفِّف في الدرجة الثالثة» غ ٤-٥ «ويقتل... البول» [«أخرج الدود الذي يُقال له "حبّ القرع"، وأدّر البول» Δ ٧ ويحفظ... بالبصر] «ترياق الفقراء» I π «ἀγαθὸν τοῖσι σώμασι, τοῖσι δ' ὀφθαλμοῖσι φιλᾶρον» «قد يؤكل على مذهب دواء حافظ للصحة» أغذية^٨ Γ «ترياق الفقراء» [«الثوم ترياق أهل البادية» طبّ العرب ١٢٨٦ || ١٠ حاز... الثانية] «حاز يابس في الجزء الثالث من الحرارة واليبس» طبّ العرب ١٣٨٦ || ١١ وخاصته... الرديّة] «تعرض منه أحلام رديّة [δυσόνειρον] Δ، «ويُري أحلاماً رديّةً» فردوس ٣٧٨ || ١٢ يُضّرّ بالبصر] «ويُحدث غشاوة في العين» Δ ١٢ ولسع الهومّ] «نفع من نهش الهوامّ» Δ ١٣ كالبواسير] «وينفع من البواسير» فردوس ٣٧٨.

٥ التي] «الذي» ب || ١٣ التي] «الذي» ب.

السَّلْجَم

1.3.8

(وهو اللَّفْت)

وهو حارٌّ في الدرجة الأولى، رطب في الثانية.
يُبيح الجماع ويزيد في المنى. وفيه نَفْحٌ في البطن، إلاَّ أنه يكثرُ الحام.

المَجْزَر

1.3.9

حارٌّ في الدرجة الثانية، رطب في الأولى.
يُبيح الجماع ويكثرُ المنى؛ ويُدقُّ الكلاء ويُدرُّ الطمث.
وإذا طُبِّح، جاد غذؤه؛ إلاَّ أنه عسرُ الانهضام بطي الانحدر عن المعدة.

السَّلْق

1.3.10

وهو حارٌّ يابس في الدرجة الأولى. وخاصته: أنه يُجَلُّ الرطوبة من الرأس. وهو جيّد للطحال، مفتوح
ب ١١٩ السدد؛ إلاَّ أنه سريع الاستحالة للسوداء.

١ السَّلْجَم [] «السَّلْجَم» أغذية^١ ١١-١٧ (Π. γογγυλίδος) (Π. ٣٢٣-٢٥٣٢٤)، «ذكر السلجم» مفردة^٢
١٠٤ ط ٧-٦ (XI Γ ١١٨٦١)، «السلجم البستاني» حشائش ٢٢-١٣ ٢٤٤ (III Δ ١٨٥ I ١١١) ||
٥ المَجْزَر [] «ذكر الجزر» مفردة^٣ ١٠٤ ط ١٤-١٠ (Π. σταφυλίνου) (Π. ١٢٩ XII Γ ١٤٨)، «الجزر البرّي» حشائش
٦٥ ط ١٠-٢ (II Δ ٦٥-٢٠ ١٣٦٦) || ٩ السَّلْق [] «السَّلْق» أغذية^٤ ١٠ ط ١٥-١٣ (Π. «Π.»
«τεύτλου» (Γ ١٣١١-١٥)، «ذكر السلق» مفردة^٥ ١٣٥ ط ١٢-٨ (Π. τεύτλου) (Π. ١٣٨ XII Γ ١١٥)، «سلق»
حشائش ٤٥ ط ١٥ (I Δ «σεύτλον» (I Δ ١٩٥-١٠ ١٢)).

٤ «يُبيح الجماع» [] «يُبيح شهوة الجماع» (Γ «محرّك» Δ) || ٤ «يزيد في المنى» [] مفردة^٦ Γ || ٤ «فيه... البطن» [] «يُولد رباحًا
ناخئةً» مفردة^٧ Γ || ٤ «يكثرُ الحام» [] «اجتمع منه في البدن خلطٌ غليظ، وهو الخاط المخصوص باسم الحام [τὸν καλούμενον
μὸν χυμὸν]» أغذية^٨ Γ || ٧ «يُبيح الجماع» [] فردوس ٢١٣٨٠، «وَيُحْرَكُ قُوَّةُ الْجَمَاعِ» Δ (Γ ≡) || ٧ «يُدرُّ الطمث»
«أدرُّ الطمث» Δ، «يُدرُّ البول والطمث» Γ || ٨ «وإذا... المعدة» [] «وقد يؤكل نيئًا ومطبوخًا، إلاَّ أنه غليظ بطي الانهضام»
أغذية^٩ III ١٠٨ هـ-٤ || ١٠ «يُجَلُّ... الرأس» [] «للنطرونية التي فيها، ولذلك عصارتهما، إذا استعط بها [ρίνι ἐγγερόμενος]
بالعسل، تُنقى الرأس» Δ، «في هذا قُوَّةٌ بورقية تجلو وتُحَلِّلُ وينفضُّ فضل الدماغ من الأنف» مفردة^{١٠} Γ || ١٠-١١ وهو
... السدد [] «إلاَّ أن السلق أنفع وأجود من الملوكية في تفتيح سدد الكبد ... وهو أيضًا دواءٌ يبلغ المنفة لمن كان طحاله عليلاً
بهذه العلة [τοῖς ὑποσπλήνοις]» أغذية^{١١}.

٧ «يُدقُّ» [] «ويدقُّ» ب ٨ «غذؤه» [] «غداه» ب ٨ «الانحدر» [] «الانهضام» ب ١١ «السوداء» [] «للسدد» ب.

٢ «وهو اللَّفْت» [] «والسلجم مثله (وهو اللفت)» طبَّ العرب ١٨٥، «سلجم هو اللفت» تلخيص ٦٦١ + «سلجم هو
اللفت» تلخيص ٩٥٦: «سلجم/سلجم» > «لَفْت» > «لَفْت».

1.3.11

الكُرْبُ

حارّ يابس في الدرجة الثانية.
يعقل الطبيعة.
وإذا أدمن عليه، قطع الولد.
وهو بطيّ الهضم، ثقيلٌ على المعدة، مُؤلّد للسوداء. ٥

1.3.12

الكُرْبُ † المعروف بالقتارية

وهو حارّ يابس.
ومنه الأبيض الرقيق الذي يقوم على ساق، وهو المعروف باللّصيف؛ وهو حارّ رطب أيضًا، يقرب من
القتارية في فعله.
ومنه البرّي، وهو أكثرها ضررًا وأمّثلها إلى السوداء، إلّا أنّه يقتل الديدان في الحيوف. ١٠
وإذا سُلق وطُبخ باللحم، ذهب ضرره وقوى الجماع ونفع من وجع الكليتين.
والقتارية، إذا سُلق وطُبخت باللحم، قوت الجماع وكثرت الباه وأدّرت البول.
والصنف الثالث يقرب من القتارية في المنفعة، إلّا أنّه ينفع من السعال البارد إذا طُبخ باللحم.
وهو ثلاثة أصناف: منه البستاني وما ذُكر فيه.

١ الكُرْبُ [≡ «الكرب» أغذية^{١٠} ١٥-١٧ ≡ «Π. κράμβης» Γ ٣١٢-٤).

٢ حارّ يابس [≡ طبّ العرب ١٦٨٤ || ٣ يعقل الطبيعة] «فأما جرمه [σώμα]، فهو بسبب ما فيه من قوة التجفيف أحرأ
أن يعقل البطن» Γ || ٥ مؤلّد للسوداء [«καὶ μελαγχολικὸν γεννᾷ χυμὸν» I atrica ١١٩٤.

٦ الكُرْبُ [> «الكنكر» || ٦ بالقتارية] «القتارزيه» پ || ٨ باللّصيف [«اللصف» پ || ١١ وقوى] «وقوا» پ.

٦ بالقتارية [«اقتنوس ≡ ἄκανθος] وتسميه العامة «القتارية» تفسير^٣ ١٤٧-٣، «كنجر: وهو القتارية» تلخيص
[٤٦١] (> ابن جليل + ابن الجزر)، «حرفش» فالبستاني هو المعروف عند الأطباء بالكنكر، وعند الناس بالقتارية»
عمدة ٣١١٥٦-٣٢، «اقتنس: هو الحرفش البستاني، وهو الكنكر، وعامة أهل المغرب تسميه «القتارية» تفسير
٢١٦-٥؛ > «κινάρα» (κινάρα / κινάρα) || ٨ باللّصيف [«ومن نوع الحرفش: اللصيف، يُشبه نبات الحرفش
إلّا أنّه أعظم منه» عمدة ١٥٧-٢٠.

الهليون

1.3.13

(هو الاسفراج)

وهو حارّ رطب في الدرجة الأولى.
 يُلين الطبيعة ويُدرّ البول، ويُبيح الجماع ويكثر المنيّ.
 ويُفتح السدد، ويُقوي الكبد، ويُثقي الكلاء.
 وينفع من لسع الهوامّ ونهش (ذوات) السموم، ويُفتت الحصاص.
 وإذا عدم الراوند، فبدله | مرّتان من لحاء أصله. ١١٩ ط

اليقطين

1.3.14

(وهو القرع، وهو الدّبّاء)

وهو حارّ رطب في الدرجة الثانية.

يُبرد الجسم.

وينفع من السعال.

١ الهليون] ≡ «الهليون» حشائش ٤٦ ط ٧-٣ ≡ (ασπάραγος) Δ I (١٩٧-١٩٨) || ٨ اليقطين] ≡ «ذكر القرع» مفردة^١ ١١٦ ط ١٦ ≡ (Π. κολοκύνθης) «Π. XII Γ (١٧٣٣-١٨).

٣ وهو... الأولى] ≡ أغذية III ١٠٦ || ٤ يُلين... البول] «لين البطن وأدرّ البول» Δ || ٤ ويكثر المنيّ] «وهو يزيد في المنيّ» طبّ العرب ١٧٨٥ || ٦ ونهش... السموم] «نفع طبيخها من نهش الرتيلاء [φαλαγγιοθήκτοις] Δ || ٩ وهو... الدّبّاء] «قلوقينيدس: وهو القرع، وبالعربية "الدّبّاء" تفسير ٣٨ ≡ (κολοκύνθης) Δ، «وخطئ من يُسّي القرع يقطيناً، لأنّ القرع تُسمّيه العرب "الدّبّاء"» ابن جلجل د تلخيص [٤٣٠]، «قلوقثي: هو القرع، وهو اليقطين، وهو الدّبّاء» تفسير ب ١٨٨ || ١٠ وهو... الثانية] «مزاجه مزاج بارد رطب، وهو منها جميعاً في الدرجة الثانية» Γ.

٢ الاسفراج] «الاسفراج» ب || ٦ وينفع... الهوامّ] «وسفع من لسع وسفعمن لسع الهوام» ب.

٢ هو الاسفراج] «والهليون (وهو الاسفراج)» طبّ العرب ١٧٨٥، «اسفراج: هو الهليون بلسان أهل الأندلس، وأصله الرومية اسفراغش» مفردة^٢ ١٧-١٨، «في الهليون (ويُسمّى بالغرب "الاسفراج")» أغذية III ١٠٦ || > ασπάραγος / κολοκύνθης).

1.3.15

البادنجان

بارد يابس في الدرجة الرابعة، لأنه أفرط في البرد واليبس بالعكس إلى ضده، وصار فيه حرٌّ ويبس. وهو مولد للسوداء وأمراض القلب، ويُغيّر الدم ويؤلّد الأنبات والاحتراق والجرب. وذكر **جالينوس** أنه، من أدمن على آكله ستين يومًا، أجذمه إجمالًا لا برو له. وهو يكلف الوجه، ويورث داء السرطان والأورام الصلبة؛ إلا أنه، إذا سُلق في الماء والملح مرتين وطُبخ باللحم والحلّ والأفويه، ذهبت مضرته.^٥

1.3.16

الكماة

وهي (باردة) رطبة، لكنها تولّد الخوانيق والذئبة، وتحبس البول وتعقل الطبيعة، وتولّد الحصا؛ إلا أنّ ماءه ينفع من وجع العين والرمد والقروح في العين والسُّلاق. وفيه حديثٌ عن النبي ﷺ أنه قال في الكماة ﴿الْكَمَاءُ مِنَ الْمَمْنِ، وَمَاؤُهَا شِفَاءُ الْعَيْنِ﴾.^{١٠}

1.3.17

شحمة الأمراض

(وهي الفُقاع)

ب ١٢٠

ومنها صنّف آخر ينبت في البراريّ، وهو السمّ || بعينه: يقتل، ليس في آكله خير. ومنه نوعٌ آخر أحمر ينبت في أصول الشجر والزيتون، وهو يقرب من الكماة في فعله. فإن أراد مزيد دفع ضررها، فليستعملها في اللحم بعد السلق في الماء ويكثر فيها الكمون.^{١٥}

١ البادنجان] ΔΓ || ١٠ قال] ≡ طبّ العرب ٧٤٢-٨ (→ سعيد بن زيد بن عمرو بن نفيل).

٣ وهو مولد للسوداء] «يولّد السوداء» طبّ العرب ٢٥٨٥ || ٥ وهو... الصلبة] «صار مفسدًا للون، مسودًا للبشرة، مولدًا للكلف ومورثًا للداء المعروف بالسرطان والداء المعروف بداء الفيل والأورام الجاسية الصلبة وللسدد» أغذية III ١٤٧-٩ || ٦-٥ إذا... مضرته] ≡ أغذية III ١٤٧-٩ || ١٣ ومنها... البراريّ] «ومن نوع الفُقاع: تين الأرض، وهو فقّع أبيض رخو في قدر التين وعلى شكله، يظهر في زمن الخريف على وجه الأرض؛ نابتة الرمل» عمدة ٢٩٢-٢٠١ || ١٥ الكمون] ⊕ > * «الكمثرى»: «وقد قال قومٌ إنه، إذا طُبخ الكمثرى البرّي مع الفطر، لم يضرّ آكله» حشائش ٢٨-١١. (≡ I Δ ١٠٩-٢١٢).

٤ ستين] «ستون» ب || ٦ والأفويه] «والأفاوي» ب || ٨ لكتها] «لاكتها» ب || ٩ ماءه] «ماوها» ب || ١٠ ﷺ] + «عليه افضل السلام» ب* || ١٥ في] «في | في» ب.

١ البادنجان] > بانجان / بانجان (→ भण्डाकी) || ٧ الكماة] ≡ «δύον» || ١٢ وهي الفُقاع] ⊙ «يقولون لضرب من الكماة "الفُقاع"» لحن ١٦٢، ٤٠٣ DAA {FQ}.*

باب ذكر الفواكه وطباها ومنافعها

1.4

فمن ذلك :

التمر

1.4.1

- ٥ حارّ يابس.
يُضَرُّ بِالْأَسْنَانِ، وَيُعْمَشُ الْعَيْنَيْنِ، وَيَكْتَرُ الْمَرَارَ؛ إِلَّا أَنَّهُ يُوَافِقُ أَصْحَابَ الْبَلْغَمِ، وَيَنْفَعُ الْمَبْرُودِينَ، وَيُسَبِّحُ الْجَمَاعَ.

التين

1.4.2

- ١٠ حارّ رطب.
ينفع السعال، وينفع المشايخ، ويُرطب الصدر ويكترم الطبيعة ويُرق القلب.
وجاء في الحديث عن النبي ﷺ قال: ﴿مَنْ أَرَادَ أَنْ يَرِقَّ قَلْبُهُ، فَلْيُدْمِنْ أَكْلِ التَّيْنِ﴾.

العنب

1.4.3

- ١٥ وهو أفضل الفواكه وأعدلها مزاجًا.
يُخَصِّبُ الْجِسْمَ، وَيُقَوِّي الْأَعْضَاءَ، وَيَنْفَعُ الْمَذْبُولِينَ.
وهو حارّ رطب لطيف، دون التين في الحرارة.
ويزيد في الدم.
والحصر منه: بارد يابس لطيف في الدرجة (—)؛ إِلَّا أَنَّهُ مَبْرَدٌ لِلصَّفْرَاءِ، وَمَسْكَنٌ لِلْعَطَشِ.
وإذا طُبِّخَ مَاءُهُ بِالسُّكَّرِ، كَانَ أَحْسَنَ مِنَ التَّمْرِهِndي فِي التَّقْطِيعِ وَالتَّبْرِيدِ، وَأَنْفَعُ فِي الْحَمَائِمَاتِ الْحَارَّةِ.

٨ التين] «التين» حشائش ٢٩^ط ٨-٧، «στυχα» (I Δ ١١٧ (١٩) || ١١ وجاء... التين] «ومنه حديث يرويه عمر بن قيس عن عطاء عن ابن عباس، إن النبي ﷺ قال: مَنْ أَحَبَّ أَنْ يَرِقَّ قَلْبُهُ، فَلْيُدْمِنْ مِنْ أَكْلِ الْبَلْسِ» غريب II ٦٦٦-٥٣، «وفي الحديث: مَنْ أَرَادَ أَنْ يَرِقَّ قَلْبُهُ، فَلْيُدْمِنْ مِنْ أَكْلِ الْبَلْسِ (وهو التين)» مكارم I ١٣٧٦-١٣٠٣

٦ يُضَرُّ بِالْأَسْنَانِ] «ويُضَرُّ بِالْأَسْنَانِ وَاللِّثَّةِ» أغذية II ١٤٢٢٠ || ١٠ ينفع السعال] «وقد يُوَافِقُ السَّعَالَ الْمَزْمَنَ» Δ ١٠ || ١٠ وَيُرْتَطَبُ... الطَّبِيعَةُ] «ويُلَيِّنُ الصَّدْرَ وَالْبَطْنَ» فردوس ١٦٣٨١ || ١٤ يُخَصِّبُ الْجِسْمَ] «يُخَصِّبُ الْبَدْنَ» أغذية ١٢٤٣.

١١ فَلْيُدْمِنْ] «فليزدمن» پ || ١٤ يُخَصِّبُ] «يخصب» پ.

- 1.4.4 **التَفَاح**
 وهو صنفان: حلوٌ وحامض.
 فالحامض منه: بارد يابس في الدرجة الأولى.
 والحلو منه: حار رطب، نافع للقلب والدماغ والكبد، لأنه يُرَوِّق الدم ويُلطِّفه. ٥
- 1.4.5 **السَّفَرَجُل**
 وهو بارد يابس.
 ينفع من ضعف المعدة وطَبْخه، وينفع من الإسهال. ٥
- 1.4.6 **الكُمَثْرَى**
 وهو بارد يابس.
 يعقل الطبيعة، ويُؤلِّد القولنج؛ إلا أنه يُقَوِّي المعدة ويقطع العطش. ١٠
- 1.4.7 **الرَّمَان**
 ذكروا أنّ القول فيه كالقول في التفاح في الطَّبْع والمنافع من الصفراء والمعدة.
 ويُلبِّين الطبيعة، ويقطع العطش، وينفع الحمّيات، ويُؤلِّد دمًا جوهريًا. ١٠

١ **التَفَاح**] «ذكر التفاح» مفردة^١ ١٢٤ ط^٢ ٣٤ (≡ «Π. μηλέας» Γ XIIV ٥ (٦-٣) || ٥ **السَّفَرَجُل**] «السفرجل»
 حشائش ٢٧-٢٠ ط^٣ ٨ (≡ «κυσθώνια» Δ I ١٠٧-١٠٨) || ٨ **الكُمَثْرَى**] «الكُمَثْرَى» حشائش
 ٢٧-٢٠ ط^٤ (≡ «ἄπιον» Δ I ١٠٩-١١٧)، «ذكر الكُمَثْرَى» مفردة^٥ ٩٩ ط^٦ ١٣-١٤ (≡ «Π. ἀπίου» XI Γ ٤٣-٤٨-١٤).

٢ وهو ... وحامض] «لأنه منه الحلو، ومنه القابض، ومنه الحامض» Γ || ٧ ينفع ... الإسهال] «هو جيد للمعدة
 [εὐστόμαχα] ... جيد للذين بهم إسهال مزمن [κοιλιακοίς] Δ || ٩ بارد يابس] ≡ طبّ العرب ١٦٨١ || ١٠ يعقل
 الطبيعة] «عقل البطن» Δ || ١٠ ويُؤلِّد القولنج] «والكُمَثْرَى المُتَدَّد، خاصته أن يورث القولنج» ابن ماسويه د مفردة
 ١٠١٧٤ || ١٠ يُقَوِّي ... العطش] «متى أكل الكُمَثْرَى، قويت به المعة وسكن العطش» Γ || ١٢ ذكروا ... التفاح]
 «القول في الرمان مثل القول في التفاح» البصري د جامع^٧ IV ٦٢-١٣ || ١٣ ويُلبِّين الطبيعة] «ملين للطبيعة» البصري د
 جامع^٨ IV ٦٢-١٥ || ١٣ ويقطع العطش] «قاطع للعطش» ابن عمران د جامع^٩ IV ٦٣-٢١ || ١٣ وينفع الحمّيات] «صار
 نافعًا من الحمّيات المتطاولة المتولّدة عن عفونة الأخلاط» أغذية^{١٠} II ٢٠٤-٦.

الإجاص

1.4.8

(وهو عين البقر)

وهو بارد رطب.

يُبرد ويُلين الطبيعة، وينفع من الحماليات الحارة والبرسام والالتهاب والجراحات.

الفرصاد

1.4.9

(وهو الثوث)

وهو حار رطب في الدرجة الثانية — والذي لم ينضج: بارد يابس.

يُصفي الدم من البلغم، وينفع من وجع الحلق والذ(بحة).

الفرشك

1.4.10

(وهو الخوخ)

وهو بارد رطب.

ثقل على المعدة، مبرد لها؛ مُضّر بالمعاء.

ويُغضن الدم، ويُؤلد الأنبات والعفونة.

ب ١٢١ مؤلد للحمى، إلا أنه يقتل الديدان وحب القرع في || البطن.

٥ الفرصاد] ≡ «توث» حشائش ٢٩٦-٧ ≡ «μωρέα» I Δ ١١٥-١٢ || ٩ الفرشك] ≡ «دكر الخوخ» مفردة^Γ ١٢٤^ظ ٢١-١٧ ≡ (Π. μηλέας Περισκής) XII Γ «Π. ٧٦-١٥».

٢ وهو عين البقر] «وإنما الإجاص عيون البقر» عمدة ١٠٢٠ || ٨ وينفع... والذ(بحة)] «كانت صالحة... وللورم الحار العارض في العضل الذي عن جانبي الحنك وجنبتي اللسان» Δ || ١١ بارد رطب] ≡ طب العرب ١٤٨٠ || ١٢ ثقل على المعدة] «ثقل» طب العرب ١٤٨٠ || ١٢ مبرد لها] «فزاها رطب مبرد» Γ || ١٤ يقتل... البطن] «ولذلك صار ورقها يقتل الديدان» Γ.

٨ والذ(بحة)] ⊗ ب.

١٠ وهو الخوخ] «فرسك» سوق ٣١١٠؛ «فرسك: هو الخوخ» عمدة ٣٤٣٢؛ «فرسك» > «περσικόν».

1.4.11

المشمش (البرقوق)

وهو بارد رطب، أردى من الخوخ.
وفيه أخلاط تُضعف الكبد وتولد حمى الربيع.

1.4.12

الأترنج

فيه أربع طبائع:
فقشره حارّ يابس، يُسخن المعدة؛ وهو صلبٌ بطي الانهضام.
لحمه بارد رطب، يقطع الصفراء ويعقل الطبيعة.
وحبه حارّ يابس، يعقل البطن ويُقوي المعدة.
ولبّه السيتال: إن كان حامضًا، فهو بارد يابس، يقطع الصفراء والبلغم.

1.4.13

الزعرور

قال **جالينوس** فيه إته بارد يابس، يُقوي المعدة ويعقل الطبيعة، وينفع من الغشاء والدوار.

١ المشمش] ≙ «ذكر المشمش» مفردة^Γ ١٢٤^ط ٢١-٢٣ ≙ (Π. μηλέας Ἀρμενικής) XII Γ (١٧٧-١٦٧٦) ||
٥ الأترنج] ≙ «الأترنج» أغذية^Γ ٩^ط ٢٦-١٠^١ ≙ (Π. κίτρίου) Γ (٢٣٠٤-١٨٣٠٣) || ١١ الزعرور] ≙ «الزعرور
والغيراء» أغذية^Γ ٨^ط ٢٤-٢٥ ≙ (Π. μεσπίλων και ούων) Γ (٢٠٢٩٥)، «الزعرور» حشائش ٢٨^٥-٧ ≙
«μέσπιλον» (I Δ ١١٠-١١١).

٣ وهو بارد رطب] «وهي ثمرة باردة رطبة»^Γ || ٣ أردى من الخوخ] «καὶ τῶν ῥοδακίνων κακοχυμώτερα»^{Synt}
٢٨-٢^٢ ٤ وتولد حمى الربيع] «ويُجدتان حمياتٍ متطاولةً» أغذية^س II ١٧٨ ٩ || ٦ فيه أربع طبائع] «أجزاء الأترنج ثلاثة
أجزاء» أغذية^Γ || ٧ وهو... الانهضام] «القشر الحاوي لها من خارج (τὸ σκέπασμα) وهو في نفسه عسر الانهضام
[δύσπεπτον]؛ وحق له ذلك، إذ كان غلًا صلبًا»^Γ || ١٢ يُقوي... الطبيعة] «ولذلك هو أصلح وأوفق للبطن
المستطلق»^Γ، «إذا أكل، كان جيّدًا للمعدة، مسكًا [στεγνωτικός] للبطن»^Δ.

٢ البرقوق] «ارميناقن: وهو المشمش وهو البرقوق» تفسير^ج ٢١ ٩، «مشمش: هو البرقوق» عمدة ٢٢٢؛ «يُسقون ثمرة
هذه الشجرة "برقوقيا" [πρεκόκκιον]»^Γ.

النبقان

1.4.14

وهو صنفان: بَرِّيٌّ وبستانيٌّ؛ وهما باردان يابسان، إلا أنّ البستانيّ أقلُّ يبساً من البرِّيِّ، يميل إلى الرطوبة.
وهما نافعان من الصفراء والإسهال.

جُمامر النخل

1.4.15

بارد يابس.
يعقل الطبيعة ويقمع الصفراء.
وإذا أُكِلَ على الامتلاء، أسهل البطن.

المجونى

1.4.16

وهو حارٌّ رطب.
ينفع الصدر والرئة، ويُذهب السعال، وينثف الفضول الفاسدة، ويُرَوِّق الدم ويُعدِّله.

٤ وهما... والإسهال] «ينفع من الإسهال الصفراويّ النبق» ابن ماسويه = الحاوي VI ١٩١١.

١ النبقان] «النبقيين» پ.

٥ جُمامر النخل] «جُمامر النخل (وهو قلبها)» مفردة^{٦٥} ٢٣-٢٢ ≡ «ὁ τε τοῦ φοίνικος ἐγκέφαλος» XII Γ
٦٧٢-٩٠٠، «جن النخل هو الجمار» تلخيص [١٨٥] (→ ابن إسحق، كفاش).

2

القول في اجتماع الأغذية إذا اجتمعت في البطن

السمك واللبن، إذا اجتمع في الجوف في حالٍ | واحد، تتولد منه الحكمة والجرب ورياح القولنج. ١٢١ ط

الإكثار من أكل البيض

والإدمان عليه يُؤدِّد الدوار والكلف. ٥
وأكله مشويًا أخفُّ من المقلّي؛ والمسلوقة في الماء، أثقلها.

أكل الملح

على إثر الفصد والحجامة، تحدث معه الأنبات والقروح.

في الحماض

مَن دخل الحماض على الامتلاء من الطعام، يولد له القولنج ورياح الشراسيف. ١٠

أكل الأترنج بالليل

يُورث الغاشية والديبيلة، فليجتنب بالليل جملةً.

**القول فيما يعهد الإنسان
ويعتمد عليه في كل شهر
وما يجتنبه**

3

وذلك أن يشرب في شهر **فبراير** كلَّ غداة جُرعتين من ماء حارّ: فإنّ ذلك يمنع من كلِّ آفة تحدث في ذلك الشهر.

وفي شهر **مارس** لا تأكل الحوت، والعقّ كلَّ يوم لعقتين من عسل: فإنّ ذلك ينفع من كلِّ آفة تحدث في ذلك الشهر.

وفي **أبريل** لا تأكل الفجل، ولا شيئًا من العساليح؛ واشرب كلَّ يوم شراب ورد عسليًا: فإنّ ذلك ينفع من كلِّ آفة تحدث في ذلك الشهر.

وفي **مايه** لا تأكل رأس شيء من الحيوان.

وفي **يونيه** يشرب الماء البارد بعد طبخه وتبريده.

وفي **يوليه** اجتنب الوطي.

وفي **أغشت** لا تشرب اللبن البقريّ ولا المعزيّ، حلو أو حامض.

وفي **اشتبر** لا تأكل الكراث، ولا البصل.

وفي **أكتوبر** لا تدخل الحمام.

وفي **دجنبر** لا تأكل الكرنب.

١-٣ القول... يجتنبه] ≅ إسحاق بن عمران ≡ عقد VIII ٤٢-٦-١٧، «Μήνες κατὰ Ῥωμαίους» بحقّيّ الدمشقيّ [= ID ٢٣٦.

٤ وذلك] + «في شهر يتبر: لا تأكل السلق، واشرب شرابًا شديدًا غداة» عقد || ٤-٥ أن... الشهر] «وفي شهر فبراير: لا تأكل السلق» عقد، «Σεύτου μη φάγησ» ID || ٦-٧ لا تأكل... الشهر] «لا تأكل الحلواكلها، وتشرب الأفسنتين في الحلاوة» عقد، «Γλυκοφάγει, γλυκοπότει» ID || ٨-٩ لا... الشهر] «لا تأكل شيئًا من الأصول التي تنبت في الأرض، ولا الفجل» عقد || ١٠ وفي... الحيوان] ≡ عقد، «Ποδοκέφαλα μη φάγησ» ID || ١١ بعد... وتبريده] «بعد ما تطبخه وتبرده على الرقيق» عقد || ١٢ اجتنب] «جُتَب» عقد || ١٣ لا... حامض] «لا تأكل الحيتان» عقد || ١٤ لا... البصل] «تشرب اللبن البقريّ» عقد || ١٥ لا تدخل الحمام] «لا تأكل الكراث نيئًا، ولا مطبوخًا. وفي نينبر: لا تدخل الحمام» عقد (ID ≡) || ١٦ الكرنب] «الأرنب» عقد، «κράμβη» ID.

٨ **أبريل**] «حجّه ابريل» || ٨ شيئًا] «سى» ب || ٨ عسليًا] «عسلي» ب.

4

القول في الملابس

اعلم، وقفك الله، أن الحرير أحرُّ شيء يُلبس، وهو موفائق للمبرودين وأخصب لأجسامهم. والكتان أبرُّها، وأوفقها للأجسام المحرورة. وكلّ ثوب جديد حارٌّ جدًّا؛ وكلّ ثوب تقادم من الكتان، كان أحسن في اللباس وأوفق للأجسام.

5.1

ومما يقوي القلب والبصر

اعلم أن أحسن ما يلبس (—) النبات، الأخضر: لأنه يقوي القلب والبصر. ومما يقوي البصر: النظر في المياه الجارية والوجه الجميل والتزاهة في الورق والنضار. وخاصته | أيضًا تسليئة الهموم.

ب ١٢٢ ط

5.2

ومما يقوي القلب وينفع من النسيان

مُرَاقِدَةُ الْجَوَارِ الْمُحْتَمَلَةُ ذَوَاتِ التُّهُودِ، وَشَمُّ الطَّيْبِ وَالتَّمْرِيخُ بِدَهْنِ البَنْفَسِجِ وَلبَاسُ الحَرِّ وَخَفَّةُ الشَّيَابِ.

١٠

5.3

ومما ينفع السوداء وأعراض القلب والنزلات وعلل شتى

فَالَّذِي يَنْفَعُ مِنْ أَمْرَاضِ القَلْبِ وَالسُّودَاءِ: التَّنَاسُّ بِالحَدِيثِ وَسِمَاعِ الحَدِيثِ، وَاللَّهْوُ، وَشَمُّ الطَّيْبِ.

5.4

ومما يقوي الدماغ

التدخين باللُّوبان والقسط.

١٥

١٠ الحزّ [«الحز» ب || ١٣ التأنس] «النانس» پ.

١٠ الجوار [«الجوار»] (الجواري).

5.5 **ومما ينفع النزلات وكثرة العطاس وقروح الأنف
لا سيما بالمشايخ**

التدخين بالعنبر الصغير (وهو اللادن)».

5.6 **ومما ينفع من وجع الرأس ووجع الأذنين**

غسلُ الرأس بالماء السخن ودقيق الترمس».

5.7 **ومما ينفع الحكّة والجرب**

غسلُ الجسم بعد التعرُّق في الحمام بماء قد طُبِّخ فيه كُزْبُر أخضر».

5.8 **ومما ينفع من العرق الكثير**

الطُّهورُ بماء قد طُبِّخ فيه الريحان».

فصل

7

في الأكحال والشيافات وأدوية العين

7.1

ب ١٢٣

صفة كحل الرمانين
النافع من || الضبابة والحرب وجميع علل العين
مجرب

٥

يُعصر الرمان الحامض بقشره والحلو كذلك، ويؤخذ من كل واحد نصف رطل ومن العسل نصف رطل. ويُطبخ في إناء نحاس أحمر حتى يرجع إلى قوام العسل. ويؤخذ من الصبر السقطري وكحل خولان ومامبران وزعفران: من كل واحد درهم. يُدق الجميع ويُنخل ويُعجن بصفيق، ويُذر على المطبوخ ويُخلط ناعماً. ويُستعمل بالليل بالغداة والعشي — مجرب ١٠

7.2

صفة شياف للماء النازل في العين
ومريح السبل الذي هو كنسج العنكبوت، وللبياض القديم والحديث وللضبابة والظلمة
والشعر الناتب في جفون العين والذي لا يلبث في قراءة الكتاب

يؤخذ إقليميا فضة وصمغ عربي وإسفيداج وزنجار وتوبال النحاس: من كل واحد درهمان. وُشَق: درهم. أفيون: نصف درهم. ١٥
يُدق الجميع ويُنخل بحريرة. ويُتقع الوشَق في ماء السذاب المعصور، وتُعجن به الأدوية وتُجَب مثل العدس. ويكتحل به غدوة وعشيّة ١٠

٣ صفة [دگان ل ٢٤٦٤-٣٠] || ١١ صفة [دگان ل ١٦١-٨٠]

٨ ومامبران وزعفران [ومن المامبران والزعفران] د [٩ بصفيق] [بشفيق] د [٩ ناعماً] [نعا] د [١١ للماء] [من الماء] د [١٢ ومريح] [ورياح] د [١٢ الذي هو كنسج] [التي تشتبك على العين مثل نسج] د [١٢ وللضبابة] - د [١٣ يلبث في] [يثبت] د [١٣ الكتاب] [الكتب] د [١٤ يؤخذ] - د .

صفة شيايف أصفر 7.3
يُنزِل الرمد الشديد في أقل مدة من أي نوع كان إن شاء الله

ب ١٢٣ ط صغ عربي ملقوط أبيض: | ستة دراهم.
نحاس محرق وإقليميا الفضة وقاقيا: من كل واحد أربعة دراهم.
زعفران وأفيون: من كل واحد درهمان.
مجموعة مسحوقة، وتُعجن بماء المطر وتُجفّف في الظل.
ويُداف ببياض البيض ويصّب في العين صبيًا.

صفة كحل نافع بإذن الله للرمد والأطفال خاصة 7.4
وهو عجيب معروف بالنجح

- ١٠ يؤخذ ماورد: رطل ونصف، فيجعل فيه درهم كافور. ثم يُتقع فيه من النَّشَا رطل. ثم يُجفّف ويُضاف إليه من العنزروت الجلال: نصف رطل، بعد السحق والنخل. ويُتقع في لبن الأسن أو لبن النساء، وتُديفه به وتُجفّفه في الظل.
ثم تسحقه وتزيد فيه نصف درهم كافور وأوقية إسفيداج مفسول مجفّف مسحوق.
ثم يُرفع في قوارير، ويكتحل به ويُذّر في العين الرّمدة، وخاصةً عيون الأطفال — وهو مجرب.

١ صفة [دكان ل ٦٠ ط ٢٤-٢٩ || ٨ صفة] ≡ دكان ل ٥٩ ط ٢٥ - ١٠٦٠.

٢ أقل [«أول» د || ٢ إن شاء] [«بأذن» د || ٤ وإقليميا الفضة] [«إقليميا فضة» د || ٤ وقاقيا] [«واقاقيا» د || ٦ مجموعة] [«يجمع» د || ٧ ويُداف] [«وتذاب» د || ٨ للرمد والأطفال] [«للعين الرّمدة وللأطفال» د || ١٠ ماورد] [«ماء وزد» د || ١١ أو] [«و» د || ١٢ وتُديفه] [«وتدفيه» د || ١٣ تسحقه] + [«حتى يجف» د || ١٤ وخاصةً عيون] [«خاصته لعيون» د.

١٤ ويُدّر [«ويدر» ب.

7.5

صفة كحل للبياض

استعمله **بولش الراهب** وجميع الأطباء؛ وأجمع الأطباء أنه لا يبرى، فصنعه وأبراً إلى ثلاثين يوماً ذكره **جالينوس** في «نصائح الزُهبان»

يؤخذ زبد البحر الذي يطفو على الماء، ويعر الصَّب، وسكر، ومسحوقا وبورق: أجزاء سواء معتدلة. تُدق وتُنخل.

ويؤخذ من الماميران: نصف أوقية. تُدق وتُنخل وتُطبخ برطل ماء حتى يذهب النصف، ويُسقى به || ١٢٤٥
ما تقدم في صلاية، ويُدام عليه بالسحق في الشمس أياماً حتى ينفذ الماء، ثم يصير دُروراً — وهو غايةً وسرّه كبير.

7.6

صفة كحل آخر للبياض

زيد البحر وأنزروت وسكر حجازي أو طبرزد: من كل واحد جزو. يُدق الجميع ويُنخل. ثم تُدز به العين، ويُغمس فيه الميل، ويُدلك موضع البياض باللسان بعد الخروج من الحمام والاكباب على الماء الحار.

١ صفة] ≡ «آخر يكون للبياض في العين» دگان ل ١٦٠-٢٤؛ ≡ تصريف II ٣١٨٣-٣٨٤؛ ≡ منصورى ٣٩٤-٧٠١؛ «كحل للبياض» ψΓ نصائح الرهبان د تذكره* ١٦٠ ظ (≡ SecMont ٣٦٤، ٣٦٦) || ٩ صفة] ≡ «آخر للبياض في العين» دگان ل ١٦٠-٢٤٠.

٢-٣ استعمله... الزُهبان] «ولم أر مثله في القلع ولا أجود» م || ٢ وجميع الأطباء] - د || ٢ وأجمع... يبرى] «وكان يخدر جميع الاطبا على أنه لا يبراء» ت || ٢ يبرى] «يبريه» د || ٢ وأبراً] «ويبرى» د || ٤ زبد] «من زيد» د || ٤ الذي... الماء] «*quae natat super aquam*» S، - م || ٤ ومسحوقا] «مسحوقا ومسحوقيا» د || ٤ وبورق] «وبورق» ل، + «وسكر حجازي» م || ٤ سواء] - د || ٦ الماميران] «الوج مقدار» د، «الماميران وعشرة دراهم و٢» م، «الماميران» ψΓ || ٦ تُدق وتُنخل وتُطبخ] «يُدق ويُطبخ» د || ٦ حتى يذهب النصف] «حتى يصير ربع رطل ويُصنى» م || ٧-٨ ما... كبير] «منه الأدوية بما تعجن به. ويُجفف في الظل، ثم يُسحق ويُعجن به أيضاً أربع مرات، ثم يُجفف ويُسحق ويُرفع ويُذر به العين — فإنه لا عدل له في إذهاب البياض حتى أنه يقلع الغليظ من عين النوات» م [ψΓ] || ٨ وسرّه] «وسر» د || ١٠ جزو] «جزء» + «وبورق ربع جزء» د || ١١ تُدز به] «يدر في» د || ١١-١٢ الخروج من] «الدخول في» د.

٢ وأبراً] «وابرى» پ || ٤ يطفو] «طفوا» پ || ٤ الصَّب] «للصَب» پ || ٤ وبورق] «ويدق» پ || ٦ الماميران] «الما مقدار» پ، «مران اظنه» پ*.

صفة كحل يُحدّ البصر
ويقوي الأشفاير اللينة الرخوة ويرفعها

7.7

يؤخذ سنبل ونوى التمر المحرق: بالسوية.

يُدقن ناعماً ويُخلان، ثم يُسحقان جيّداً.

صفة باسليقون كبير

7.8

ينفع لهدوء البصر والكُمنة ومرج السبل والمجرب والظلمة والدمعة

أخلاطه — إقليميا ذهبية ووشق: من كلّ واحد مثقال ونصف.

نحاس محرق: مثقال ونصف.

إسفيداج وهليلج أصفر: من كلّ واحد مثقال.

ملح درائي: مثقال.

فلفل ودارفلفل ومزّ: من كلّ واحد وزن أربعة دوانيق ونصف.

ساذج وأشنة وسنبل وهيل بوا وجندبادستر وإمد: من كلّ واحد نصف مثقال.

عروق قرنفل وماميران: من كلّ واحد نصف دانق. ^{١٢٤}ط

عنبر: قيراط.

ملح الطعام: مثقال.

ملح هندي: دانق ونصف.

يُدق ويُخل بحريرة ويُبالغ في سحقه، ويُكتحل به — فإنه مجرب.

١ صفة] دكان ل ٦٣ ط ٢٤-٢٣؛ كئاش س ٢٢٤-١٣ و ٢٢٤-١٣ ط ١ (< ابن الكخال) || ٥ صفة] ≡ «باسليقون الكبير على خلاص المتقدم ذكره» دكان ل ٦٢ ط ٢١-٢٩؛ ≈ «الباسليقون الأكبر» هارونيتة ٣١٥-١١؛ ≡ أقرباذين س ١٩٦-١٥-٢٤ ≈ «دواء الباسليقون = روشنائى» فردوس ١١٧-١٢-١٩؛ ⇒ «Ἰνδικὸν βασιλικόν» XII Γ ١٧٨٢-٦-١٤.

٢ «ويخشن» ك || ٢ «ويرفعها» + «إلى الفوق» ك || ٣ «يؤخذ» - د || ٣ «سنبل» + «جيد» ك س || ٤ «يُدقن... جيّداً» «يدق وينخل ويستعمل صحيح مجرب» ك ٤ ناعماً] «دفا ناعماً» د || ٦ «لهدوء» «لحدة» د || ٦ «والكُمنة» «والكمية» د || ٧ ذهبية] - د || ٧ ووشق] «ووشق» د، «زيد البحر» س || ٩ وهليلج] «وأهليلج» د || ٩ مثقال] «ودانق ونصاف» د || ١١ ومزّ] - د || ١٢ مثقال] «دانق» د || ١٣ عروق قرنفل] «قرنفل [...] وعروق» ق ص، «قرنفل» ف ه، - د || ١٣ وماميران... دانق] «نشادر دانقان» د || ١٤ عنبر: قيراط] ≡ د، - س || ١٥ ملح الطعام] «ملح العجين» هق || ١٥ مثقال] - د || ١٦ ملح... ونصف] «ودانق ونصب ملح هندي» د.

فصل

8 في الأدهان المستعملة ومعاناتها النافعة

فمن ذلك :

8.1 صفة دهن الخردل

٥ يؤخذ الخردل، يُدقّ دقًا ناعمًا، ثم يُنقع في ماء حارّ ويُخلط بشيء من زيت أنفاق، ويُعصر في مندبلٍ صفيق ويُرفع.
وهو حارّ لطيف، يصلح للأوجاع الباردة المزمنة، ويُجفف الرطوبة ويُنتفها. وينفع من داء الثعلب ومن أوجاع المفاصل والفالج والرعشة والاختلاج والنافض. وينفع من لسع العقرب ومن جميع الهوامّ، حاشا لدغة الأفعى. وإذا دهن به مؤخر الرأس بعد حلّقه بالموسى، نفع من النسيان وقوى الحفظ وحلّل البلغم الذي هو السبب في ذلك، ويُسّخن العصب، إن شاء الله. ١٠

8.2 صفة دهن الغافت

يؤخذ الغافت ويُلقي في الدهن الزكائي ويُعلّق في الشمس حتى يأخذ الدهن قوته — وإن شدّت، جعلته على النار حتى يجفّ.
وهو حارّ لطيف مُنقي، نافع من أوجاع الكبد ومحلّل لجسائها ومفتّح لسددها، نافع من الحقيبات المتقدمة وحمى الربع وحميات الصبيان. ١٥

٤ صفة] ≡ دكان ل ٥٢ ظ ١٣-٦ = د ٦٣ ١٢-١٧؛ ≡ «*oleum sinapis*» ^{Ant} ١٠٠ ١٧-٢٣؛ ≡ تصريف II ٢٠٣ ٢١-٢٤ ≡ هارونية ٤٥٣ ١٣-٨ || ٥-٦ يؤخذ... ويُرفع] → «صنعة سينابينون، وهو دهن الخردل» حشائش ١٠ ١٨-١٧ ٣٩ I Δ (≡ «*τὸ δὲ σινάπινον*» I Δ ١٧-١٥ ٣٩) || ٧ يصلح... المزمّنة] → حشائش ١٠ ١٨ (≡ I Δ ١٧-١٧ ٣٩) || ١١ صفة] ≡ دكان ل ٥٣ ظ ٣١-٢٧ = د ٦٤ ٢٢-١٩؛ ≡ تصريف II ٢١٦ ١٢-٨ || ١٤-١٥ وهو... الصبيان] ≡ «غافت» ابن عمران د جامع ص IV ٢٢٠ ٢٣-٢٢١-١١.

٥ زيت أنفاق] ≡ د، «زيت» Σ («*ἐλάτου*» Δ) || ٥-٦ ويُعصر في مندبلٍ صفيق] - Δ || ٦ ويُرفع] - ده، - Δ || ٧ حاز] ≡ دت، «بارد» دل، - A || ٨ والنافض] «والنافض» د، «واللقوة والنافض» ت، «واللقوة والناقص» ه، - A || ٨ لسع] «لسعة» د || ٩ الأفعى] «الافعا» د، «اليفاع» ه || ٩ بعد... بالموسى] - A || ١٢ الغافت] - Σ || ١٣ جعلته] «حملته» دل || ١٤ لطيف مُنقي] «له لطافة وتنقية» د، «له لطافة بليغة» د.

٧ حاز] «حاد» پ || ٨ والنافض] «والناقص» پ || ٩ الأفعى] «الافعا» پ || ١٤ مُنقي] «منقي» پ.

صفة دهن السذاب

8.3

- ب ١٢٥ | النافع من || برد الكلى والمثانة والظهر، واسترخاء العصب والعرشة والالاختلاج) والفاالج والقوة وسلاسة البول، إذا دُهنَت به السُّرَّة والمائدة والوركين.
- إذا دُهن به الظهر، نفع من الاحتلام الكثير إذا أفرط.
- وإذا قُطر منه في الأذن، نفع من الريج فيها منفعَةً قَوِيَّةً.
- وإذا عُمِل منه قيروطي وعُمِل على الأورام، نَشَفها من المادَّة وما يسهل منها.
- يؤخذ ثلثة أفساط من الدهن الركابي أو من دهن الشَّيرج.
- ومن ورق السذاب الطري: رطل ونصف بالبغدادِي.
- ومن الماء العذب: قسطًا واحدًا.
- يُجمع الكلّ ويُطبخ بنار لينة في قَدْرٍ نظيفة حتى يذهب الماء ويبقى الدهن، ويُنزل ويُصْفى ويُرفع.
- وإن شئت، صنَعته كسائر الأدهان، إلا أن هذه الصنعة أرفع وأحسن وأسرع.

صفة دهن الدفلى

8.4

النافع من المجرى الرطب

يذهب به أصلا

- ب ١٥ | يؤخذ من عصارة الدفلى قَدْر رطل، ويُلقى عليه نصف رطل زيت وردٍ أو زيت أنفاق.
- ويُطبخ حتى تذهب العصارة ويبقى الدهن، ويُصْفى ويُستعمل.

١ صفة] دگان ل ٢٦-١٦٥٤ = د ١١١٩٦٥؛ ≡ تصريف II ١٢٢-٦١٣؛ ≡ أقرابادين س ١٧٢-٢٨؛ ≡ كئاش س ١٨٥-٩-٢١٨٦ || ٢ النافع ...] ≡ «oleum rute» Ant^R ١٠١-١٧٢١ || ١٢ صفة] دگان ل ٥٥٥-٨ = د ١٠٧٦٦-٧٠١؛ ≡ تصريف II ٢١٦-٤٦؛ ≡ «oleum oleandri» Ant^R ١٠١-٢٦٠٢.

٢ النافع] «نافع» د ٢ والظهر] + «الأرحام» ق ٢-٣ واسترخاء ... والوركين] «ووجع الجنين» ق ك || ٢ والالاختلاج) [«والاختلاج» دت ٣ وسلاسة] «وينفع من سلاسة» د ٤-٦ إذا ... منها] - ق ك || ٥ الأذن] «الانب» د، «in naso» A || ٥ قَوِيَّةً] «عظيمة» د ٧ يؤخذ] «وهو أن تأخذ» د ٧ الدهن ... الشَّيرج] «دهن حل» ق، «الدهن» ك ١١ وإن ...] - ق ك || ١١ أرفع ... وأسرع] «أسرع» د || ١٣ النافع] «نافع» د || ١٤ أصلا] + «مجزب» دت ١٦ ويُستعمل] «ويرفع» دت، «reserva» A، «وينفع» دل.

٧ الشَّيرج] «السرغ» ب.

8.5

صفة دهن البنج

يؤخذ من بزر البنج الأبيض اليابس الحديث، ويُعجن بماء حار، ثم يُشتمس. فما جف منه، خلط بالباقي، ولا يزال يفعل به كذلك حتى يسود ويلين. ثم يُعصر بمندبل صوفٍ صفيقٍ، ثم يُجمع الدهن برفقٍ ويُرفع.

ب ١٢٥ ط

٥ فإته بارد | مخدّر للخام.

ينفع من السّهر إذا قُطر منه في الأنف.

ويُسكّن الصداع الصفراويّ، وينفع من القروح[†]، ويُسكّن أوجاع الأرحام.

وقد يُدهن به مواضع الصّنبان في اليد، فيقتلها.

ويدهن به الصّدغان، فيجلب نومًا معتدلًا.

وقد ينفع من وجع الأذن إذا قُطر فيها. ١٠

١ صفة [دكان ل ١٠٠٢٥٣ = د ١٧٠٠٠٦٣] ≡ تصريف II ١٢-٦٢٠٥ هـ ≡ ٤٥١-١٦٠٠٠١ ≡ «*ol. iusquiami*»
 Ant^R ١٠٠٤٣-٥٠: ⇒ «دهن البنج» حشائش ١٠٠١٠-١٢ ≡ «*τὸ ὑοσκαμίνον*» I Δ ١٦٣٨-٣٩(٢).

٢ بزر [Σ ≡ ≠ «ثمرة» (≡ «καρπὸν») Δ ٢ البنج [«ه» د، «*eius*» A || ٢ ويُعجن] «*malaxa*» A؛ «ويدق
 ويعجن» د؛ «ودقه واعجنه» (≡ «φύρα [...] καὶ κόψας») Δ ٣ ويلين [Σ ≡ (A «*et mollescat*» + Δ ٤٠ ١٨؛
 † «وينتن» (≡ «καὶ δυσώδες γένηται») Δ ٤ بمندبل... صفيق [«في خلال الحوض» (≡ «διὰ φορμού») Δ
 || ٤ ثم... ويُرفع [«واخزنه» (≡ «ἀποτίθεσο») Δ ٥ فإته بارد... - Δ ٥ || فإته - دت || ٥ مخدّر للخام] «مخدّر
 للخام» د، «مخدّر للحواس» ت، - A هـ || ٧ الصفراويّ [«*calidam*» A || ٧ القروح] «فروح الرأس إذا كان من
 المزة الصفراء، ومن الحكّة والجرب، وينفع من القروح» د، «قروح الرأس إذا كانت من المزة الصفراء ومن الحكّة والجرب
 ويقع في الفرزجات» ت، «قروح الرأس ومن الحكّة والجرب» هـ، - A؛ «ويقع في أخلاط بعض الفرزجات» (≡ «καὶ
 πεσσοῖς μείγνυται») Δ ٨ وقد... فيقتلها [≡ د، «ويقتل الصّنبان من اليد» هـ، «وقد يدهن مواضع الصّيبان في
 أوجاع البدن، فيقتلها» ت، - Δ A || ٩ ويدهن... فيجلب [«وإن دهنّت به، أجلب» هـ || ٩ معتدلًا] - A || ١٠ وقد
 ... فيها [«وهذا الدهن يصلح لوجع الأذن» (≡ «ποιεῖ δὲ καὶ πρὸς ὠταλγίας») Δ.

٧ القروح] «الفروح» ب.

صفة دهن الورد

8.6

يُصنع على ما تقدّم في الياسمين، ويُصنع المغسول على رأي جالينوس على ثلاثة أضرُب:

8.6a أحدها — أن تأخذ من زيت الزيتون أو الزيت المغسول المعروف بالزكايي: رطلًا، فتضعه في ظرف مزيج وتلقي فيه ربعه من الورد الغصّ، ويُشدّ رأس الظرف ويُعلّق في الشمس أربعين يومًا. ثمّ يُصقّى ويُرفع في زجاجة — وهذه الصناعة أفضل الصناعة في عمله وألطف جوهراً وأغوض في الأجسام.

وصناعة ثانية

8.6b

تأخذ المقدار بعينه من الزيت والورد، ثمّ تُعلّقه في البئر حيث لا يمسه الماء، وتتركه شهرين. ثمّ تُخرجه وتصفّيه، وترفعه.

وصناعة ثالثة

8.6c

ب ١٢٦ وهو أن تأخذ المقدار بعينه من الدهن || والورد، إلا أنّ (الإناء الذي) تضعه فيه تطليه من داخل بالعلسل، وكذلك تضع فيه الزيت والورد. ثمّ تشدّ رأس الإناء نِعْمًا وترفعه في قعر الأرض نِعْمًا وتطرح عليه التراب — وإتاك أن يكون في مكان يمسه الماء ونُدوّة، فتتركه فيه شهرين. وقد يُزاد فيه شيء من الإذخر، فتذكي به رائحته ويلطف جسمه. وهذه الصناعة أيضًا معها من رائحة الورد أكثر من الأول. فهذه الثلث صناعات التي ذكرها جالينوس.

١ صفة] «عمل دهن الورد» دكان ل ٤٧ ظ ١٦-٤٨ ظ ٣ = د ٥٧-١٩٥٧-٢١٥٨؛ تصريف II ٢٠٧-٢٨٢-٢٠٩-٢٠٩؛
Ant^R ١٠٠.١٠٧-٤٧؛ Pragm II ٣٨٢-٩١٥، I atrica ١٥٨-٩٥٩.

٢ المغسول] - Σ ٢ على رأي جالينوس] - A ٣ أو الزيت المغسول] «المعروف بزيت الاتفاق أو الزيت المغسول»
ت، «IP «ἐλαίου ὀμφακίνου» || ٤ في الشمس] «للشمس» د || ٤ أربعين يومًا] «per tres dies» A، «μ' ἡμέρας»
P، «I «ἡμέρας κ'» || ٤-٥ يُصقّى ويُرفع] «تصفّيه وترفعه» د || ٥ وهذه...] «ἀρίστη δὲ ἐστὶν ἢ διὰ τῶν ῥόδων»
- I «μόνων καὶ ἐλαίου σκευασία» || ٥ الصناعة في عمله] «صناعته» د، «صناعاته» د || ٥ وأغوض في الأجسام] -
A || ٧ حيث... الماء] «ita quod tangatur ab aqua» A، «εις φρέαρ ὕδατος ψυχροῦ» I - P || ٧ شهرين
A «IP «ἡμέρας μ'» || ٩ وصناعة ثالثة] - Aτ || ١٠-١١ إلّا بالعلسل] «in vase vitreo intus melle illinito»
«في إجانة ملطّخة بعسل» حشائش ١١١-٣ (≡) «εις κρατήρα μέλιτι κατακεχρισμένον» I Δ ٤٢ (١) || ١٠ الإناء
الذي] ≡ ت، «الذي» د || ١١ وترفعه] «وتدفعه» ت، «et submitte» A؛ «ἀλλοὶ δὲ κατορύττουσιν αὐτὸν ἐπὶ»
P «τῆς γῆς» || P ١١-١٢ نِعْمًا... التراب] - A || ١٣ وقد... الإذخر] - A؛ حشائش ١٠ ظ ٢٢-٢٣ (≡) I Δ ٤٢ (٧)
A - [١٥ فهذه...]

٥ جوهراً] «جوهر» ب || ١٣ فتذكي] «فتذكا» ب || ١٤ معها] «معها» ب.

وهو من الأدهان المقدّمة العجيبة، ومنافعه كثيرةٌ جلييلة. وهو بارد قابض باعتدال، ليس برده ظاهراً، ولا قبضه بيّناً، ولا إطلاقه للطبيعة مفرطاً، ولا إمساكه أيضاً قوياً.

مُطلقٌ للطبيعة، إذا شُرب، أزيد من الأشياء الملتينة لمن أراد إطلاق الطبيعة؛ وإن شُرب بعض الأشياء الماسكة، أمسك الطبيعة.

وهو مسكّنٌ لجميع الأوجاع التي تكون من الحرّ. وإن شُرب، نفع من حرارات المعدة والتهاها؛ وإن دهن به من خارج، فعل مثل ذلك. وكذلك إن قُطر في بعض الأشربة منه النافعة للكبد الملتهبة والمعدة والأحشاء، نفعها.

ب ١٢٦ ط

وإن شُرب منه مع البرزقوتونا المغسولة المحمّصة على النار، نفع من إطلاق الطبيعة التي يكون سببها أدوية حارّة مسهلة. ونفع من سخج الأمعاء.

وكذلك، إن شُرب مع لبن، نفع من حرقة البول وحرقة المثانة، وسكّن وجعها. ونفع من قروح الكليتين وحرّتها والتهاها، ومن علة دياييطيسا (وهي العلة التي يكثر صاحبها من شرب الماء وينزله سريعاً) — وكذلك يفعل إذا دهن به من خارج.

وإذا مُزج به مع خلّ وسكب على الرأس، نفع من الصداع العارض من وهج الشمس والسُّموم، ومن حرارة الحتمي والبرسام.

وإن ضرب بالخلّ ومُحمّل على البدن، نفع من الشرا والحكة والجرب — ولا ينبغي أن يفعل ذلك إلا بعد تنقية البدن. وكذلك يفعل إذا سُكب على الرأس التي فيه الوجع من قبل صدمة أو ضربة. وإن أصابت الرأس ضربةً وشقت العظم وظهر صفاق الدماغ وضبت عليه من دهن الورد مُدفاً، كان عَوْضاً من دم الصفاق والحمام، ونفع من ذلك ويسكّن الوجع.

١ وهو... باعتدال [«وله قوة قابضة مبرّدة» حشائش ١٣١١] (≡ «δύναμιν δὲ ἔχει στυπτικήν, ψύχουσαν» I Δ ١١٤٣) [«٣ مُطلقٌ للطبيعة» «ويُسهل الطبيعة إذا شُرب» حشائش ١٣١١] (≡ «λύει δὲ καὶ κοιλίαν ποτιζόμενον» I Δ ١٣-١٢٤٣) [«٣ إذا... وإن» «إذا شرب منه أزيد من المقدار، ويقبض الطبيعة إذا شرب منه مقدار معتدل، ولا ستيماً إذا» د، «إذا شرب مقداراً زائداً ويقبض الطبيعة إذا شرب منه مقداراً معتدلاً ولا ستيماً» ت، «Et si aliquis sumpserit ex eo in maiori quantitate quam debeat» A «٤ الماسكة» [«الملتينة إن أريد إطلاق الطبيعة» ت «٥ نفع... والتهاها» «ويُطفئ التهاب المعدة» حشائش ١٤١١] (≡ «καὶ καύσον σβέννυσι στομάχου» I Δ ١٣-٤٣) [«٥ حرارات» «حرارة» ت «٦-٧ وكذلك... نفعها» - A «٨ التي» ≡ دت «٩ حارّة» «حادّة» دت «١٠ لبن» ≡ دل، «لبن اللباج» د، «لبن النفاج» ت، «lacte caprino» A «١٠ وسكّن» «وشدّة» ت «١١ دياييطيسا» «ذياييتاويس» د، «ذياييطاوهي» د، «ذنانيطا» ت (> δισβήτης) «١١ وينزله» «ويوله» ت «١٢ وكذلك... خارج» - A «١٣ به» - ت «١٥ الشرا» - A «١٨ الصفاق» ≡ د، «الشفانين» ت، «A columbe vel turturis».

ب ١٢٧^١ وإذا قُطِر منه في الإحليل ببعض الشياقات || أو لبن النساء، نفع من الحكمة والتشنج الذي يكون في العصب^٢.

وإذا مُرَّخ به البدن من خارج، نفع من العرق المفرط.

وإن عُني به الجراحات العفنة، أُنبت اللحم فيها.

وإذا صُنِع منه مرهم مع فض البيضة المسلوقة ومُحَمَل على العين الشديدة الوجع والحز، سكَّها.

وإذا صُنِع منه قيروطي بشمع أبيض ومُحَمَل على شقاق اليدين والرجلين، سدَّها، ومن شقاق الشفتين

والمخريين.

وإذا حُمِل في قطنه على السن الذي يوجع، سكَّن الوجع.

وإذا تُمَضِّمُ به مع لسان الحمل، نفع من قروح المثة والقلاع.

وينفع من وجع القروح التي تكون من المثة الصفراء والدم الحار، مثل الغملة والحمرة وحرق النار، إذا

حُمِل عليه وحده أو مع الشمع الأبيض.

وقد يدخل دهنُ الورد في كثير من الأقراص التي تنفع من نزف الدم والمراهم.

وقد ثلَّت به الأدوية القويَّة الحدة المشروبة — ومنافعه كثيرة جدًا.

٦ قيروطي [®] «Iatrica» I ٥٨-١٦-٢٥.

١ وإذا قُطِر... [A - ١-٢ الحكمة... العصب] «الحرقه والسلح الذي يكون في القضيب» ت || ٣ مُرَّخ [«مزخ» دل ||

٤ وإن... فيها] «ويُنْبِي اللحم في القروح العميقة» حشائش ١١^{١٤} (≡ «I Δ «ἔστι δὲ καὶ ἐλῶν θρεπτικόν κοιλῶν» ||

١٣-١٤) || ٤ عُني [دل، «عونيت» د، «عمر» ت || ٤ العفنة] «العتيقة» ت || ٦ قيروطي [«قيروط» د || ٨ الذي

يوجع] «التي تُفَلَع» د، «الذي قلع» ت || ٩ المثة [د، «الفم» ت || ١٠ وجع] «جميع» ت.

٣ مُرَّخ [«مزخ» پ.

8.7

صفة دهن الآجر المبارك المستعمل في جميع الأمراض الباردة

- وهذا من | سرّ الطبّ المكتوم، لم آخذه إلاّ تقليدًا. ومنافعه كمنافع دهن النفط، إلاّ أنّه أحرّ وألطف ^ط ١٢٧
- جوهراً وأسرعُ نفوذاً وأكثرُ نفعاً للأمراض الباردة والبلغانية.
- وينفذ من باطن اليد إلى ظاهرها بسرعة، وينبسط في المثانة وغيرها^١، ويأخذ مكانًا واسعًا.
- وينفع من علل الحصى والمثانة، ويُدّر البول.
- وينفع من الأمراض وجميع الأوجاع الباردة، ومن علل الأذن الباردة ومن الدود، إذا قُطر فيها.
- وينفع من الفالج والقوة نفعًا عجيبًا، إذا دُهن به أو شُرب. وينفع من عرق النسا ووجع المفاصل والظهر.
- وإن حُلّ فيه الوُشْق وعُمل منه ضماد وحُمّل على الطحال، أذهب وَرَمَه في أقرب مدّة. وكذلك جميع الأورام الصلبة التي سببها البرد.
- وإن قُطر منه قطرات في أنف المصروع، نفعه؛ وينفع من انسداد الحياشيم، ويُسخن الدماغ.
- وإذا دُهن به مؤخّر الرأس، نفع من النسيان.
- وإن قُطر منه على الأسنان الوجعة، نفعها وأذهب وجعها.
- وإن استعمل في الفرج واحتُمّل، أدّر الطمث بسرعة وأخرج الجين الحيّ والميت.
- وإن احتُمّل في صوفة، قتل الدود الصغار التي في المعدة^٢.
- وقد يُفتح أفواه العروق، ويُجَلّل الأورام || والدم الجامد.
- وإن قُطر منه مع شراب الورد (شُرب، نقي) الرئة من الفضول الغليظة، ونفع من ضيق النفس.
- وإن دُهن به ظاهر البدن، نفع من برد الهواء.
- وإن اكتحل به، نفع من الماء النازل في العين، وربّما يبرّده.
- وينفع من جميع السموم الباردة، ومن لسع العقارب، ومن شرّب الأفيون والبنج وما أشبه ذلك.

١٢٨^ب

١ صفة] «صنعة الدهن المبارك» دكان ل ٥٦-١٢-٥٦ ط ٢٥ = د ٦٧-١٨-٦٨؛ ≡ تصريف II ٢٠٦-٣١-٢٠٧؛
 ≡ «oleum benedictum» Ant^R ١٠١-٥٣-١٠١-٢٤.

٣ لم... تقليدًا] - ٣A دهن النفط [«oleum balsami» A || ٤ وأسرعُ نفوذًا] - A || ٤ والبلغانية] - A ||
 ٥ وينبسط... وغيرها] ≡ د، «وان سقطت منه قطعة في بعض الاجسام من الثياب او غيرها انبسطت تلك النقطة»
 ت، «et expanditur» A || ٦ والمثانة] «وعلل المثانة» د || ١١ الحياشيم] «الحياشيم» د || ١٤ الفرج] «فرزجة» ت
 || ١٥ وإن احتُمّل في صوفة...] - A || ١٥ المعدة] ≡ د، «المقعدة» دلت || ١٦ الأورام] «الورم» د || ١٧ الورد]
 «الزوفاء» ت || ١٧ (شُرب، نقي)] ≡ دت || ١٨ وإن... الهواء] - A || ١٩ برّده] «برده» د، «برده» دل، «برا به»
 ت.

٣ تقليدًا] «تقليد» ب.

ومنافعه أكثر مما وصفنا — وإذا دهن به الصيادون الشباك للحوت، اجتمع إليها السمك. والجيد منه: القوي الرائحة، الشديداً الحمرة، اللطيف الجسم. وإذا جعل منه في طرف حديد وأدني من النار، اشتعل بسرعة. وإذا أخذ طرف لبدٍ وغمس في الماء وجعل منه في الطرف الثاني، رأيت قد نفذ: فهو صحيح.

- ٥ يؤخذ من الزيت العتيق المقدار الذي تريد. وتأخذ من الآجر الأحمر الذي لم يمسه (الماء) فتكسره قطعةً قطعةً، كلُّ قطعة مثل أوقية أو أوقيتين. وتوقد عليها النار حتى يحمر، ثم تأخذها واحدةً واحدةً فتطعمها في الزيت حتى يفرغ الجميع.
- ثم تدقها دقاً جريئاً وتملأ منها بطون التقطير المزججة المصبرة للنار بعد أن يُحمل عليها طين الحكمة. وتعلقها في | الفرن على هيئة طريق الماورد، ولا يكون بينها وبين النار حجاب. ثم انصب على البطون رؤوسها وطين أوصالها بطين الحكمة، واترك ذلك حتى يجف جميع ذلك.
- ١٠ ثم أدخل النار تحت البطون برفق. كلما سخنت البطون، شددت النار، فلا تزال تشده حتى ترى الماء يقطر أحمر شديد الحمرة. وتحفظ ألا تدب النار إلى الدهن القاطر، فإنه يتعلق به فلا تستطيع أن تطفئه. وفي ذلك كله شد النار حتى لا يقطر شيء من الدهن. ويترك الفرن يبرد حتى تخرج الأتفال من البطون، وتجعل غيرها فيها إن سلمت البطون من الكسر؛ وإلا، عوّضت من المكسور آخر وأحكمت طينها وشدت رؤوسها وقطرت فيها حتى تأخذ حاجتك منها، وترفعه في قارورة وتشده عليها لئلا يخرج منها شيء.
- ١٥ وتستعمله في جميع الأمراض الباردة — نافع، إن شاء الله.

١ تما وصفنا [«من ان احصينا» ت، «من ذلك» د || ١ الشباك للحوت] «شباكهم للحوت» د، «للحوت شباكهم» دل ||
 ٢ حديد [«حديدة» دلت، «حديدة» د || ٣ وإذا أخذ...] - A || ٤ فهو صحيح] + «غير مغسول ولا مغشوش» دل،
 «ليس فيه غش فهذه محنته» ت || ٥ يؤخذ [«تأخذ» د || ٥ (الماء)] || ٦ مثل [«من» د || ٨ التقطير] «يقطين» ت،
 «*vasa vitreata*» A || ٨ وتعلقها [«وتعلقها» د || ٩ طريق] «تقطير» د، «*sicut suspenditur vas olei rosati*
donec aqua fluat ab illis vasis;» A، «يقطين» ت، - دل («البتطين الذي» دل ه) || ١١-١٢ حتى... يقطر [«*donec aqua fluat ab illis vasis;*
 «*tunc incipias vigorare ignem quousque videas fluere oleum*» A || ١٥ رؤوسها] «راسه» دل، - د ||
 ١٥ وتشده عليها [«*et claudas cera*» A || ١٧ الباردة] «المتقدمة الذكر» دل، «المتقدمة الذكر» د || ١٧ نافع... الله
 د -

١ الصيادون [«الصيادين» ب || ٦ واحدة واحدة] «واحدة واحدة | واحده» ب || ٩ طريق] «طريق» ب.

پ ۱۲۹

8.8

صفة دهن || الياسمين وهو الزئبق وأصله من السمسم

تأخذ من اليَسْمِيمِ المقشور (وقد يُعمل غير مقشور) فترَبِّيه بالياسمين على ما تُريد طيبه: إن شئت قليلاً، وإن شئت كثيراً — وكلما زدت من الياسمين، كان أذكى له. تطرحه فيه وتُحرِّك حيناً بعد حينٍ مراراً كثيرةً في اليوم. فإذا كان بالغد، غربل منه وبدل غيره من الياسمين. تفعل به ذلك عشرة أيام إلى عشرين يوماً، ثم تطحن السمسم وتُخرج منه دهنه. فإن أردته صافياً، عمدت إلى شيءٍ من الملح وألقيته فيه — فإنه يصفو.

وعلى هذه الصفة يُعمل دهن الورد والبنفسج والخيري والزرجمس والبابونج والنينوفر والحناء وكل دهن — فاعلمه.

ومن أراد استخراج الشيء اليسير منه، فليستخرجه على حسب استخراج دهن اللوز سواء.

١ صفة] ≡ «عمل دهن الياسمين» دكان د ٤٧-٢٢ و ٤٧-٢٢ ط ٥٦-٢١ و ٥٧-٢١؛ ≡ «عمل دهن الياسمين» هارونبة ١٥٩-١١١ و ١٦١-١١١؛ ≡ تصريف II ٢٠٩-٢١٠ و ٢١٠-٢١٠؛ ≈ «oleum iuriden» Ant^R ٢٩٩-٥٤ و ٦٠-٥٤؛ ⇒ «ισαμή» I Iatrica ٦١-٢١ و ٢٧-٢١ («παρά Πέρσαις»).

٢ وهو الزئبق] «زئبق» — هو الياسمين على مذهب الأطباء، وزهره يُربب بالدهن فيُستقى ذلك الدهن «زئبق» عمدة ٢٣١-٤ هـ || ٢ السمسم] + «الجلجلان» دل || ٣ من] - د || ٣ طيبه] «تربته» ه || ٥ منه] «عنه» د || ٧ فإن] «إذا» د || ٨ دهن الورد] «دهن السوسن ودهن الورد» ده || ٨ والنينوفر] «والنيولوفر» ده || ١٠ استخراج] «ان يستخرج» د || ١٠ سواء] + «مناجعه — حاز يابس...» د.

٧ يصفو] «صفوا» پ || ٨ دهن] «زهر» پ^{هـ}.

نجز الكتاب بحمد الله وممته وحسن توفيقه وعونه
ووافق فراغه يوم الثلاثاء الرابع والعشرين من ذي القعدة
بسنة اثنتي عشرة وستائة
والحمد لله رب العالمين، وصلى الله على محمد وآله وسلم.

- ٥ **نجز كتاب النتائج العقلية فى الوصول إلى المناهج الفلسفية والقوانين الطبية
ومعرفة أمزج الأعضاء البشرية ومنافعها وذكر الأمراض اللاحقة بكل عضو
وعلاج ذلك** پ ١٢٩ ط
- تأليف الشيخ أبي محمد عبد الله بن أحمد الطيب الإلبيري
(رحمه الله)
- ١٠ غاية فى الطب مبرهن
الحمد لله

ومن يأمن الله، مثل فانس على الماء خاتبة، فرج الأصابع
وكان الفراغ من نسخه يوم الأربعاء الثامن والعشرين من ذي القعدة
سنة اثنتي عشرة وستائة

د ٣٨٥

صفة مرقد قوَيَّ جَدًا

أفيون وجوز مائل وثمر اليربوع وبزر حرمل وبزر حنّاء وخرشق أبيض وبزر خشخاش أبيض ومن قشره: من كلّ واحد بالسويّة. يُدقّ جميع ذلك ويُنخل، ويُعجن ببياض البيض أو بماء الرمان. الشربة منه: وزن دائق للقوَيّ؛ وللضعيف: نصف دائق بشراب أو بماء فاتر. ٥

ولمثل ذلك أيضًا

بزر خسّ، يُدقّ ويُعجن بزيت ورد وماء ويُطلى به جبهته. ٥
وقد يُصنع لعليل لا ينام عصابةً من كزير أخضر على جبهته، ويُطلى منه كقاه. ٥
ولعليل لا ينام: تُدقّ الكزيرة الرطبة، ثم تُجعل على باطن رجليه ا ويديه وعلى صدغيه — فإتّه ينام. ٥ ٣٨٥ ط

ولمثل ذلك أيضًا

بزر اليربوع وبنج أخضر وأفيون: من كلّ واحد مثقال. يُدقّ ويُنخل كلّ واحد على حدته، ويُعجن بماء فاتر، ويُطلى على خرقة أو قرطاس، ويُضمد به الصدغان والجبهة. فإذا أراد أن يُعيق من نومه، فتؤخذ صوفةً وتُغمس في الخلّ ويُعصر منه في أنفه نقطة أو نقطتان، أو بكندس. ١٥

٧ بزر... جبهته] ≡ هارونية ٦٣٣٩/١١٣٤١.

٧ بزر] «زريعة» ه.

٢ مائل] «مائل» د، «مائل» د^٥ || ٢ خشخاش أبيض] + «شراسو» د^٥ || ٧ يُدقّ] «تُسحق» ه || ٧ بزيت] «بدهن» ه
|| ٧ ويُطلى] «ويطلي» د || ٨ يُصنع] «يصنع» د || ٩ تُدقّ] «يدق» د || ١٢ ويُضمد] «ويضمد» د.

٢ مائل] «وفي عيون الأدوية لعريب: "هو جوز مرقد"» تلخيص [١٩٩]: (> مال → मात्र). ٢

صفة مرقد
تأليف إسحق بن عمران
يرقد بالشّم

أفيون وجندبادستر وزعفران وبنج وخریق أسود وجوز بوا وبزر خشخاش وببروح: من كلّ واحد جزء.

يُدقّ ذلك ويُخل ويُعجن بعصير البيروح، ويُصبّ عليه دهن الزنبق. ثمّ يُترك في الشمس عشرة أيّام، ويُضرب كلّ يوم في قارورة زجاج ضرباً جيّداً. ثمّ يُصفى، ويُؤخذ من الأفيون قدر الحاجة، فيُدقّ ويُجعل على الدهن، ثمّ يُضرب عشرة أيّام. ثمّ يردّ الدهن إلى الثفل ويُجعل عليه أفيون، ويُضرب كلّ يوم إلى تمام ثلاثين يوماً، ويُترك في ثقله.

فإذا احتيج إليه، يؤخذ منه جزآن؛ ومن البان الرفيع: جزء؛ ومن القرنفل: جزء. يُجعل في صدفة ويؤضع على رمادٍ سخن، ثمّ يطلي به الصدغين والمنخرين — فإته ينام.

١ صفة [«صفة دهن لإسحق بن عمران» تصريف I ٢٠٧٠-٢٠٢٨، زاد ١٠٦٣-١٢٠٦، ≅ «عمل المرقد الأعلى» هاروتية ١٣٤١-٨.

٤ أفيون [«يؤخذ أفيون» ت ٤ وبنج [«وسيكران» ت ه، «وشوكران» ز ٤ أسود [«أبيض» ز ٤ وجوز بوا [«وجوز مرقد» ت، «وجوز المرقد» ه، «وجوز ماتل» ز ٤ وبيروح [«ووجه» ز ٦ الزنبق [«زنبق / زيبق» ه، «زنبق خالص» ز، «زنبق فايق» ت ٦ يُترك [«يعلق» ه ٧ زجاج [- ه ٨ يُضرب [«يعلق» ه ٨-٩ إلى ... ثقله [«ويزداد عليه أفيون آخر أيضاً، يُفعل به كذلك إلى ثلاثين يوماً» ه ١٠ البان [«اللبن» ز ١١ ثم ... ينام [«يطلع منه في التين دائق إن شاء الله تعالى» ه ١١ والمنخرين [«ويستنشق» ت ١١ ينام [«ينوم» ت.

٢ عمران [«عيران» د ٥ جزء [جزء» د ٦ الزنبق [«الزيبق» د ١٠ جزآن [«جزان» د ١٠ جزء [«جزء» د.

صفة أيامرج هرمس
من كتاب هارون

أخلاطه

- أغاريقون أنثى : أوقية. زراوند طويل ومدور : من كل واحد أوقيتان.
 ٥ ناخه ووج وأسارون : من كل واحد أوقية. جنطيانا : أربعة أواق. قردمانا : نصف أوقية.
 أدزبون (وهو بالسريانية «عرطينا») : نصف أوقية.
 مّر وسنبل وفودنج جبلي وبزر كرفس جبلي وجعيدة وأفيثون : من كل واحد أوقيتان.
 بزر سذاب وهوفاريقون وزوفا يابس وفؤا : من كل واحد أستاذان.
 وكباديوس : أربعة أواق. ساذج : وقية.
 ١٠ يُدق كل واحد على حدته، ثم يُجمع ويُسحق سحقًا جيدًا وتعجنه بعسل منزوع الرغوة. ثم ترفعه ستة أشهر، ثم تستعمله.
 وهو دواءٌ لطيف يدخل في العروق ويُذيب الداء ويجري في البول، وليس يُمشي. ويُذيب الحصى،
 ١٥ ويُخرج أساخ الأخلاط الغليظة من العروق. ويُخرج المرّة السوداء والبلغم. وينفع من الماء الأصفر،
 ووج الكبد والطحال، والمختنقون ويصدعون وتسقيهم منه، إذا سقيتهم قدر حمصة بماء فاتر. ويصعق
 منه صاحب ذلك قدر عدسة.
 وهو دواءٌ يفتح السدد ويمضي في العروق، ويُذيب ما كان فيها من الفضول الغليظة.
 الشربة منه لسائر الأوجاع ما خذ(—) الذين يختنقون ويصدعون : مثقال بماء فاتر للقوي، وللضعيف
 أقل من ذلك، إن شاء الله.

١ صفة] ≈ تصريف I ٣٩٧-٢٣ (→ إسحق بن عمران، كتاب المالمخوليا).

٥ قردمانا [ومن القرطانا وهي الكراويا البرى] ت || ٦ أدزبون ... أوقية] «ومن الطينينا ويقال بالرومية ادرمون نصف اوقية» ت || ٨ وفؤا] «وفو» ت.

٢ هارون] «هلرون» د، «هارون» د* (→ «أهرن») || ٥ قردمانا] «يعني الكراويه» د* || ٦ أدزبون] «ادريون» د || ٦ عرطينا] «عرطينا» د || ٧ وأفيثون] «وافيثون» د || ٨ سذاب] «سذاب» د || ٨ وهوفاريقون] «وهوفاريقون» د || ٨ وزوفا] «وروف» د || ٨ وفؤا] «ويوا» د || ٩ ساذج] «ساذج» د || ١٢ دواء] «دواء» د || ١٤ وتسقيهم] «ونسقيهم» د || ١٤ بماء] «بماء» د || ١٦ دواء] «دواء» د || ١٦ ويمضي] «+منه تسالير+ الاوجاع ويمضي» د || ١٧ خذ(—)] «خذ» د.

٦ أدزبون] «عرطينا هو الآدريون؛ قال المؤلف: هذا النبات الذي تعرفه العامة عندنا بالذهبي» تلخيص [٧١١] (> حذرس).

دواء لكل داء يكون في العين

يؤخذ البسباس الأخضر، وأوقية من العسل: تُخرجه بيدك من الشُّهد، وقد أحضرت إناء من نحاس لم يُبييض قط، وتجعل ذلك الماء مع العسل في الإناء على نار لينة، وتُحرّكه حتى يذهب الماء. وقد أحضرت زوج حجلٍ ذكور، فتذبحها في الوقت في ماء البسباس، وتشق بطونها دون نثف وتُخرج مرارها أمجل ما يُمكنك، وتطرحها على ذلك العسل الذي في الإناء، وتُحرّكه. وتتركه حتى يبرد، وترفعه في إناء من زجاج.

ويُرط على فم الزجاجة برقي لئلا يدخل فيها غبار. ويكتحل به على الريق — فإنه نافع لكل داء بإذن الله تعالى.

٢ تُخرجه [«مخرجه» د || ٢ إناء] «انا» د || ٣ وتجعل [«وحمعل» د || ٣ الماء] «الماء» د || ٤ ماء [«ما» د || ٧ ويرط] «ويرط» د || ٧ ويكتحل [«ويكتحل» د.]

صفة مداد أحمر

هذا بابٌ غريب حسن، وفيه فوائد لمن عمل أو فتش عنها وجرب، إن شاء الله. تأخذ ثمانية مثاقيل إسفيداج الرصاص، وأربعة مثاقيل قلقنت. تجعلها في قارورة مطيئة، محكمة الطين، مستوثق منها ومن رأسها. ثم تضعها، بعد جفاف طينها، في أتون الزجاجين الأعلى على ليلة واحدة. ثم تُخرجها من غدوة، وتُكسرها، وتُخرج ما فيها وتسحقه نَعْمًا، وتُذيه بماء الصمغ ويكتب به ما شئت — فإنه عجيب.

قال الحكيم في تدبير الزرنيج والكبريت إنهما الصابغان، وعليهما المَعْوَل، لأن الجسد إنما أدخل ليُمسكها ويُقوِّمها ويُردِّدها، وإنما أدخل الروح ليُجرِّمها، ويجري في انبساطها ويُعينها على تمام أفعالها. وتدبيرها تدبيرٌ واحد — فدع عنك تطويل أهل الصنعة والدَّهْشَة، وإنما هو إخراج الإحتراق منها، وهو السواد العرضي في جسمها، وهو احتراق المعدن شبه حرق النار للدهن. فمن أخرج ذلك من غير فسادٍ ليا يبقى من أجسادها، فقد أصاب التدبير الحق. وإخراج هذه الكباريت وجوَّة: منها التصعيد، ومنها السحق والسقي والدفن، ومنها إحراق في لطف ولين من غير إحجاف النار، والغسل والشمس أو ما يقوم مقام الشمس. وليس يُبيّضها غير الملح والحلّ، ثم تغسله منه حتى يعذب.

تدبير المرقشيثا البيضاء أو الزرقاء

تسحقها سحقًا ناعمًا بخلّ ونشادر حتى يصير شيئًا واحدًا. ثم تعجنها بالعسل حتى تأتي كالطين، ثم تجعلها على رَصْفٍ ليلةً — فإنها تنحلّ كالزبيق العبيط. فتُلقي منها على النحاس، فإنها تصبغه حجرًا، ألا أن فيه جسومًا. فتُلقي منه على المائل المدبّر، فإنه يُقيمه بإذن الله.

٣ إسفيداج [إسفيداج] د ٣ وأربعة [واربع] د ٤ جفاف [حرفاف] د ١١ يقي [يقي] د ١٢ منها [منها] د ١٢ منها [ومنها] د ١٢ ومنها [ومنها] د ١٣ إحجاف [اححاف/ اححاب] د ١٣ والغسل [والعسل] د ١٦ ونشادر [ونشادر] د ١٦ شيئًا [شيئا] د ١٦ تعجنها [يعجنها] د.

ترطيب الأجسام اليابسة

يؤخذ من القلي المدبر الأبيض الصافي : جزء.

ومن النطرون : جزء.

- وتسحقها نِعْمًا وتلقيها في بول صبي لم يبلغ الحلم حتى ينحل، ثم تُرَوِّقها ترويقًا حسنًا بلبد. ثم تأخذ مصفى وتعدده إما لشمس حارة أو بنار فاترة حتى ينعقد، ثم تُذِيب أي جسدٍ شئت واطعمه منها مرارًا حتى يرطب.

وهو غاية الاستنزالات، ولترطيب الصيني اليابس، ولكل جسد ينشقق. ويُشَمَّع به الآنك المحرق بالزرنِخ، والفضة المحرقة بالزرنِخ، أو تُذاب به. فإنه غاية الغايات وملايه تصفيته وبياضه.

- خذ الآنك فأحرقه بأي شيء شئت (وأجودها: إما الكبريت أو الزجاج). فإذا احترق، فخذ رماده فلتته بزيت واسبكه على سبيل الاستنزال ثلاث مرات — فإنه ينزل نقيًا. فأحرقه أو أذبه على مقلًا، وأقله حتى يتكلس أبيض عجيبيًا، إن شاء الله.

٢ القلي [«اللي» د || ٢ جزء] «جزء» د || ٣ جزء] «جزء» د || ٥ تم] «تم م» د || ٥ تذيب] «تذيب» د || ٥ أي] «أي ال» د || ٥ واطعمه] «وطعامه» د، «وطاعمه» د* || ٦ يرطب] «ترطب» د || ٨ تُذاب] «تذاب» د || ٩ وملايه] «وملايه» د || ١١ أذبه] «أذبه» د || ١١ مقلًا] «مقلًا» د || ١٢ أبيض] «أبيض» د.

كتاب النتائج العقلية

في الوصول إلى المناهج الفلسفية والقوانين الطبية

ومعرفة مزاج الأعضاء البشرية ومنافعها

وذكر الأمراض اللاحقة بكل عضو منها

وعلاج ذلك ومداواته

إن شاء الله تعالى

حقة مسهلة تنفع من وجع الظهر والمفاصل والأمعاء السفلية والقولنج

يؤخذ حلبة شامية ويزر الكتان وتين يابس وعتاب وسبستان وخطمي رومي وبابونج وشبث وحسك :
من كل واحد كُفٌّ — وبعض الأطباء يُصير مع الأدوية بزر رازياخ.
تُجمع هذه الأدوية ويُصب عليها قسطان ماء، ويُطبخ طبخًا ناعمًا حتى يغلظ الماء. ثم يُنزل عن النار،
ويُمرس ويُصقى منه رطلًا ويُضرب مع عسل ودهن شيرج : من كل واحد أوقيتين. وملح العجين : ثلاثة
دراهم. وبورق : درهمن.
ويُصير في المحقنة ويُحقن به فاترًا.

٧ حقة ≡ تصريف I ٢١-١٦، ٢١٠ ≡ أقراباذين ٣ ١٩٠-١٧١٩١؛ → كتاش ١٩١-١٠٠٦.

٧ وجع... السفلية [وجع الصلب] ك ٨ حلبة شامية [حلبة] ك ٨ وسبستان [ومحيطا] ت ٨ وخطمي رومي [خطمي] ك ٨ وبابونج... وحسك] - ق ٨ وحسك] + [كليل الملك] ك ٩ كُفٌّ [حقة] ك ٩ وبعض... رازياخ] - ك ٩ يُصير [يزيد] ت ٩ مع الأدوية [فيه] ق ١٠ الماء] - ق ١١ ويُمرس ويُصقى [ويُصقى بعد أن تُمرس الأدوية مرسًا جيدًا ويُؤخذ] ق ١١ وملح العجين [ملح] ك ١٢ درهمن] + [مسحوقين سحقًا ناعمًا] ق.
٨ وشبث] [وشبث] د ١١ ويُصقى [وصفا] د ١١ شيرج] [شيرج] د ١١-١٢ ثلاثة دراهم] [تسلم] د.
١٣ فاترًا] [فاتر] د (≡ ق).

حقنة لباه تنفع من ضعف الكلى

يؤخذ حسك: خمس حُرْم، كل حزمة قبضة كَف.

خمسة أصول السلق.

وحلبة: كَف.

- ٥ وشحم كلى تيس ومخَّ صُلبه وكليتيه وخصيتيه مرضوضتين جميعًا. تُجمع هذه الأدوية، ويلقى عليها من لبن المعز الحارّ الحليب، أقسطان؛ وماء عذب، قسطان أ. ويُطبخ بنار لينة طبعًا نَعْمًا، ويصْفَى الماء ويُعزل. ويؤخذ منه قدرُ ما تحقن به، فيفْتَر ويحتقن به على الريق. ويُمْسك ما أمكن إمساكه ثلاثة أيام متوالية.

حقنة للريح الغليظ

١٠

يؤخذ سمن بقر وماء الكراث: من كل واحد نصف سكرجة. ويفْتَر ويُحقن به.

نافع، إن شاء الله.

١ حَقْنَةٌ] ≡ تصريف I ٤٢٩-٨-١٣، ≡ أقراباذين س ١٩١-١٩٢-٥، ≡ كتابش ١٩١-٩-١٩٢-١٠ || حَقْنَةٌ] ≡ تصريف I ٤٢١-٧-٨؛ → أقراباذين س ١٩٣-٤.

١ **الباه... الكلى**] «تنفع من ضعف الكلى وزائدة في الباه» ق، «تنفع من ضعف الكلى ونقصان المتي» ك || ٢ خمس ... كَف] «باقات» ق، «أساتير» ك || ٣ خمسة] «خمسة باقات» ك || ٣ السلق] «السلق الطري» ت، «سلق طري» ق || ٤ كَف] «قبضة» ك || ٥ وشحم كلى تيس] «وشحم طري من كلى تيس» ق، «وشحم تيس» ت، «شحم تيس لم يُخَصَّ» ك || ٥ ومخَّ صُلبه وكليتيه] «ومخَّ صلبه» ق، «ومخ ساقه» ت، «دهن رأس التيس» ك || ٥ وخصيتيه ... جميعًا] «وخصيتيه جميعًا مرضوضتين» ق، «وخصياته مرضوضتين» ك، «وخصيته جميعًا» ت || ٦ الحارّ] - ك || ٦ قسطان ... قسطان] «ومن ماء الحسك الرطب رطلان ومن ماء عذب رطلان» ت، «وماء عذب قسطين، ومن الحسك الرطب قسطين» ق، «رطل ونصف، وماء الحسك ثلاثة أرطال» ك || ٨ قدر ... به] «في كل يوم قدر رطل» ق، «مقدار سكرجة» ك || ٨ فيفْتَر] «ويصْفَى» ق ك || ٨ على الريق] - ق || ١٠ **للريح الغليظ**] «نافعة من الريح الغليظة» ق || ١٢ نافع... الله] - ق.

٥ مرضوضتين] «مرصوصن» د || ٦ ويلقى] «ويلقا» د || ٧ ويصْفَى] «ويصفا» د.

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Part III

The specific properties of things

Introduction

As I have explained in the Prolegomena to this dissertation, what is now Part III had been intended until quite recently to be the core and actual *raison d'être* of this whole study. The subscription to the general title would have been, accordingly, *Materials for the Early Transmission of the Ḥawāṣṣ Genre in Andalus*, and an integral commentary on the contents of *Nat* III should have been complemented not only with a particular introduction of its own but also with a more detailed survey of the diachrony of the genre than the one that the reader shall find here. The final decision to submit an abridged (and actually fragmentary) version of the introductory study and just a small sample of the commentary has had some negative repercussions on the overall exposition. Not everything could be expounded and justified in as much detail as necessary and the extract from the commentary fails to illustrate all the nuances alluded to in the chapters that precede it—but it is hoped that the readability of the text has improved after reducing its size to a tolerable limit.

Part III comprises, then, five separate chapters. Chapter 1 offers a description of the structure and contents of *Nat* III ḤAWĀṢṢ,¹ as well as a discussion of its genetic affiliation, including a comparison to IBN ALHAYTAM's half sibling text *Iktifāʾ* and a provisional attempt to a characterisation of their hypothetical common source ^a*Ḥawāṣṣ*.

Chapter 2 contains a cursory overview of the origin, semantic spectrum, and evolution of the concept of specific properties (δυνάμεις ≡ خواص) in the Helleno-Islamicate tradition across a diversity of genres. Some attention is given also to typology and several different classifications are proposed that might be of some use for further research.

Chapter 3 provides some materials for a corpus of *Ḥawāṣṣ* literature. Due to the particular circumstances under which this version of the dissertation has been compiled this limited survey does not cover, as it should, all the sources mentioned in *Nat* III but represents a selection of data that I feel sufficiently confident sharing here and now.

Chapter 4 reproduces also a simplified sample from the integral commentary on each individual passage of *Nat* III. In this case, however, the selection

¹ As a reminder for the reader: the section on the specific properties within *Natāʾij* is consistently referred to as "*Nat* III" throughout the text, while reference to particular chapters or passages within that section take the form "*Ḥawāṣṣ* III.II.3", for instance. There is no possible ambiguity, as no other homonymous text is alluded to in these pages simply as "*Ḥawāṣṣ*" without an explicit mention of its author (cf. "ARRĀZĪ, *Ḥawāṣṣ*" or "ALMADĀʾINĪ, *Ḥawāṣṣ*") and, moreover, ALʿILBĪRĪ's is the only one to show such a structure (for ARRĀZĪ's *Ḥawāṣṣ* the reference is to letter and entry, which makes it immediately identifiable).

(which some will assuredly find too small and others exceedingly large) has a practical motivation. It was simply impossible to include the integral commentary, unless the whole Part I was sacrificed—and even then it was not advisable to abuse the patience of the reader in the context of a dissertation submitted for evaluation. The whole text shall be made available, I hope, in more favourable circumstances.

Finally, a recapitulation and some brief remarks are brought together in Chapter 5 as a conclusion to Part III and to the whole dissertation.

The methodology is the same as everywhere else in this study and the same instructions and indications apply with regard to transliteration, references to primary and secondary literature, etc. Given the philological focus of much of the discussion, a larger number of manuscripts have been regularly consulted in order to establish the material form of unedited texts (thence a noticeable accumulation of references for each title especially in Chapter 4), but availability of sources has been a major limitation in this regard.

To a greater extent perhaps than in the case of Part I, the analysis below presupposes some familiarity with the materials under scrutiny. Readers are encouraged to go at least through the Arabic text of *Nat* III (and, if possible, some other *Ḥawāṣṣ* text such as IBN ALĠAZZĀR's) before turning their attention to these chapters.

A fair warning to the reader: my selection of the materials is deliberately biased and serves large and by a corrective purpose. There seems to be no need to justify the association of the specific properties of things to so-called magic and irrationality (as matter of fact this appears to be somewhat of a *petitio principii* in modern scholarship) but a non-positivistic and emotionally unloaded analysis of this particular epistemic tradition is still wanting. Here I could only contribute some materials for further consideration but the time shall come when a more complete and unbiased study should be possible.

Nat III: text, genre, and family

A proemial introduction in Section 1 is intended to clarify my approach to the matter and to set the general frame for the whole of Part III. Then a description of *Nat* III is provided in Section 2. The focus is put there mainly on the structural analysis of its contents and on the intrinsically quotational nature of the materials transmitted in this and other *Ḥawāṣṣ* texts. A preview of the corpus of authors mentioned in *Nat* III is included here, but the conceptual characterisation of the contents is reserved for Chapter 2. The correct interpretation of transmissional accidents is instrumental to the discussion of intertextuality and such accidents are discussed in Section 3 as a necessary premise for all subsequent analysis. It is in this section that the concept of apomorphy as applicable to text and source criticism is introduced. The usefulness of such a label shall become evident when in Section 4 the close cognacy of a constellation of texts is postulated on the basis, precisely, of textual identity and the presence of some highly characteristic synapomorphies. The textual family that emerges from this comparison includes IBN ALHAYTAM's entire *Iktifāʿ* and a remarkable number of passages transmitted in IBN ALBAYṬAR's *Almuḡnī*, as well as discontinuous sequences in the edited version of the *Hārūniyyah* and also in ALMADĀʿINĪ's *Ḥawāṣṣ*. Given that the relationship that obtains between any two members of this constellation of texts is not one of direct dependence, the conclusion seems unavoidable that a parent compilation (provisionally labelled as *Ḥawāṣṣ*) must have existed. This hypothesis and an proposal for an outline of its main features and likely context close the chapter in Section 5.

1.1 Prolegomena to the study of yet another wretched subject

Dioscorides said: «If three roots of plantain are drunk with three ladlefuls of wine mixed with another three ladlefuls of water, this shall avail against tertian fever.»

Arrāzī said: «If a hoopoe's skin is put on someone with a headache, it shall relieve the pain with God's permission»—proven by experience.

Aristotle said: «The lazuli stone has the property of purging back bile when four carats thereof are drunk with rose syrup.»

He said: «Let a young maiden shout thus at a woman that cannot deliver her child, and let her do it by her name: "Oh, So-and-so, I am a young maiden who has already given birth and thou hast not!"—she shall immediately deliver her child.»

Such are the passages of which the third major section of ALḤILBĪRĪ's *Natāʿiğ* is made up. The power to heal an ailment—or, in more general terms, to solve a health-related or medicalised problem—is attributed to something (a plant, a mineral, an animal or some part thereof; only exceptionally to words, either uttered or written) when it is used following specific instructions. This information is encapsulated in the form of quotes that are, with very few exceptions, duly ascribed to well-known authorities, amongst which DIOSCORIDES and GALEN feature as major contributors.¹ Moreover, the vast majority of the passages transmitted from these two Roman physicians are indeed to be found in their extant output essentially with the same wording, which means that no substantial alteration of the original information has been introduced in the process of transmission and that a substantial part of this knowledge derives from pre-Islamic standard “rational” sources.²

In sum, with regard to its characterisation as an ἐπιστήμη built on the foundations of Graeco-Hellenistic so-called rational science, the lore of the specific properties appears to be no different from medicine (of which it is in fact often an allied discipline, as shown by *Natāʿiğ*) or from any other of the “foreign

¹ Some of the Galenic passages (but not all of them and not even a quantitatively significant part of them) are admittedly pseudo-Galenic, but this is hardly relevant with regard to the authoritativeness conferred to them by ninth- and tenth-century scholars that in most cases were in no position to discriminate between genuine and pseudepigraphic texts. Even the ascription of the *Book of stones* (= *Ahğār*) to ARISTOTLE was only marginally suspected (for ALBĪRŪNĪ's doubts on this point, cf. his *Ġawāhir* 41, and also KĀS 2010: 7) and the pseudo-Aristotelian *Naṣt* (or some indirect echo from it) is quoted here, and also in zootherapeutic and zoographical texts, as confidently as the Stagyrite's genuine works on zoology.

² As shall become clear below, faulty transmission, misinterpretation, and even resignification are widely attested in the history of these materials, yet that does not alter the overall picture of remarkable *conceptual* continuity across centuries, languages, and entirely different cultural contexts.

sciences". Nor is the limited incorporation of non-Greek materials (ranging from enigmatic authorities to echoes of local folklore) by any means particular to this discipline, of course, for there is probably not one single Islamicate epistemic tradition (not even the allegedly autogenetic and uncontaminated "sciences of the Arabs") in which such an admixture cannot be detected.

The knowledge of the specific properties of things materialised as an autonomous epistemic genre quite early in the Islamicate tradition and already by the beginning of the 10th c. a treatise was compiled by no less an intellectual authority than ARRĀZĪ. His *Kitābu ḥawāṣṣ* (henceforth simply *Ḥawāṣṣ*) would become the standard reference and the source of inspiration (when not the actual copy-text) for virtually all Islamicate writers with an interest in this matter.¹ The aforementioned essential features of the genre are already perfectly defined in ARRĀZĪ's *Ḥawāṣṣ* and the indebtedness to the Graeco-Byzantine medical tradition is as conspicuous there as it is in *Natāʾiğ*. He quotes verbatim, with no manipulation of the passages, not only the usual suspect BALĪNĀS (and the lithognomia of THEOPHRASTUS and an as-yet unidentified Antiochian author), but also the reputed physicians ARCHIGENES, GALEN, and ALEXANDER OF TRALLES. He further provides a justification for his having collected all this information, and his tone in the prologue to the treatise is far from apologetic.²

From that moment onwards, the names of IBN MĀSAWAYH, AṬṬABARĪ, and ARRĀZĪ become the main (in some cases the only) Islamicate figures of a corpus of ḥawāṣṣic authorities that is widely cited well beyond the limits of this specific genre. Their influence can be felt from conventional therapeutics and pharmacognostics to lithognomy and alchemy. If ḥawāṣṣic materials were certainly incorporated into the medical tradition well before ARRĀZĪ's compilation of *Ḥawāṣṣ* (which is, as a matter of fact, a reflection of that previous trend rather than its initiator), the new treatise of the Iranian polymath provided a practical and user-friendly collection of otherwise hard-to-find references to an ancient lore on a subject (that of the specific properties) that was as familiar to physicians through GALEN's repeated allusion to drugs that produce their ef-

¹ There is evidence for even earlier treatises bearing the title of *Ḥawāṣṣ* (IBN MĀSAWAYH appears to have authored one) and it is possible (but quite hard to argue) that ARRĀZĪ might have been drawing from some pre-existing compilation and that he did not collect all his quotes from scratch—but that he was quite capable (and perhaps even fond) of doing so is sufficiently proved by his monumental *Alḥāwī*.

² Leaving ARRĀZĪ out of the fragmentary survey of the corpus in Chapter 3 has been as painful as detrimental to my exposition. The analysis of *Nat III* has necessitated the preparation of a working edition of his *Ḥawāṣṣ* based on four manuscripts and some valuable data have emerged from its analysis that I should find a way to make available in the near future. An excerpt from the prologue to *Ḥawāṣṣ* is reproduced in Chapter 2.

fect “through their whole substance” as it was to astrologers or talisman-makers, who were equally used to studying and to activating the specific properties ascribed to the planets and zodiacal signs or to minerals and invocations.

On the other side, in Andalus the compilation of a *Ḥawāṣṣ* treatise in parallel to a more conventional medical output is associated from the early caliphal period down to the 13th c. to such highly reputed physicians as IBN ALHAYTAM ALQURṬUBĪ, ZUHR, and IBN ALBAYṬĀR, spanning thus almost three hundred years. The contribution of Andalusī authors to the genre is in fact remarkable for, unlike most of their eastern homologues, they did not merely imitate the prevalent model but either elaborated on alternative formats different from ARRĀZĪ’s *Ḥawāṣṣ* or expanded considerably the corpus while retaining the standard item-centred alifatic structure. The former trend is represented by IBN ALHAYTAM and by ALṬILBĪRĪ, who both transmit a post-ARRĀZĪ rearrangement of the materials and are the only extant fully-developed examples of the head-to-toe *Ḥawāṣṣ* formal subgenre. The expansion of the received text, in turn, was implemented to a stunning extent by ZUHR, who authored the richest compilation of ḥawāṣṣic passages ever produced in the Islamicate tradition.

All the above considerations notwithstanding, the knowledge of the specific properties of things has an extremely bad reputation amongst historians of science and, more strikingly, even amongst those that have applied themselves to the edition, translation, and commentary of some major works in this genre.¹ As shall be shown below in Chapter 2 when attempting to describe in non-anachronistic terms the Islamicate tradition of the knowledge of the specific properties of things, any reflections of this doctrine in medical texts have been at best overlooked or downplayed, at worst (and most frequently) misconstrued and even contemptuously dismissed as “magic” and “superstition”.² During the last years a few major texts from *Ḥawāṣṣ* and other allied genres have been brought to the fore thanks to some excellent annotated critical editions,³ but

¹ A telling example is BOS, KÄS, LÜBKE, and MENSCHING 2020: 114, where the phrases “obscure sympathetic virtues” and “this medico-magical genre” are related to ARRĀZĪ’s and IBN ALĠAZZĀR’s *Ḥawāṣṣ*, despite the fact that one of the members of the team is the author of a superb edition of the latter text.

² Concrete examples of this widespread tendency are to be mentioned throughout Part III but I have no wish to draw a complete catalogue that would serve no other purpose than sterile polemics. The prevalence of an unnecessarily judgemental attitude regarding the *Ḥawāṣṣ* tradition is highest, quite unfortunately, in the Iberian peninsula, which has translated into a generalised neglect of the major contribution of Andalusī authors to this branch of knowledge.

³ Most particularly the aforementioned edition of IBN ALĠAZZĀR’s *Ḥawāṣṣ* by KÄS 2012, and the equally praiseworthy edition of IBN ṢALĪ’s *Ḥayawān* by RAGGETTI 2018, both of which have been extremely helpful not only as a source of materials for comparison (especially those references

this overall (mis)conception remains largely unchallenged. This is all the more surprising in view of the turn that has taken in recent times the study of so-called Islamicate magic.¹ It seems quite obvious that here we face “some deep-seated positivist preconceptions colouring or even determining commonly accepted interpretations”.²

In this last version of the text that I submit to evaluation my original vindication of the study of this particular subject has been transformed into a far less belligerent and more nuanced discussion. However, I remain persuaded that the need is felt for a renewed look at the matter and that, while there is much to learn from parallel developments in the field of magic (both Islamicate and otherwise), *Ḥawāṣṣ* is best studied as an epistemic genre of its own, based in its own premisses (which may or may not be partially shared by other genres) and ruled by its own conventions. Its corpus of authorities does indeed overlap largely with the corpora of some parallel sciences (or, to be more precise, in its maximal extension it encompasses all other corpora), but its main focus and the prevalent criterion for the selection of its materials obey both, for the most part, to well-defined criteria that are neither simply medical, nor magical. Furthermore, “superstition” (whatever semantic content one is willing to attribute to such a vague term) plays actually a minimal rôle in standard *Ḥawāṣṣ*—unless, of course, the definition of this pseudocategory is so large that it may also include much of Hippocratic-Galenic medicine.

All in all, the following pages are an open invitation to an unprejudiced re-assessment of the rôle of the knowledge of the specific properties of things in the context of Islamicate medicine.

indicated by Kās’ meticulous *Quellenforschung*) but also as an inspiration for this research.

¹ Given that I could not offer a proper discussion of the interfaces between *Ḥawāṣṣ* and magic and *Ḥawāṣṣ* and religion I should draw the readers’ attention to the superb collection of papers published under the title *Die Geheimnisse der oberen und der unteren Welt. Magie im Islam zwischen Glaube und Wissenschaft* (GÜNTHER and PIELOW 2018). Besides providing a wealth of information, the innovative approach of the contributors to that volume prompted me to devote a whole chapter to the particular intersection between the knowledge of the specific properties of things and so-called magic, and also to include the interface with religion (Abrahamic and otherwise). The presence of at least one charm in *Nat* III was, at least in my eyes, enough justification for a full-fledged inquiry into that complex matter. The text is not ready to see the light, however, and only a few elements from that analysis are to be found in these chapters.

² Cf. LLOYD 1991: XI.

1.2 Description and analysis of *Nat III* Ḥawāṣṣ

As explained in Part I, the description of *Nat III* has been extracted from the series of partial surveys of the different sections of the book only to place it in a more suitable context alongside the general remarks on the Ḥawāṣṣ genre and the discussion of intertextuality, which in this particular case opens unexpected venues for research. On the other hand, even if it is more exhaustive than the previews offered in Part I (particularly with regard to source criticism), it is still far from complete—let alone definitive—as a study of this text and its family.

The examination below focuses on two key aspects of the text: its structure and the corpus of sources that are mentioned in it. A correct understanding of these two elements is instrumental to all subsequent discussion.

1.2.1 Structure of *Nat III*

The extant text of *Nat III* is acephalous and begins in medias res with Ḥawāṣṣ II.iv *On oblivion* in both witnesses. That the section was originally complete (including, that is, chapters I–II.III) is not only a reasonable assumption but it is also strongly suggested by the actual numbering of the preserved chapters.¹ An impression of the rubrics and contents of the missing segment can be gained from comparison with the twin text of *Iktifāʿ*, but it is only too unfortunate that the hazards of manuscript transmission have caused the *incipit* of the section to be lost.²

In essence *Nat III* is, as stated above and just like any other treatise in the Ḥawāṣṣ genre, a collection of passages (almost three hundred in number)³ that are quite systematically sourced and which describe the particular (and mostly

¹ Whatever one may think of ALḤILBĪRĪ's unsophisticated copy-and-paste compositional strategy, it is hard to assume that the author should have skipped one and a half chapters from his source text only to begin his excerpt at some random epigraph. Even if he had found his source already lacking these initial chapters, it would still be rather irregular for him to keep the original chapter numeration. Let it be recalled, moreover, that also the received text of *Nat I* and *Nat II.2* (and perhaps even that of *Nat V*) suffers from more or less severe lacunae.

² On the undeniable cognacy between *Nat III* and IBN ALHAYTAM's treatise, see below Section 3. Given the laconic nature of textual markers at section boundaries throughout *Natāʾiḥ* it is far from certain that ALḤILBĪRĪ's version of the ḥawāṣṣic treatise should have included a full-blown prologue as *Iktifāʿ* does. In fact, one cannot rule out the possibility that the section opened with a simple "And now/in this section we deal with the specific properties of things" very much in the line of both *Nat II.2* and *Nat V*. However, even such a brief transitional sentence would have helped immensely to clarify whether *Nat III* was or not included in the original compilation.

³ Some 290 to be precise, but the exact figure is open to interpretation since it is not always possible to distinguish between originally complex passages involving more than one element and those that may have become juxtaposed by later compilers.

medical) property or virtue of a plant, an animal, or a mineral when used in a certain way. These quotations are clustered in thematic epigraphs (this lower taxon is invariably marked as *faṣl* in our text) that are in turn arranged according to a noso-topological criterion, which at the macro-level results in a text of the head-to-toe type that mirrors quite closely, in fact, the sequence of chapters of *Nat* II.2 THERAPEUTICS.¹

Lower level rubrics conform to one of the following patterns:²

1	<i>On</i> + ailment(s)	II.IV <i>On oblivion</i> VIII.IX <i>On leprosy, albaras, and warts</i>
2	<i>On the</i> + organ	III.I <i>On the eye</i> V.VI <i>On the liver</i>
3a	<i>On the treatment of</i> + organ	III.II <i>On the treatment of the ear</i> V.II <i>On the treatment of the stomach</i>
3b	<i>On the</i> + organ + <i>and its treatment</i>	III.VI <i>On the tongue and its treatment</i> V.VIII <i>On the kidneys and their treatment</i>
4	<i>On</i> + category of remedies regarding their effect	VI.II <i>On what promotes conception</i> VI.VI <i>On what draws the menses</i>

These different rubrical formulas are not evenly distributed and although in some cases a rationale may be intuited for the titles beyond mere stylistic preference,³ one must bear in mind that the wording of the epigraphs (like the overall architecture of the treatise) is by no means to be ascribed to the author of

¹ A few remarks on the dichotomic classification of *Ḥawāṣṣ* texts are provided below. For the time being, suffice it to note that *Nat* III belongs to the less widely documented type of medical organ/ailment-centred *Ḥawāṣṣ*, as opposed to non-medical item-based treatises such as the model set by ARRĀZĪ with his apparently groundbreaking *Ḥawāṣṣ*.

² What must be considered to be the reflection of the original *nawʿ* IV (comprising three separate epigraphs on cough, quinsy, and scrofulas) is exceptional in that it lacks not only a number but also any rubric at all.

³ Pattern 1 is predominant throughout the text and includes the mention of a minimum of one and a maximum of four different conditions. The choice between formulas 1 and 2 may have obeyed to a combined criterion of saliency and practicality, and the epigraph titles here mirror quite closely what was also common in therapeutic literature (cf. for instance the traditional categories of βηχικά on the one hand and ὀφθαλμικά or στομαχικά on the other). The two variants of pattern 3, in turn, are best considered stylistic variations of 2 and they seem to cluster particularly in *Ḥawāṣṣ* III.II–IV|VI and V.II–III|VIII. As for pattern 4, it is characteristic of the whole sequence *Ḥawāṣṣ* VI.II–XIII and also of VIII.I|V–VII|X|XI–XIV and it is reminiscent of the received classifications of simple drugs according to their tertiary qualities within the frame of Galenic pharmacognosics (ie diuretics, emmenagogues, haemostatics, etc).

Natāʾiğ but rather to his source, as proved by the parallel testimony of IBN AL-HAYTAM's *Iktifāʾ*? (an exhaustive comparison of the segment titles in these two texts is provided in Tables ***REF). Authorial intervention in this regard was minimal.

Epigraphs are also remarkably diverse as to the number of passages that they comprise, ranging from just one (eg *Ḥawāṣṣ* VI.xiv on the treatment of wounds in the vulva, VIII.vii on promoting exudation of superfluities, and VIII.x on eliminating odour from the body) to as many as twenty (as in the case of aphrodisiacs in *Ḥawāṣṣ* VI.x). Availability of quotations in the source text was, of course, the major limiting factor for the compiler (one-passage segments certainly left no freedom for authorial elaboration), however lengthier epigraphs may occasionally allow a glimpse into the author's interest in a given subject or into his leanings towards certain kinds of remedies rather than others.¹

As far as the organisation of the epigraphs is concerned, explicit indication of the higher taxon *nawʿ* is far from consistent: segments V and VII–IX feature the word in the rubric, whereas III–IV and VI (as well as, needless to say, the acephalous segment II) do not.² In both cases the segment titles follow a uniform pattern:³

*On the diseases of + organ/part of the body
divided into — epigraphs*

Within chapters epigraphs are regularly numbered, with only two exceptions (namely *Ḥawāṣṣ* II.vii and V.viii), and in one instance (*Ḥawāṣṣ* VI.xi on remedies against sexual binding) the disagreement between the introductory subdivision (which announces thirteen epigraphs) and the actual number of segments (fourteen) seems to betray some unrevised authorial reworking that is further confirmed by external evidence.⁴ On the other hand, just like

¹ These clues are followed with due caution below both on an individual basis in the introductory remarks to each section of the sample in Chapter 4 and in a summarised manner in the final conclusions in Chapter 5.

² Actually *Ḥawāṣṣ* III is marked as *qawl* («*alqawlu fi amrāḍi aṣḍāʾi bwağh*») and VI as *fuṣūl* («*fuṣūlun fi ālāti ttanāsul*»), while the epigraphs contained in *Ḥawāṣṣ* IV are, as seen above, introduced by no general rubric. As for the not so common hierarchical marker *nawʿ*, it is used as the higher taxon in the structure of AṬṬABARĪ's *Firdaws*, which appears to have been one of the sources perused by the now-anonymous author of the parent compilation. In any case, the assumption of its presence in *Ḥawāṣṣ* is supported by the parallel testimony of IBN AL-HAYTAM's *Iktifāʾ*? (cf. figure 2 in HASANI 1999: 22).

³ With regard to the titles, the sole exception to this formula is *Ḥawāṣṣ* IX *On the types of fevers*. When specified, the subdivision into epigraphs is expressed as «*wayanqasimu ṣalā — fuṣūl*» except for III («*wahuwa sittatu fuṣūl*») and IV (in which this information is not provided).

epigraphs vary greatly in length chapters also differ widely regarding the number of epigraphs into which they are divided. Thus *Ḥawāṣṣ* IV **On the throat* (no title is provided in the text) and VII *On the ailments of the joints* contain only three segments, whereas both VI *On the organs of reproduction* and VIII *On the ailments of the body surface* include a much more detailed coverage with no less than fourteen different epigraphs each.

To sum up, one of the few well-organised sections in *Natāʾiḡ* shows nonetheless some structural inconsistencies despite the fact that its author was essentially reproducing the blueprint of a pre-existing and, according to all evidence, quite systematic treatise.

1.2.2 Corpus of authorities and quoting strategies

Except for a number of accidents in the transmission (for which see below Section 3) passages are regularly sourced. The authors mentioned in *Nat* III are the following, in roughly chronological order:¹

GRAECO-BYZANTINE AUTHORS

Theophrastus | Dioscorides | Galen | Aristotle | Hermes | Alexander | Balinās

?

Aṭhūrusfus (⚭ اطراطيس* | ⚭ سقطور*) | *Books of animals*

ISLAMICATE AUTHORS

Aṭṭabarī | Ibn Māsawayh | Arrāzī

⁴ The arrangement of the corresponding materials in the Hebrew translation of IBN ALHAYTAM's treatise (ie *Saḡullōt*) bears likewise the marks of alteration but the only extant Arabic copy of the original text announces thirteen chapters in its index of contents and it may reflect more closely the original form of the common source.

¹ For the sake of exposition pseudepigraphic texts are assigned here the date of their alleged author—rather than anachronistically correcting it in light of modern research. Thus the “Aristotle” that features in the *Ḥawāṣṣ* tradition is classed here amongst Graeco-Byzantine authors alongside DIOSCORIDES and GALEN even if the passages ascribed to him draw actually from *Aḡḡār* and *Nāʾit*, both of which must be dated to the early Islamicate period (although a pre-Islamic Syriac precedent should perhaps not be disregarded as a possibility in the case of *Nāʾit*). An asterisk preceding a name indicates that it is corrupt in our text and that its original form can only be retrieved with the help of parallel witnesses.

That amounts to a total of twelve authorities (eleven authors and one anonymous text of the *Ḥayawān* genre), the youngest author being ARRĀZĪ. The reference corpus reflected here is exclusively Graeco-Byzantine and eastern Islamicate. If in quantitative terms it represents a noticeable reduction of the list of sources quoted from in ARRĀZĪ's *Hawāṣṣ*, this particular corpus features nevertheless a major addition to the previous catalogue: DIOSCORIDES, whose *Materia medica* is intriguingly ignored by ARRĀZĪ.¹

The chronological implications of this corpus and a hypothesis on the immediate origin of the passages shall be analysed in Sections 4–5, but it should be borne in mind that the remarks that follow are by no means exclusive to *Nat III* but apply equally to the parent compilation and, in fact, to the *Hawāṣṣ* genre in general.

Sourcing the passages

The explicit and regular indication of the author from whom a given passage is quoted is one of the most characteristic traits of mainstream *Hawāṣṣ* texts.² On a formal level it is, in fact, its main defining feature; one that it shares, perhaps unsurprisingly, with ARRĀZĪ's colossal and unparalleled medical book of quotes *Alḥāwī* and also with the pharmacognostic *Ġāmiʿ* that has in Andalus its cradle (and perhaps even its actual birthplace) and in IBN SAMAGŪN its foremost pioneer.³ While the strong contrast in this regard with most epistemic genres

¹ Although ARRĀZĪ's *Hawāṣṣ* is certainly not exclusively medicine-focused, properties with a medical application are widely represented in it—statistically they are even a majority. The absence of DIOSCORIDES there contrasts strongly with the conspicuous presence of GALEN, AETIUS OF AMIDA, and ALEXANDER OF TRALLES. That an Arabic translation (maybe even two) of *Materia medica* was available to ARRĀZĪ is proved by quite an exhaustive use of that text for *Alḥāwī*, and *Nat III* itself shows that there was something to borrow from DIOSCORIDES regarding the specific properties of plants, animals, and even minerals. It does not seem likely (but it nor is it impossible) that ARRĀZĪ should have come into possession of a copy of the text only after the compilation of *Hawāṣṣ*, which may have been an early work in his career. At the present time I can find no other plausible explanation for this absence.

² The qualifications 'mainstream' here and 'standard' below are not intended as genuine categories and I resort to them as an uncompromising label only to avoid a chronological or diastatic classification for which there may not be enough evidential support.

³ For biobibliographical data on IBN SAMAGŪN, cf. BENFEGHOUL 2007. The "epochale Rolle bei der Ausbildung der wissenschaftlichen Methode der Heilmittelkunde des islamischen Westens" of his *Ġāmiʿ* (which remains unedited) is insightfully emphasised by KĀS 2010: 58–59. Incidentally, the hypothesis of the existence of a common source for IBN SAMAGŪN and IBN ĠANĀḤ (who appear not to have known each other's work) was first suggested in KĀS 2010: 60 and has been recently and quite compellingly developed in BOS, KĀS, LÜBKE, and MENSCHING 2020: 161–165. Their assumption of the existence of a tenth-century anonymous western (probably Qayrawānī) compilation has been referred to before when examining ALʿILBĪRĪ's possible

is self-evident, it must be noted that the practice of sourcing each quote distinguishes standard *Ḥawāṣṣ* treatises also from the genetically related, and for the most part later, collections of unsourced benefits (*fawāʾid*) on the one hand,¹ and from the parallel genre of zootherapeutics as represented, for example, by IBN ʿALĪ's and IBN BUḤTĪŠŪʿ's *Ḥayawān* on the other.²

It is not perhaps totally ungrounded to credit ARRĀZĪ with the introduction of this quoting methodology in the genre, as his punctiliousness both in *Alḥāwī* and *Ḥawāṣṣ* sets him apart from all earlier authors in the non-Islamic sciences.³ While the existence of some Hellenistic or Byzantine text compiled according to the same criterion (ie some sort of ḥawāṣṣic doxography or collection of sayings related to the specific properties of things) cannot be entirely ruled out, the prevalent practice in the pre-Islamic tradition appears to have been anonymisation rather than explicit ascription—except in the case of overt refutation or condemnation: then the opponent is often identified by name.

Thus, despite the impressive catalogue of books that he claims to have exploited, PLINY is far from consistent in the indication of the exact sources for the colossal mass of passages that he collects in his *Naturalis historia*. His indebtedness to Greek texts is self-evident from terminology, and the Iranian ori-

sources (see Part I, Chapter 9).

¹ The development of the spin-off subgenre of *Fawāʾid* could not be explored in this dissertation. It must suffice to point out that there is a clear tendency to omit the explicit ascriptions of the passages in later texts (cf. especially ALZANTAKĪ's *Tadkirah*) and that this subgenre actually outlives the classical format of *Ḥawāṣṣ* well into the modern period. The chronology of this development, however, is perhaps not so well established as to allow for a clear-cut periodisation classical/post-classical, and compilations of both “authorial” and “anonymous” passages may have cocirculated since a relatively early date. The justification for labelling these alternative texts as ‘popular’ or ‘popularising’ as a working category, on the other hand, would necessitate a research on its own and such a categorisation may, furthermore, convey unwanted classist overtones. After all, much of the material transmitted anonymously even in the most modern and most marginally produced texts of *Fawāʾid* stems ultimately, through a more or less long chain of transmission, from ARRĀZĪ's or ZUHR's *Ḥawāṣṣ*.

² To my deep regret, a projected chapter on the *Ḥayawān* genre and a systematic study of its links to the *Ḥawāṣṣ* could not be included in the final draft of this dissertation. Some sparse remarks shall be salvaged from those materials and introduced in the discussion. Regarding the non-ascription of the properties attributed to each animal of animal organ (which in *Ḥayawān* texts are in fact mostly referred to as *manāfiʿ* rather than as *ḥawāṣṣ*), this differential trait of *Ḥawāṣṣ* with regard to *Ḥayawān* has not always been sufficiently remarked by modern scholarship.

³ But he has an evident, and as far as I am aware rarely mentioned, precedent in the so-called traditional sciences. The chain of transmission (*isnād*) is of paramount importance in Sunnah compilations as well as in lexicography, and ARRĀZĪ systematic indication of his sources could be interpreted as a sort of minimal *isnād* adduced in support of a dubious *matn* the veracity and soundness of which lies essentially in the credibility of its ultimate source. In his *Ḥawāṣṣ* (as in *Alḥāwī*) there are, in fact, a few instances of genuine two- and even three-link chains.

gin of much of these materials (which are of great interest for the commentary in Chapter 4) can be ascertained mainly thanks to his open abhorrence of the Magi; yet only an exacting task of source criticism can reveal more concrete borrowings from any particular source.

An even more radical example of anonymising strategy is shown by DIOSCORIDES, who makes thus an impression as an author both highly original and rationally sceptical, but he can be shown to be largely indebted to SEXTIUS NIGER, for instance. The same applies to GALEN too, with the remarkable exception of his books on the composition of drugs (but the transmission of recipes obeys to different principles and cannot be compared to that of pharmacognostic data). Many passages from his predecessor's *Materia medica* are slightly reworded and silently incorporated into his monograph on simple drugs. In the same book he also records a great many specific properties in reported speech ("it is said", "its is affirmed", just like in DIOSCORIDES' treatise) but he only mentions XENOCRATES by name so that his invective can be more effective.¹

In any case, the complex question of source ascription in the Roman tradition cannot be tackled here, but it must be stressed that in pre-Islamicate times no epistemic genre related to medicine and natural philosophy appears to have been characterised by a systematic indication of the sources for each and every piece of information collected. This seems to be a trait peculiar to literary anthologies, doxographies and, of course, lexicography. As mentioned above, in an Islamicate context even after ARRĀZĪ this feature does not extend beyond Ḥawāṣṣ and a particular subgenre of pharmacognostics.

On the other hand and regardless of diachronical considerations, there may be some utility in describing some of the main characteristics of the quotational context in relation to this genre.²

¹ Some remarks on the problematic interpretation of anonymous references in DIOSCORIDES are to be found in the epigraph devoted to this author in Chapter 3.

² It should be clear that the phrase 'quotational context' (just like the words 'quote' and 'quotation' themselves) is used here in its more intuitive and non-technical meaning, and the same applies, in general, to 'verbatim quotes' and 'non-verbatim quotes' or to 'paraphrase'. There is a whole linguistic theory of quotation that may or may not be of some interest to textual criticism, but no attempt has been made here to reconcile my remarks with that theoretical framework.

Quotes and authorial voice

The first and most evident implication of a quotational context is that the voice speaking throughout the text is *not* the author's but rather the sources'. Each individual passage (whether it preserves the original ascription or not) is a written artefact and it is therefore no more reflective of the compiler's knowledge, medical practice, or noetic attitude than the recipes collected in a dispensatory are of the collector's actual know-how and experience as a drug-maker. Such an obvious tautology (after all, the very definition of 'quote' implies non-authorialness) would not need to be stated were it not that all too often quoters are credited or discredited (according to highly subjective criteria) for ideas and practices of which they are mere transmitters. While there may be something to learn from the author-compilers' leanings, preferences, or interests by carefully examining their particular selection of passages, it is on the quotees that all responsibility ought to be laid ultimately—by those who are keen on passing judgement on such matters, of course.

When considered globally, a text such as *Nat* III reflects a heterogenetic polyphony, a plurality of authorial voices coming from very different contexts, reflecting disparate doctrines, and using unrelated terminologies. To a far greater extent than in the case of *Nat* II.2, no single word or phrase can be automatically interpreted as an indicator of locality or chronology without previously examining the source of the passage in which it is found. In this regard, as far as the *Ḥawāṣṣ* genre is concerned, authorial harmonisation of the materials collected is minimal or null. Intervention, if present at all, is limited to glosses or to sporadic synonymic substitution. From a diachronical point of view, moreover, evidence regarding the exact origin of such authorial interventions is often inconclusive. The addition of a gloss can be ascertained by comparison to the source, but in the absence of external witnesses it is impossible to know at which point the extraneous element was introduced into the text.

On the semantic level, some of the analogies and sympathies involved in the remedies selected and noted down by the authors were certainly opaque to them and represent faint echoes of beliefs long vanished from history, some of which cannot be reconstructed even nowadays despite all hermeneutic efforts.

Stratigraphy

In absolute terms, the chronology reflected by *Nat III* is quite straightforward. As seen above, the latest author mentioned is ARRĀZĪ, which provides a *terminus post quem* that does not necessarily coincide with his demise in 925 (his *Ḥawāṣṣ* appears to have been an early production) and which shall be dealt with at the end of this chapter.

There is, on the other hand, a salient feature that *Nat III* inherits from the parent compilation but which is absent, for obvious reasons, from the subgenre of item-centred alifatic *Ḥawāṣṣ*. With some alterations introduced mostly by accidents of authorial selection and clerical transmission, the text shows remarkable consistency in the *chronological sequence* of the authorities mentioned in each epigraph. Their relative order reflects quite closely their actual chronology—or at least the one believed to be true in the author's context. Thus, DIOSCORIDES regularly precedes GALEN, and AṬṬABARĪ comes almost invariably before ARRĀZĪ. As a matter of fact, this chronological order is so regular that it can be occasionally used as complementary evidence for the reconstruction of some severely altered series of passages.

This feature is all the more interesting because it cannot be explained as the natural outcome of simple accretion. It is not as if there had been a primitive anthology of Dioscoridean ḥawāṣṣic passages, then a later expanded version including Galenic quotes, then new layers were successively added at different stages until a text was produced that contained all extant quotes ranging from DIOSCORIDES to ARRĀZĪ. Judging from available evidence, the chronological arrangement of the passages appears to be the result of intelligent design. If the anonymous compiler of ^α*Ḥawāṣṣ* was working on a previous medicine-centred head-to-toe treatise (let us say, for the sake of the argument, IBN MĀ-SAWAYH's) and enriching it with materials from ARRĀZĪ, the quotes extracted from the latter's *Ḥawāṣṣ* (which include passages from GALEN, ALEXANDER OF TRALLES, AṬḤŪRUSFUS, etc) were redistributed according to a criterion of temporal priority. If he took ARRĀZĪ's compilation as a basis, a much more drastic rearrangement of the building units was required that affected not only the chronological order but also the overall architecture of the text.

The relative plausibility of these hypotheses shall be considered below when attempting to sketch the basic outlines of the parent treatise, but regardless of its original mode of implementation this trait is quite significant, as it also links the head-to-toe *Ḥawāṣṣ* subgenre to the *Ĝāmiʿ*. In its standard format, pharmacognostic texts of the *Ĝāmiʿ* type show the same chronological arrangement of their materials already in IBN SAMĀĜŪN's treatise. This ordering in his *Ĝāmiʿ*

may not have been unprecedented¹ but it certainly did not derive from (nor was it inspired by) IBN ALĠAZZĀR's *Istimād*, which is characterised (probably like IBN ṢIMRĀN's previous treatise) by overall anonymisation of the passages. This is a conspicuous feature of Andalusī pharmacognosy that contrasts strongly with its Qayrawānī precedent and the origin of which remains to be explained.

At any rate, none of the sources that are mentioned in *Nat* III was directly accessed by ALḠILBĪRĪ. Despite the ubiquitous presence of DIOSCORIDES throughout the section, he may have never perused a copy of *Ḥašāʾiṣ*,² and he certainly was not better informed about the correct pronunciation of the name of أطهور سفس than we are now. He did not lay eyes on a Hermetic treatise containing specific properties, and most probably he did not ever see a copy of AṬṬABARĪ's *Firdaws*. In this he is no different from many other authors working in most epistemic genres after the foundational period. Failing to see the tralatitious essence of the *Ḥawāṣṣ* genre may mislead one into describing ALḠILBĪRĪ as “the introducer of *Firdaws* in Andalus”. Not understanding the bookish nature of the properties reported in these texts may result in a mischaracterisation of their authors as permissive with regard to so-called folkloric medicine, genuine endorsers of superstitions, or even enthusiastic practitioners of the magical arts.

¹ Let the reader recall the hypothesis of a common source for IBN SAMAGŪN and IBN ĠANĀḤ proposed by BOS, KĀS, LŪBKE, and MENSCHING 2020: 161–165.

² There is a very slight possibility that some passage in either *Natāʾiġ* or *Iktifāʾ* might represent an authorial addition to the inherited text and in principle the plausibility of such an intervention would be higher in the case of IBN ALHAYṬAM, who was well acquainted with the Arabic translation of *Materia medica*, but no certainty could be gained so far in this regard.

1.3 Transmission: misreadings, ghosts, and apomorphies

Misreadings

Let me honour in the first place the old tradition of branding the copyists as the likeliest culprits for all apparent “corruptions” that have altered the otherwise supposedly smooth and untroubled transmission of the written word through the centuries—nay, the millennia. Being often assumed not to have had the slightest notion about the subject dealt with in the texts that they mechanically copied, it is most often the scribes (only rarely the authors) that are held responsible for all apparent divergences between the original source and its reflections.

There is, of course, some truth to this idea as far as *original* production is concerned. The verdict is quite straightforward indeed whenever there is external evidence (usually in the form of indirect transmission) to prove that the original locus must have been sound. Legitimate speculation yields positive results too when the author’s knowledge can be assumed to be such as it would make a particular mistake impossible. In the case of *Natāʾiğ*, for instance, any distortions of Andalusī words are certainly to be attributed to the eastern copyists of the text, as it is simply unreasonable to assume that the author should have ignored the correct form of words belonging to his own geolect and which he had further chosen to use with no constraints imposed by his sources. In all such cases an emendation is in order—if possible.

On the other hand, when the “original” text (in our case, *Nat III*) happens to be essentially a selective *copy* and its “author”, therefore, somewhat more than a mere copyist but less than a creator, the question becomes far more complicated. This, in fact, applies not only to whole sections but also to small bits of information or to individual words. As shown in Part I, eastern phytonyms or exotic names of drugs (mainly those of Greek and Persian origin) were transmitted essentially in written form and they were often found by the authors distorted beyond recognition. That such names must have been originally recorded in a more or less correct form is a sensible assumption, but their metamorphoses had begun long before they reached Andalusī soil.

A similar phenomenon can be suspected, in the case of *Nat III*, for the name of AṬHŪRUSFUS, which is itself the form found and handed down by ARRĀZĪ (but not by AṬṬABARĪ!). Intertextual comparison shows that this name was probably disfigured at every single transmissional stage between ARRĀZĪ’s *Hawāṣṣ* (some manuscripts of which transmit already a corrupt form) and the extant copies of *Natāʾiğ* or those of the Hebrew translation of IBN ALHAYṬAM’s *Iktifāʾ*. In such cases the blame must be shared between copyists and authors-compilers, and

the modern editor cannot be so naive or so reckless as to “restore” without further consideration the name of this enigmatic author only to introduce into the text a consistency that was never there. Here, more perhaps than elsewhere, emendation must be context-sensitive and it must also be supported by external evidence. If none is available, the locus is perhaps better left as transmitted and a conjecture may be added to the apparatus suggesting its most probable original form.

There is no need, however, to enter any further into the discussion of the intricacies of textual criticism. A few remarks on my personal views on current editorial practices have been introduced in Part II when explaining my own criteria for the critical edition of *Natāʾiq*. Here and now I would like to draw attention to two particular phenomena related to the transmission of ḥawāṣṣic passages: the vexing challenge of ghost-quotes and a specific category of innovative readings that can be extremely helpful to establish stemmatic relationships.

Ghosts-quotes

As if the most grotesque deturpations introduced in the names of some of the authors cited in the *Ḥawāṣṣ* genre were not enough trouble,¹ a quite characteristic feature of the quoting strategy deployed in these texts conspires with clerical mistransmission against the reader. Within each epigraph, authors are usually mentioned just *once*, preceding the first passage that is ascribed to them. All subsequent quotes from the same source are typically introduced by a coordinated verb with no overt agent: “And he said” (*waqāla*). Economical and commendable as this practice may be from a stylistic point of view, it often results in defective transmission, especially near the boundaries of each block of quotes, as any eyeskip on the part of a copyist may translate into a passage being misattributed to the preceding author.

The major agent of distortion, however, appear to have been the authors themselves, at least as far as derivative treatises such as *Nat* III and its siblings are concerned. Since their compiling technique basically involves picking a number of passages out of a pre-existing set, skipping (either intentionally or

¹ The difficulty is not particularly great regarding ARRĀZĪ’s *Ḥawāṣṣ*, in which the Antiochian author of a *Book of stones* is probably the only source for which not even a name can be established (cf. ULLMANN 1972: 100). Nor does the family of *Nat* III represent a challenge in this respect, since the aforementioned transformations of the name of AṬHŪRUSFUS can be safely traced back to the source of the corresponding passages. A simple look to ZUHR’s list of abbreviations in his *Ḥawāṣṣ*, on the contrary, shall give reason for dismay even to the more optimistic reader, and the fact that the manuscript transmission of the text appears to have obliterated most of the actual abbreviations from the body of the treatise makes the reconstruction of the prehistory of that compilation a hopeless task.

inadvertently) the first passage of a sequence results in the omission of the name of the author to whom the whole block should be ascribed. This can only be avoided if the compilers are careful enough to correct this by stitching the pertinent name to the new first quote—but then they may not even be in a position to do so if their copy-text is already defective. A thorough examination of the corpus may reveal some individual tendencies, some authors being more prone to mechanical reproduction and, therefore, to anonymisation of the materials;¹ others taking more pains to provide an authority for the orphaned passages. If the former attitude produced a mass of unattributed passages, the latter sometimes translated into misattribution—making in either case the analysis of such loci time-consuming and often also frustrating.

Throughout Part III of this dissertation and especially in the commentary on the individual passages contained in *Nat* III the phrases ‘ghost-quote’ and ‘implicitly ascribed to’ are repeatedly used to refer to the concrete consequences of the above accidents in the transmission. By ‘ghost-quote’ I mean such passages as are *explicitly* ascribed in the text to a certain author but which source criticism can prove positively to have a different origin.² Then, ‘implicitly ascribed to’ must be understood as a reference to those passages that, not being the first explicitly ascribed one in a sequence, can be interpreted by the reader as deriving from the last mentioned authority. The farther removed a passage is from the last available name of an author, the more likely it is that the implicit ascription might be wrong, although there are remarkably long strings of quotes that have resisted the accidents of selection and copy.

It should be noted that ghost-quotes, which are unequivocally defined by the presence of an authority (however historically wrong this ascription may be), are a reflection of what may have been the authors’ knowledge—if they ever cared enough to worry about such things.³ Implicitly ascribed passages, in turn,

¹ Although a deliberate simplification of the onerous authorial apparatus of standard *Hawāṣṣ* texts ought probably to be assumed as one of the main factors involved in the genesis of the *Fawāʿid* subgenre, the fact that large blocks of passages were already transmitted in anonymous form even in texts produced in a more elitist context must have certainly contributed to the eventual disappearance of authorial ascriptions in that parallel tradition.

² This label is not even entirely original, or course, as “ghost-title” has been used by KAHL in reference to the work *Alġawharah* traditionally ascribed to AṬṬABARĪ (cf. KAHL 2021: 10 n. 76). At first I was tempted to call such pseudo-quotations “Quellenforscheraltbräume”, but a more practical alternative had to be found, which nonetheless still contains the anxiety-evoking word *ghost*.

³ By this somewhat uncouth expression I mean that it is perhaps not warranted to presume that all compilers were concerned about the historical correctness of the passages that they included in their anthologies. It is also only fair to point out that a certain familiarity with pseudepigraphic literature must have contributed greatly to the credibility of some unlikely combinations of ancient authors and relatively late species.

do not actually constitute a genuine working category and cannot provide any useful information in this regard. It is possible (but only possible) that the second or the third passage in a sequence may have been related to the last mentioned source *in the authors' mind*, but in many cases nothing can be inferred about the extent of their knowledge about the actual origin of the passages that they were copying. In other words: not every unascribed *waqāla* should be automatically assumed to be co-referential with the preceding authority according to the compiler's intention.

A very different and entirely legitimate task is to try to establish the historically "correct" ascriptions of each passage. The results of that task belong in the apparatus of sources and parallels and in the commentary, but not in the edited text. Here, as elsewhere, an effort must be made not to impose the researchers' knowledge onto the authors', who were for the most part content with reproducing with more or less success their source text.

Apomorphies

With some diversity in the exact formulation of the idea, a distinction has long been made in textual criticism between major and minor variants, between substantive and accidental readings.¹ Differences between the manuscript witnesses with regard to the spelling of the words *حصي* 'stone, calculus' or *هواء* 'air', for instance, can be regarded as inconsequential from a semantic point of view. No new meaning is born from any such formal variation. They are moreover of no use (unless the absolute regularity of their distribution might suggest otherwise) for the identification of intertextual links.²

Still within the category of minor or accidental innovations, I have shown elsewhere in this dissertation (see the Editorial criteria in Part II) that there can be no doubt that a misreading must have occurred somewhere between the first

¹ The latter concepts were developed by GREG 1950: 21, where 'substantive readings' are defined as "those readings that affect the author's meaning or the essence of his expression", whereas 'accidentals' would relate rather to such phenomena as spellings, punctuation, etc. In traditional terminology major or significant variants are basically MAAS' 'indicative' or 'significant errors' (*Leitfehler*, cf. MAAS 1957: 27, the first instance of the concept dating back to 1937).

² Even if minor or accidental, some of these variants are not altogether insignificant, as they may reflect an ambiguous and hard to interpret picture of retention of original authorial use, normalisation, or linguistic adaptation to the copyist's context. Thus, the spelling *ḥaṣṣ* 'lettuce' in an eastern copy of an Andalusī or Maġribī text may preserve an original geolectal feature, whereas the same spelling in a western copy of a Mašriqī text could be interpreted as a clerical innovation. There may be some utility in distinguishing several different categories of minor or accidental variants.

Arabic transliteration of the Greek drug name $\delta\iota\sigma\pi\omicron\lambda\iota\tau\eta\varsigma$ and its Arabic reflection *diyāsqūlītūs* as found in several medical texts. This new form of the name ought to be recorded as a genuine historical *variant* of the etymologically correct *diyāsfūlītūs*, and any historical dictionary of Arabic medical and pharmacognostic terminology should be quite liberal in admitting similar variants as long as their existence is supported by enough manuscript evidence. Now, *diyāsqūlītūs* does not represent any new drug different from the cumin-based preparation inherited from Greek sources, nor have the spelling variants *dabīd* / *dabīd* ever generated two different categories of hepatic medicines. Furthermore, in these cases the nature of the variants is such as they could spring *spontaneously* with every act of reproduction or copy and it is an almost impossible task to try to establish intertextual affinities on the basis of this kind of readings.

On the other hand, there is a different category of innovative readings that produce a whole new *meaning*. The difference with regard to the original locus can be as slight as changing ‘second’ (ثانية / ناسه) into ‘third’ (ثالثة / ناله) or vice versa, but it can also result in the metamorphosis of a ‘catfish’ or ‘silurus’ (سلور) into a ‘cat’ (ستور), of ‘arrowheads’ (نصول) into ‘superfluities’ (فضول), or of ‘obstructions’ (سدد) into ‘worms’ (دود). Needless to say, this kind of reinterpretation is entirely language- and script-dependent and the peculiarities of the Islamo-Arabic script (ie the alifat) make it especially fertile for such developments.

These variant readings are usually instrumental to traditional stemmatics for the grouping of the different witnesses into branches or families. If on a material and diachronical level they are traditionally conceptualised as a ‘corruption’ (*corruptela*, *Verderbnis*) of the original reading, on an epistemic level they must be considered historical reinterpretations. Their impact in the medical tradition is only rarely taken into consideration by modern scholars but the agents of that tradition were fully aware of the existence of parallel reports born from differential manuscript transmission. The clearest case is the frequent reference to variant readings in the source or sources consulted by the author:

ARRĀZĪ, *Alḥāwī* V.9 (H V 39₁₀₋₁₂)

قال: «من كانت به تخم وأبطأ هضم طعامه، فظهر على عينيه بثورٌ سود» (وفي نسخة أخرى «حمر»، وفي أخرى «خضر») «كالتحص، ولم تكن وائمة: مات في السابع عشر».

But in other cases the autonomisation of variant readings was so absolute and their evolution into self-independent traditions so complete that their primitive unity in origin could not longer be intuited:¹

ALĠĀFIQĪ, *Mufradah* s–II s.v. حجر النسر (M 211v 13–15 | T 382₁₋₂)

حجر النسر — من الناس من يُسميه “حجر النسر” و “حجر العقاب” (وهو الكيمكث) لأنه يوجد في أوكار العقبان والنسور. ومنهم من يقول “حجر النسر”، لأنه يُبستر الولادة.

أوكار [اكار] M | يقول [قال] T.

There is yet another category (or rather subcategory) within the spectrum of productive or meaningful misreadings that includes cases ranging from rare to unique. As suggested by my use of ‘spectrum’ here, there is not any clear-cut boundary or any indisputable criterion (other than the extent of the editor’s familiarity with the manuscript tradition) to distinguish between relatively common and rare innovative readings. There is no dictionary of frequency of misreadings available by which to measure this quality. An extensive examination of the corpus, however, can contribute compelling evidence for the existence of a kind of exceptional or unique misreadings. As I shall show below, the presence of a ‘leek’ as the main ingredient of a recipe for a hair-blackener in *Nat* II.VII.2 goes back to an original ‘raven’ in *Firdaws*. The origin of the transformation is relatively easy to pinpoint and it can be described as a simple misreading of two words (namely كراث and غراب) that are written in a similar way in unpointed old style. The fact, however, that this misreading is not attested absolutely anywhere except in the textual family of *Nat* III makes it unique. The added fact that the misreading necessitated a noticeable reformulation of the passage (a leek, unlike a raven, cannot be put ‘alive’ into a vessel) recommends defining a special category for this particular kind of innovations.

It is here that I borrow from cladistics or evolutionary biology the concept of apomorphy. Although in strict application of the concept *all* significant misreadings (*Leitfehler*) that were passed on from one copy to another are apomorphic by definition, in my analysis I reserve this term for the specific category of exceptional or unique innovative readings that result in a meaningful reinterpretation of the original passage. If the carrier of these apomorphies happens

¹ The basic unpointed ductus سر was certainly prolific and gave rise also to parallel subtraditions involving vultures (نسر) and he-goats (نيس) for the exact same passages on blood, fat, gall, etc. A similar case is that of سف and its diverging interpretation as jasper (يشف/يسب) etc, coral (بتسد/بتشد), and even alum (شبت). The latter word was often read as dill (شبت) and vice versa; an eye (عين) could become a neck (عنق), and a nest (عش) an eye.

to be reproduced and borrowed from by other texts, these reinterpretations do not die with the text in which they were first introduced but rather gain a circulation of their own. Unlike in the case of more frequent misreadings, the shared presence of such apomorphies (and most especially their accumulation) in any two texts is highly indicative of close cognacy between those two texts. This particular kind of conjunctive misreadings (*Bindefehler*) is accordingly referred to as 'synapomorphies' in the present analysis. Finally and for the sake of exhaustiveness, the traditional category of separative misreadings (*Trennfehler*) may be sporadically alluded to as 'autapomorphies'.¹

1.4 A text with a family

A quite radical hyperbaton may be justified (and even required) here so that the pertinence of the following epigraphs can be better understood. Even if the matter shall be dealt with specifically at the end of this chapter, a few headlines shall no doubt help the reader to navigate the compact discussion that follows.

First, *Nat* III ḤAWĀṢṢ is an essentially literary (ie bookish) and entirely derivative text that as such does not reflect in the least the author's medical practice, let alone that of Andalus (not even of Ilbīrah) at the time of its compilation. Its inclusion in *Natāʾiğ*, as well as the specific selection of passages made by ALʿIL-BĪRĪ certainly can—and perhaps also must—be interpreted as significant with regard to the author's overall attitude towards medicine, but in incorporating these materials to his *kunnāš* he is simply emulating (no doubt indirectly) previous representatives of the genre such as AṬṬABARĪ in *Firdaws*.

Moreover, not only is ḤAWĀṢṢ derivative in the sense that no original (that is, previously unattested) material is included in it but also in the more strict sense of being entirely dependent on one single source. One of the main conclusions drawn from the examination of this section is that all the passages comprised in it must stem from an unidentified, probably no longer extant, compilation of ḥawāṣṣic material that provided both the whole plan and the source materials for *Nat* III. From the individual passages to the entire hierarchy of epigraphs and

¹ The application of cladistic terminology as a subspecification of traditional stemmatic terminology was inspired by my own background and by the analogous prevalence of taxonomic labels in literary studies (eg genre and even species). I cannot claim absolute originality in this respect, however, as the equivalence that obtains between the basic concepts of stemmatics and those of cladistics was already pointed out some fifty years ago in PLATNICK and CAMERON 1977: 381–382. Given the extraordinary development of stemmatology in recent years it is possible, in fact, that I am inventing the wheel here, and in any case I can only hope to amend any errors in my current approach in a future version of this study.

chapters (including its exact rubrics), everything was already available to the author in virtually the same form as shown by the extant text of *Natāʾiğ*. As a matter of fact, ALʾILBĪRĪ was not the only author to accede and exploit that compilation (which I shall henceforth label as “*Ḥawāṣṣ*” and sporadically also as “Ur-*Ḥawāṣṣ*” when the context is sufficiently specific). IBN ALHAYTAM ALQURṬUBĪ’s *Iktifāʾ* appears to show the same relation of absolute dependence from it, and there is good reason to postulate that a substantial part of the ḥawāṣṣic materials transmitted in some versions of the pseudepigraphic *Hārūniyyah* and also in ALMADĀʾINĪ’s *Ḥawāṣṣ* may have the same origin.

The genetic cluster proposed for *Nat* III would then mirror with striking detail the hypothesis advanced above with regard to *Nat* V PHARMACOPOEIA. In both cases a couple of Andalusī partially identical texts seem to presuppose the existence of a previous compilation that is further reflected, with a lower degree of strict dependence, by at least one other western text. Unlike in the case of *Nat* V, however, the evidence for the existence of *Ḥawāṣṣ* is overwhelming and the genetic affinity shown by *Nat* III and *Iktifāʾ* makes the assumption of cognacy almost a certainty. It is then from these premisses (which represent rather the conclusions drawn after protracted examination of the subject) that the analysis of the Helleno-Islamicate ḥawāṣṣic traditions is conducted in the following chapters.

I would like to stress, however, that the postulation of the existence of *Ḥawāṣṣ* is just a working hypothesis. I currently consider it the most useful hermeneutic instrument to explain the interrelatedness shown by this constellation of texts. It is mainly on account of its explanatory power that I favour it over the assumption of *Iktifāʾ* as the first origin of this subtradition and, of course, over any stochastic interpretation. And yet the analysis that I propose here is not dependent on this hypothesis. If a much more complete text of any of the members of this family ever emerged which happened to be a genuine superset of all the others, one should just substitute its name for *Ḥawāṣṣ* and much of the reconstruction below would still be valid.

As I shall insist throughout this part of the dissertation, I take no pleasure in idle speculation and I would have gladly accepted the genetic priority of any of these texts with regard to *Nat* III. That would have made the task far easier and would have spared me much trouble and time. The fact is that on the basis of the evidence available to me and despite IBN ALHAYTAM’s assertive proem the “western Ur-*Ḥawāṣṣ* hypothesis” appears to be the most satisfactory explanation at the moment.

Let me, then, introduce this family, which consists of *Nat* III, a half sibling, a nephew, and at least two putative relatives.

1.4.1 IBN ALHAYTAM'S *Iktifāʾ*?

As far as my undivulged study of *Nat* III is concerned, the contents of a monographic treatise on the specific properties of things written by the Qurtubī physician ʿABDURRAḤMĀN B. IṢḤĀQ B. ALHAYTAM (*fl.* second half of the 10th c.) were the first piece of evidence that proved beyond doubt the non-original nature of the ḥawāṣṣic section included in *Natāʾiḡ*. Despite the emergence of a few new witnesses its testimony remains essential both for the analysis of *Nat* III (as these two texts are much closer to each other than to any other relative in this small family) and for the reconstruction of ^α*Ḥawāṣṣ* (because IBN ALHAYTAM'S selection of quotes is not identical to ALʿILBĪRĪ'S). However, in this chapter *Iktifāʾ* is, somewhat paradoxically, the text to which I shall allot less space relative to its importance.

There are a number of reasons for my doing so. First and foremost, virtually every single passage of the Hebrew translation of *Iktifāʾ* (namely *Səḡullōt*), as well as some additional ones preserved only in indirect transmission, are reproduced and analysed in as much detail as possible in the integral commentary to *Nat* III and a sample of this methodology is to be found in Chapter 4. Second, a substantial part of *Səḡullōt* is paralleled by the pseudepigraphic *Nisyōnōt*, for which an annotated English translation is available. Notwithstanding its shortcomings, the introduction by LEIBOWITZ and MARCUS to their edition of these two texts offers a convenient preview of their context and contents. Last but not least, I am reluctant to press too far the combined evidence provided by these two Hebrew texts.

As I shall briefly show, *Səḡullōt* (or, more precisely, the only two copies of it identified and edited so far) does not transmit IBN ALHAYTAM'S whole original compilation, often as a result of eyeskip either by the translator himself or by some copyist.¹ A few of the most evidently affected loci can be emended by conjecture with the support of *Nisyōnōt* and of several explicit quotes from the Arabic *Iktifāʾ* collected in IBN ALBAYṬĀR'S *Almuḡnī*. There are some other cases in which an accident (usually homoeoarchton or homoeoteuton) appears as strongly plausible but the reconstruction of the original locus must remain speculative in the absence of external help. I have not shied from proposing such emendations in my commentary with a variable degree of plausibility.

¹ There are also manifest signs of intentional omission: the dedicatory to ALMAṢṢŪR was an obvious candidate for non-consideration but the whole Section X appears to have been excluded from the original translation. This selective strategy suggests that some of the missing passages that I have provisionally described as the result of eyeskip may have rather belonged to the category of deliberate omissions by the Hebrew translator.

Now, emending a corrupt locus and reconstructing, even partially, an unknown prototext such as ^α*Ḥawāṣṣ* are two very different things. Even my hypothesis of cognacy rather than dependence between *Nat* III and *Iktifāʾ* would be entirely disproved if IBN ALHAYTAM's treatise should be shown to have originally included all the passages transmitted in ALʿILBĪRĪ's section. And there exists a text that can shed definite light on all these doubts and which I could not manage to access: the Arabic copy of *Iktifāʾ* currently held at the Al-Beruni Institute of Oriental Studies in Tashkent. I have already explained the story of my failure and how heavily this deficiency weighs upon me and my research. All lamentations aside, let me summarise now the most pertinent data on IBN ALHAYTAM's book and its likely place within the family of descendants from ^α*Ḥawāṣṣ*.

The first documented Andalusī treatise on the specific properties of things

Unlike in the case of the virtually unknown compiler of *Natāʾiḡ*, one treads on firmer ground when approaching IBN ALHAYTAM's profile and output. He features amongst the protagonists of the so-called "Qurṭubī revision" of the Arabic translation of DIOSCORIDES' *Materia medica* (for which see Chapter 2.**sect/ref) and he also receives some attention from Islamicate biobibliographical sources.¹ For him we have a chronology and also a fairly indisputable testimony about his being the author of a treatise that bears the explicit title of *Kitābu liktifāʾ biddawāʾ min ḥawāṣṣi lʾaṣyāʾ* (henceforward *Iktifāʾ*, or *Ikt* in abbreviation), which he compiled for the ḥāḡib ALMANṢŪR (r. 978–1002).²

Until the year 1999, however, *Iktifāʾ* was known only through a Hebrew version ספר הסגולות (from now on *Səḡullōt/Səḡ*)³ and a pseudepigraphic treatise ספר הנסיונות (*Nisyōnōt/Nisy*) ascribed partially to ABENEZRA and which contains an extensive reproduction of either the original *Iktifāʾ* or of its Hebrew translation with some later additions ascribed to "the Experimenter" (המנסח). For the unclear nature of the dependance of *Nisyōnōt* from *Səḡullōt* the reader is referred to the preliminary (and to date sole) study of the matter by the modern editors

¹ For all secondary information the reader is referred to the most recent update on IBN ALHAYTAM in the corresponding entry in the *Biblioteca de al-Andalus* (cf. CABO-GONZÁLEZ 2004), which ignores, however, the discovery of the Arabic unicum in Tashkent. Let it be noted that while IBN ĠULĠUL places IBN HAYTAM (this is how he alludes to him in two different works) in the select group of Qurṭubī pharmacognostics working on the identification of simple drugs by the mid 10th c. he does not devote to him a separate entry in his history of medicine, nor does SAʿĪD ALʿANDALUSĪ include him in his own *Ṭabaqāt*.

² Cf. IBN ALHAYTAM, *Iktifāʾ* Proem 41v 3–11 (= HASANI 1999: 21); also IBN ABĪ UṢAYBĪṢAH, *Ṭabaqāt* 492^{9–10}. The rank attributed to ALMANṢŪR by the author indicates that the final composition of *Iktifāʾ* cannot predate 978.

³ Cf. LEIBOWITZ and MARCUS 1984: 292–326.

of these two texts.¹ As far as the Hebrew reflections of *Iktifāʾ* are concerned, in this chapter I shall focus almost exclusively on *Saḡullōt*.

Our knowledge of IBN ALHAYTAM's treatise changed quite radically with the publication in 1999 of a brief notice about the aforementioned Tashkent manuscript.² According to the description provided by HASANI, the fourth item (beginning on fol. 41v) in MS 9777 held at the Al-Beruni Institute is a twenty-seven-folio Arabic copy of a work that bears the exact same title as noted down by IBN ABĪ UṢAYBĪṢAH (ie *Kitābu liktifāʾ biddawāʾ min ḥawāṣṣi lʿaṣyāʾ*) and is ascribed to “Abulmuṭrib [≠ *Abulmuṭarrif] ʿabdurrahmān b. Ishāq b. Alhašim”.³ Thanks to the pictures supplied in that notice the proem and the whole index of the treatise can be accessed and these data can now be combined with the testimony of *Saḡullōt* to draw a clearer (albeit still incomplete) picture of IBN ALHAYTAM's original.

The proem of Iktifāʾ and a new problem of self-attribution

Unlike *Nat III*, IBN ALHAYTAM's treatise contains a full-blown proem in which he dedicates the work to the *ḥāǧib* ALMANṢŪR, justifies his choice of the subject with a convenient reference to his own books on poisons and on purging drugs, and criticises those ignorants who deny without arguments the existence of the specific properties. The latter segment is a close echo of ARRĀZĪ's prologue to *Ḥawāṣṣ*, from which the Andalusī physician borrows the phraseology and perhaps even the conventional example of the magnet.⁴ The Tashkent manuscript supplements the dedicatory that was not included in the Hebrew translation

¹ Cf. particularly LEIBOWITZ and MARCUS 1984: 103–105, where some considerations are included about the different branches of the tradition and a hypothesis is proposed about the hyperarchetype from which the two main groups of manuscripts appear to derive. A more critical edition of *Nisyōnōt*, distinguishing perhaps the two main branches A and N (the former is often far more coincident with *Saḡullōt*) and, above all, taking into account the parallel Arabic tradition, could be wished for.

² Cf. HASANI 1999, who deserves the merit not only for having made this new finding public but also for providing three reasonably readable pictures from the manuscript and an English translation of the epigraphs on the teeth, on headaches, and on oblivion. As he does not add any concrete reference to the catalogue of manuscripts of the Al-Beruni Institute and since I could not get access to a copy of it, all my information on the item derives directly from HASANI's publication. The news of this Arabic copy is echoed in PORMANN and SAVAGE-SMITH 2007, but it does not seem to have reached all the quarters of the historians of Andalusī medicine.

³ HASANI 1999 (and apparently also the cataloguer of the Institute) reads “al-Shayām”, but in the photographic reproduction of fol. 41v one can clearly see that there is no *alif* and that there is an apparent correction before the *šin*. In any case, this element of the name is probably corrupt but it is still reasonable close to the original.

⁴ This part of the proem of *Iktifāʾ* is reproduced below in Chapter 2.

and which contributes decisively to the establishment of the chronology of the text.

It is however the ending of the proem that concerns me here. There IBN AL-HAYTAM resorts to one of the most frequent *topoi* in medical literature in order to explain the origin of his compilation.¹ Having found no book at all by any of his predecessors that was either satisfactory enough or well-organised, he attempted to bring together what was scattered in different books and arranged the materials in sections according to the organs and the ailments, from head to toe. To this effect he collected the sayings (on the specific properties) “of Dioscorides, Galen, Alexander, Theophrastus, Balīnās, Aḥūrusfus, Hermes, Iṣṭifan, Ḥunayn b. Iṣḥāq, Aṭṭabarī, Arrāzī, and others”. Each passage was ascribed to its author, and the whole was divided into ten sections:

Iktifāʾ Proem 42r 16–23

ولم آزر لأحدٍ من الأوائل في ذلك كتابًا مرضيًا
مرتبًا، ولا كافيًا عندي؟ بل رأيت ذلك
في كتبٍ متفرقةٍ، فحاولت جمع المتفرقة فيه
وترتيبه وتنويحه وتصنيفه على الأعضاء المألوفة
والعلل المعروفة من رأس الإنسان إلى قدمه،
ما هاء وجدانه، وتركته من ذلك ما قبيح
استعماله. وتبع ذكره مما قال ديسقوريدس،
وجالينوس، والإسكندر، وثاوفرسطس،
وبليناس، وأسطوهومرسين، وهرمس، و
إصطفان وحنين بن إسحق وعليّ الطبري، وابن
نركرياء الرازي وغيرهم. وينسب كل قول
منها إلى قائله، وقسمت الكتاب على عشرة
أنواع.

Saḡullōt Proem (L–M 294_{3–12})

ואני לא ראיתי לאדם שקדמני באלו
הסגולות שום ספר מחובר ולא שום
הסתפקות. אבל ראיתי מזה הענין
בקצת הספרים פרטים נפרדים נפרדים
בקצתם מבקצת. ואספתי כללם ופרטם
וענינם [--- יאם] על האיברים המתרפאים
והחכמה הידועה בהם מכף רגל ועד
ראש כפי מה שיתכן מציאותם. והנחתי
מה שנמאס מלרפות בהם או נעלם
זכרו כמו שאמר דיאוסקורידוש ונאלו
ואליסכנו וחנן בן יצחק ועלי אלטברי
ואבן זבחה אלרזי וכל מה שחובר לאלו
זולתם. וחברתי בכל דבור זולתם
אל דבורם. וחלקתי זה הספר עשרה
שערים.

ثاوفرسطس [ثاوفرسطس T | الرازي] رازي T.

As a description of the book this passage is quite accurate and informative (and certainly more synthetic than my own summary of *Nat III*) but it is also problematic. According to his own words, IBN ALHAYTAM ought to be credited

¹ Such a formulaic self-justification (that can sometimes take the form of a quite aggressive marketing strategy as in the case of ALMAḠŪSĪ) may be prevalent also in other epistemic genres but I am not familiar enough with non-medical literature and I can provide no parallels here.

not only with the collection of quotes but also with the actual head-to-toe organ/ailment-centred design of the treatise.

There are a few minor elements that may not bear significantly on the assessment of this originality, such as the fact that most of his corpus of authorities IBN ALHAYTAM purposely bypasses his actual intermediary source, namely ARRĀZĪ.¹ In doing so he adopts the same strategy as IBN ALĠAZZĀR some years earlier in his *Ḥawāṣṣ*.² As for the originality of the design, I have already stated that I would happily accept IBN ALHAYTAM's priority and ALʿILBĪRĪ's absolute dependence from him, but not even the summation of the Arabic unicum, the Hebrew translation, and the fragments that can be salvaged from indirect transmission account for the entire text of *Nat* III. In principle, the original *Iktifāʾ*? could have been much larger than what any of the extant copies reflect and in that case (only in that case) it might be the actual *Ḥawāṣṣ* and much of the mystery would thus be solved. As a matter of fact, IBN ALHAYTAM's profile matches quite well that of the hypothetic author of *Ḥawāṣṣ* and his active rôle in the identification of the obscure items in DIOSCORIDES' *Materia medica* would explain the presence of some characteristically western equivalences that differ both from IBN ĠULĠUL's and from the later Andalusī pharmacognostic tradition.

¹ This must be assumed for ALEXANDER, THEOPHRASTUS, BALĪNĀS, AṬHŪRUSFUS, and HERMES, as shown by the examination of the passages ascribed to these authors in *Saġullōt*, all of which have a precedent in ARRĀZĪ's *Ḥawāṣṣ*. No quote is ascribed to either IṢṬĪFĀN or ḤUNAYN B. IṢḤĀQ in any of the extant members of this textual family, but it is highly plausible that any passages mentioning those two names were also borrowed from the same source, cf. two mentions of ḤUNAYN's *Iḥtiyārāt* in ARRĀZĪ, *Ḥawāṣṣ* 3-حار (I 81r 15-17) and فؤة 2-ف (I 85v 4-6). In the latter quote ALKINDĪ is mentioned alongside ḤUNAYN in at least two manuscripts, but *fiwwah* is nowhere to be found in his *Iḥtiyārāt*. As for IṢṬĪFĀN, cf. ARRĀZĪ, *Ḥawāṣṣ* 1-10 أتل (I 79v 11-12), which is in turn borrowed from AṬṬĀBARĪ, *Firdaws* IV.II.5 (§ 144₁₂-145₂), where ALEXANDER "the philosopher" and ALʿISṬĪFĀN (sic) are both labelled as Alexandrian («alʿiskandarāniyyān»), which rules out IṢṬĪFĀN B. BASĪL as the empiricist source referred to by AṬṬĀBARĪ for his ḥawāṣṣic materials. Mark, however, that the passage on the bone from a stag's heart against epilepsy is not transmitted in *Saġullōt* (nor in *Nisyōnōt*).

² One of the many threads that I could not follow so far is the complex relationship between tenth-century Andalusī physicians and their Qayrawānī colleagues. Some remarks in this regard have been introduced in the survey of *Nat* V PHARMACOPOEIA but it is worth recalling here that IBN ALHAYTAM is the author of a monograph on IBN ALĠAZZĀR's mistakes in his *Iʿtimād*. It might not be entirely coincidental that he favoured a format of *Ḥawāṣṣ* that was at variance with the one chosen by the Ifrīqī physician. If IBN ALHAYTAM was, as he claimed to be, the creator of this head-to-toe treatise (and therefore the author of *Ḥawāṣṣ*), then this contrast would be still stronger and might even be interpreted in a context of competition. The Qayrawānī *Ḥawāṣṣ* (like its main source) was most unsuited for medical use, whereas its Andalusī homologue could easily be integrated, as a block or in small doses, in any text on medicine (as shown by all members of the textual family described here except for *Iktifāʾ*? itself).

If, on the other hand, *Nat* III is not a subset of *Iktifāʿ* but has nevertheless the exact same architecture and nomenclature of taxa and also a remarkable amount of shared passages, the only possible explanations are that either (1) ALʿILBĪRĪ copied this design, borrowed an arbitrarily limited number of quotes, and then added a great many other passages from the exact same set of sources as used by his copy-text, or (2) they both drew from a common source that showed already the features that IBN ALHAYTAM claims as his own work. The unlikelihood of scenario 1 is, I think, self-evident and in the remainder of this chapter much evidence will be produced that supports the hypothesis of cognacy.¹

The contents of Iktifāʿ

The treatise is arranged in ten major sections (שער | פֶּנִי) arranged according to a clear head-to-toe criterion, with the obvious exception of Section I, which contains a general introduction to the concept of specific property,² and the non-medical Section X. A full concordance of the sections and chapters of the treatise as transmitted in the index of the original Arabic and its Hebrew translation is provided in Tables ***REFS, where the corresponding divisions in *Natāʿiḡ* are also registered for ease of consultation.³ I guess that the level of coincidence between the two treatises not only in the exact arrangement of the materials but even in the linguistic form of the rubrics may convince most readers of their relatedness. However, identity in structure (even to such extent) is not necessarily indicative of cognacy, since theoretically the two authors might have picked this specific arrangement for their respective treatises from a pre-existing source whereas the actual contents of the epigraphs might have a different origin. Now, that is extremely unlikely, but let us consider this possibility

¹ To be clear, I do not disregard the likelihood of a few sporadic additions by ALʿILBĪRĪ to the inherited stock (although I consider this probability extremely low), but compiling *Nat* III from *Iktifāʿ* would have required actually replicating IBN ALHAYTAM's work. From the perspective of a compiler like the Ilbiri physician that would have entailed an awful lot of effort to very little gain—not to mention that the availability of that corpus of sources must have been rather limited.

² The full rubric of the Section (which had to be abridged in the concordance in Table 1.1) reads thus in the Arabic copy: «*Alkalāmu lkullīyyu wamaʿnā ḥāṣṣīyyati wamaḥīyyatuhā* ← [*wataqāsimuhā*]» (the segment marked with an arrow is obviously dislocated after *alkulli* on the manuscript and I have restored it to its most probable primitive position, but mark that *Saḡ*, or at least one of the two copies, places the corresponding word in a similarly awkward position: «בסגולות בכלל (וחלקם) ומהותם»).

³ In the synoptical tables the original rubric for *Nawʿ* X is abridged (the full title is commented on below). All glosses have been omitted from the Hebrew rubrics in the tables.

for the sake of the argument if only to argue more forcibly for the relatedness of these two texts.

As can be seen in the sample included as Chapter 4 of this dissertation, the overlap between *Nat* III and *Iktifāʾ*? is by no means limited to the entire structure and to the exact nomenclature of the epigraphs but it extends to their basic constitutive elements: the quotes. It is not a random coincidence in the selection of the authorities and of the quotes that they draw from them (which by itself would be quite compelling evidence for relatedness) but genuine *formal identity*. With such variations as could be expected from any two independent copies of one single text (all the more so in the case of *Saḡullōt*, in which the change of linguistic vehicle was liable to introduce a whole new range of innovative readings), these two texts transmit the exact same quotes. Their shared wording, more importantly, is noticeably different from the ultimate sources that they allegedly quote and also from any possible intermediary.

The conclusion is ineluctable: neither ALṬILBĪRĪ nor IBN ALHAYṬAM are directly excerpting their quotes (which would have been an unrealistic expectation), nor are they personally enriching, à la IBN ALĠAZZĀR, ARRĀZĪ's *Ḥawāṣṣ* with additional passages. The latter is, of course, the ultimate source for all quotes ascribed to ALEXANDER (sc. of Tralles), AṬHŪRUSFUS, HERMES, and BALĪNĀS, to cite only some of the most evident cases of mediation. However, ARRĀZĪ does not include one single passage from DIOSCORIDES in his compilation, whereas *Nat* III contains some fifty-odd quotes explicitly ascribed to the author of *Materia medica*, and *Saḡullōt* is at least as rich in passages from the same source. And in all these shared Dioscoridean passages the two Andalusī treatises show, once again, the exact same wording—which is quite often at variance with the one in the standard Arabic translation of *Materia medica*.

In order not to abuse of the readers' patience, here I shall compare only two different epigraphs from *Nat* III with the corresponding ones in *Saḡullōt* and with HASANĪ's English translation of the Tashkent unicum (see Tables ***REF). If the small sample from the Arabic original contributes definite proof of the textual identity of the two treatises, it also shows how unfortunately fragmentary the text of *Saḡullōt* is and how provisional (and occasionally also incorrect) my own work of comparison and reconstruction has to be considered.

On the other hand, at the highest level of probativeness, there is a number of synapomorphies that could hardly be interpreted as spontaneous parallel developments in the two texts under scrutiny here. Thus, in *Nat* II.VII.2 ≡ *Saḡ* II.VII.6 the "leek" (كزاث ≡ הכציר) that enters the recipe for a hair blackener stems from a misreading of the original word "raven" (*ḡurāb*) in *Firdaws* (عرااب and كراب being actually quite close in old-style writing). Let it be noted that it is not a mere vari-

ant reading but a true reinterpretation of the passage: the original qualification “alive” in *Firdaws* has been dropped since it did not make sense any longer once the active element was read as “leek”. Moreover, this apomorphy is not shared by any other text in the corpus, except for IBN ALBAYṬĀR’s *Almuḡnī*, which, as shall be seen in the next epigraph, depends for this and other similar passages from the same Andalusī tradition.

Then, both *Nat* III.VI.2 and *Saġ* III.VI.1 attribute to the onyx stone a *benefit* against dribbling or ptyalism, yet the original passage in the pseudo-Aristotelian *Aḡġār* states the exact opposite effect for this stone: it *induces* dribbling according to the latter account. As in the preceding case, this highly idiosyncratic misreading necessitated a syntactical rearrangement of the elements of the apodosis for the new passage to make any sense, and as an apomorphy it is further unparalleled (with, once again, the exception of *Almuḡnī*) in the whole corpus—which in this case is a large one, for it includes a plethora of lithogonic texts, all of which transmit the primitive version of the passage.¹

In *Nat* V.VIII.11 ≡ *Saġ* V.VIII.6 instructions are given to dilute the “eye” (عين ≡ عي) of a swallow in water and to drink this potion against dysuria. Both AṬṬABARĪ and ARRĀZĪ, however, read “mud from the swallow’s nest” (طين عش الخطاف). On palaeographic grounds it was probably عس that was misread as عس but in any case this apomorphy is not recorded either in the direct or in the indirect tradition of *Firdaws* or *Ḥawāṣṣ*, nor by any other text with the exception of *Almuḡnī* and also of MASĪḤ’s *Hārūniyyah*, which shall be shown below to be an additional witness to the same textual tradition.²

In *Nat*|*Saġ* VIII.VII.1 AṬṬABARĪ is quoted on a plaster made of cattle dung that is censured to “bring out superfluities [מזותרים ≡ فضول] from the body and sinews through sweat”. This is, in fact, the only passage in that epigraph, which bears precisely the title *On what brings forth the superfluities of the nerves and the re-*

¹ As shown in the survey of *Nat* I in Chapter 5 of Part I, in the epigraph on the onyx in *On stones* ALṢILBĪRĪ himself records the historically correct form of this passage, which proves beyond doubt the parallel use of different sources for these two sections of *Natāʾiġ*.

² Given that this chapter is not included in Chapter 4, I provide here the main references: *Saġ* V.VIII.6 (L–M 312_{9–10}) ≡ *Nisy* V.VIII.5 (L–M 218_{3–4}) ≡ *Hārūniyyah* LXIII.1 (G 239_{1–2}). For the original passage, cf. AṬṬABARĪ, *Firdaws* VI.IV.31 (S 436_{12–13}); and ARRĀZĪ, *Ḥawāṣṣ* 5–خطاف (I 87v 6–7). Although in *Firdaws* and also in *Ḥawāṣṣ* the remedy is transmitted anonymously, it probably stems from AṬḤŪRUSFUS, to whom it seems to be ascribed in ARRĀZĪ, *Alḥāwī* X.v (H X 185_{5–7}); thence, with an explicit reference to both the intermediary and the ultimate sources, IBN ALBAYṬĀR, *Almuḡnī* XI.9 (M 194r 16–18). The correct reading “nest mud” is transmitted in parallel *Ḥayawān* texts, cf. IBN BUḤTĪŠŪṢ, *Ḥayawān* VI.10 (وهي الخطاف) (G 176_{2–4} | Q 90r 9–11 | P 48v 4–6) ≡ *Nat*^L 55r 4–7. In Andalus, the apomorphy “eye” is inherited also by ALḤIDRĪSĪ, *Ġāmiṣ*^F 26–خطاف (S III 507_{1–2}), which needs to be further scanned for echoes of *Ḥawāṣṣ*.

maintaining body through sweat. Now, according to *Firdaws* this remedy extracts “arrow heads and shafts” («النصل والقصب»). While the misreadings فضول for نصول (written فصول and نصول respectively in unpointed script) and also عصب for قصب (which would be عصب and قصب respectively) are two plausible spontaneous variants, the radical adaptation of the whole apodosis shared by the two Andalusī texts can only be understood as an active (ie non-mechanical) authorial reinterpretation—to the point that the compiler created a new chapter only to contain this quote. Needless to say, it is most unlikely that two authors working independently from each other should coincide in such an innovation.¹

There are several more peculiar innovative readings like these in the two texts under consideration and the more exhaustive comparison conducted in Chapter 4 should dispel the doubts of even the most sceptical readers. However, there still remains the question on how to interpret this relatedness and whether one of the two treatises is a subset (and therefore a probable descendant) of the other.

Siblings, almost twins

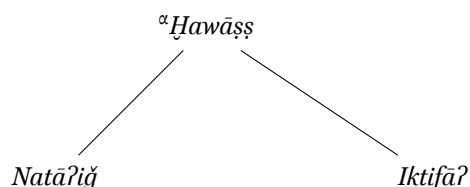
That neither of the extant texts of *Natāʿiḡ* and *Saḡullōt* can be derived from the other becomes obvious from a quick comparison of the contents of any of the epigraphs: their overlap is large but the authors' selection of quotes is certainly not identical. This is true for most of the chapters, with only a few exceptions for which the total overlap of the two treatises is undoubtedly a consequence of the scarcity of material in the parent text: there can be no divergence when the source text offers a one-passage epigraph (unless, of course, one of the compilers decides to skip the chapter altogether, which they apparently never did). The variability in two- and three-passage chapters might be expected to be likewise non-existing, yet even in that case ALʿILBIRĪ and IBN ALHAYTAM managed to apply different (and not easy to understand) criteria for inclusion. In longer chapters, the range of overlap is accordingly (but not always proportionally) wider. It must be noted that there are a very few exceptional chapters in which the selection of the two authors is entirely different.²

Frustrating as these divergences may sometimes be with regard to the elucidation of some obscure loci in *Nat* III, the differential selections made by the

¹ Cf. AṬṬABARĪ, *Firdaws* VI.IV.4 (§ 423₁₋₃), which is transmitted in unaltered form by IBN SAMAGŪN, *Ġāmiʿ* زيل 14-ز (S I 35₁₅₋₁₇), and probably through him by ALĠĀFIQĪ, *Mufradah* زيل 28-ز (M 176r 18-20 | T 314₄₋₆); and IBN ALBAYṬĀR, *Ġāmiʿ* بقر 116-ب (B I 107₉₋₁₁) and also *Almuḡnī* XV.8 في الجاذبة للشوك والسلا (M 267r 18-20). A non-mediated use of *Firdaws* may be suspected, perhaps, for the paraphrase in ALʿIDRĪSĪ, *Ġāmiʿ* ثور 7-ث (S III 490₃₋₅).

² See *Nat*|*Saḡ* II.v *On sleep and wake* (which is included in Chapter 4).

two authors are extremely useful for the reconstruction of the anonymous parent compilation given that, after all, ${}^{\alpha}\text{Ḥawāṣṣ} \geq \text{Natā}ʔiḡ + \text{Iktifā}ʔ$ (this mathematical expression shall briefly become a little more complex). Further remarks on this matter are to be found in Chapter 4; for the time being suffice it to express the relationship of these two Andalusī texts in a minimal stemmatic form:



For the sake of exhaustiveness, let it be noted that any horizontal contamination (ie ALḤILBĪRĪ having extracted additional passages from *Iktifāʔ* or IBN ALHAYṬAM from *Natāʔiḡ*) is most unlikely. If a complete copy of the parent source was available to both authors, there would be not point in excerpting a subset of it. On the other side, mark that the above diagram should not be interpreted as implying that these two texts are contemporary—although, as I have argued in Part I, there actually is some compelling evidence to consider them roughly coeval.

The indirect transmission of Iktifāʔ

In addition to a few quotes that appear to derive from a pharmacognostic treatise,¹ IBN ALHAYṬAM is also occasionally cited for *Iktifāʔ* by some Andalusī *Ġāmiʿ* authors. Some of those quotes corroborate the soundness of the text transmitted by the Hebrew translation; others show clearly that the original Arabic treatise contained more passages than those preserved in *Saḡullōt*.²

¹ Quite probably the one in which he addressed IBN ALĠAZZĀR's mistakes in his *Iṣtimād*, cf. *Kitābu liqtiṣār wal-iḡād fi ḥaṭaʔi bni lḡazzār fi liṣtimād* in IBN ABĪ UṢAYBĪṢAH, *Ṭabaqāt* 492₈₋₉. Cf. for instance ALĠĀFIQĪ, *Mufradah* بـ 21 بخور مریم (M 75v 18 – 76r 2 | R 154₆₋₉ | T 116_{16-117₂}) ≡ IBN ALBAYṬĀR, *Ġāmiʿ* بـ 29 بخور مریم آخر (B I 85₄₋₆); ALIDRĪSĪ, *Ġāmiʿ*^T s.v. يصل (S II 88₁₋₂). It is less probable that these items should have been mentioned either in his monograph on purgatives and emetics or on the treatise on poisons.

² On a side note, the emergence of every such “new” passage results in the need to introduce small modifications in the description of the relationship between *Nat III* and *Iktifāʔ* for the corresponding chapter. Not a few “unparalleled by” had to be changed into “has a matching parallel in” and many more corrections shall have to be introduced in my analysis once the Tashkent manuscript has been consulted. That is the main reason why I abstain from extracting any deceptively accurate statistic data from the texts under examination.

Thus, in his entry on oak galls ALʿIDRISĪ quotes IBN ALHAYTAM without mentioning the title of his book:

Ġāmiʿ^T 5-ع (S III 363₂₃)

ومن كتاب ابن الهيثم أن، متى أخذ إنسان عفتةً وشدها في ركبته، منع ذلك من خروج
الدمامل — جُرب، فكان كذلك.

منع [مع T].

This obviously ḥawāṣṣic passage is nowhere to be found either in *Saḡullōt* or in *Nisyōnōt*. It corresponds however to a quote from ALEXANDER in *Nat* VIII.VIII.4 that actually derives from ARRĀZĪ's *Ḥawāṣṣ* but introduces an apomorphic reading ركبته 'knee' instead of the original بكتة 'underclothing band'. As the reading is shared by the two texts it probably represents a synapomorphy and ought to be ascribed to the parent compilation.¹

In his own *Ġāmiʿ* IBN ALBAYṬĀR includes at least two explicit quotes from IBN ALHAYTAM. The first one, specifically borrowed from *Iktifāʾ*, involves some big lizard (*ḥirdawn*); the other is actually a double passage on two different medical uses of scorpions. To these, at least three passages recorded in his *Almuḡnī* must be added. As expected, there is some overlap between the two sets, but there are also some significant differences. In the entry on scorpions in the *Ġāmiʿ* he records under the name of ʿABDURRAḤMĀN B. ALHAYTAM a recipe for an oil made of one single scorpion which can be used against aching backs and thighs and which also gets rid of haemorrhoids when smeared over them.² Nothing like this is recorded in either *Saḡullōt* or *Nat* III.³

¹ Cf. ARRĀZĪ, *Ḥawāṣṣ* 2-ع (I 84v 19 – 85r 1 | Q 22₁₃₋₁₄ | T 108r 8–9 | V 22v 14–15). There is a slight possibility that «ركبته» might have already featured as a variant in the direct transmission of *Ḥawāṣṣ* (cf. «غير مثقوبة», «في منكبته» V, «غير مثقوبة», «في منكبته» T). For the meaning of *tikkah*, cf. DOZY 1845: 95–99. An apparently parallel transmission of this passage is likewise ascribed to ALEXANDER with a remarkably different wording by ZUHR, *Ḥawāṣṣ* 11-ع (B 100r 3–5 | H 156₇₋₈ | P 66r 13–15 | T 324₅₋₆); thence IBN ALBAYṬĀR, *Almuḡnī* XVI.2 في الدماميل (M 272v 12–13). The passage cannot be located in the extant text of ALEXANDER OF TRALLES' *Therapeutica*, where boils and swellings are not dealt with in any form, and none of the eleven instances of the word *κηρίς* indexed by PUSCHMANN 1879: 608 can be its origin.

² Cf. IBN ALBAYṬĀR, *Ġāmiʿ* 60-ع عقرب (B III 128₁₉₋₂₂).

³ At least the second segment of the quote (clearly signalled by «*waqila inna*») might stem from *Ikt* V.v *On the seat*, where a similar oil made of viper ashes burnt and beaten up with oil is described. The mention of the back and the thighs, however, points towards a different chapter for the initial segment.

Within the same entry in *Ġāmiṣ* and also in *Almuḡnī* XIII.14 a benefit for women prone to miscarriage is attributed to a dead scorpion when amuletised on them. This confirms a passage already known from *Saḡullōt*.¹

The case of the passage on the lizard is quite interesting. On the one hand it improves notably the text transmitted in *Saḡ*, on the other hand it shows that IBN ALBAYṬĀR may have occasionally paraphrased his source. From the combined testimony of *Saḡ* and *Almuḡnī* it can be ascertained that IBN ALHAYṬĀM must have transmitted the name *waral* that he found in his source; the identification with *ḥirdawn* implied in exact same quote in the *Ġāmiṣ* must therefore be ascribed to the compiler, as well as the radical abridgement of the passage:²

Almuḡnī XX.1 (M 356v 11–12)

ومن كتاب الاكتفاء: «قال الطبري: "إن سلخ جلد الورل (وهو ذكر التمساح) وأحرق
وخلط بزيت وطلّي به العضو الذي يحتاج إلى قطعه، أخدره حتى لا يحس القطع».

Saḡ VIII.XI.2 (L–M 3238–10)

ואמר אלטברי: «אם יופשט עור אלורל (והוא התמסח) ויעורב בשמנו שמן זית
ותחבוש האבר אשר תרצה לחתכו או לכוותו. ירדימהו עד שלא ירגש החתוך».

IBN ALBAYṬĀR, *Ġāmiṣ* 60–113 حردون (B II 18_{24–25})

ابن الهيثم في كتاب الاكتفاء: «جلده، إذا وأحرق وطلّي إنسان، لم يخف ما يناله من
الضرب والقطع».

A third explicit quote from *Iktifāʿ* on the benefit of the magnet stone against tetanus or spasms (*kuzāz*) is included only in *Almuḡnī* I.31 and has no matching parallel in *Saḡullōt*, yet it corresponds exactly to *Nat* VII.III.1 and shares with it the ascription of the remedy to ALEXANDER.³ It provides further confirmation that the edited Hebrew translation is defective:

¹ Cf. IBN ALBAYṬĀR, *Ġāmiṣ* 60–66 عقر (B III 128_{22–23}) and *Almuḡnī* XIII.14 (M 218r 20–21) ≡ *Saḡ* VI.IV.3 (L–M 313_{24–26}).

² The edited Hebrew text actually reads «גורל», which I silently emend to ורל (cf. a different misreading «הורל» in *Saḡ* VI.III.8, where the gloss «המסאס» must also be emended). As for the origin of the passage, it does not derive from AṬṬĀBARĪ as affirmed by *Iktifāʿ* but rather from AṬḤŪRUS-FUS as excerpted by ARRĀZĪ in *Ḥawāṣṣ* 3–9 ورل (I 80v 10–11). It is possible, of course, that the quote in *Ġāmiṣ* might stem from a different chapter, *Ikt* VIII.IV being a logical candidate, but this presumption would have even less evidential support than my comparison.

³ Cf. *Almuḡnī* I.31 (M 31v 15–16).

Almuǧnī I.31 في الكراز (L 54r 14 – 54v 1 | M 31v 15–16 | P¹ 28r 21 – 28v 1 | P² 5or 3–5)
 ومن كتاب الاكتفاء لابن الهيثم: «قال الإسكندر: حجر المغنيطس الذي يجذب
 الحديد، متى مُسك في اليد، منع من الكراز ونفع منه».

المغنيطس [المغناطيس M | مُسك] امسك P¹.

There are, furthermore, several *unasccribed* remedies (and even whole sequences of up to eleven consecutive passages) that may be considered reflections of the same subtradition (namely ^α*Ḥawāṣṣ*) but cannot be located in the extant text of *Saǧullōt*. The testimony of the Arabic *Iktifāʾ* may be conclusive in this regard but for the time being I have limited myself to pointing out the *possibility* that such passages may have been borrowed from IBN ALHAYTAM'S treatise because, as shall be seen in the next subsections, there were at least two other texts transmitting materials from the same origin and one of them is actually quoted explicitly by IBN ALBAYṬAR in *Almuǧnī*.

Addendum: Iktifāʾ X and the boundaries of Nat III

The last section of *Iktifāʾ* may provide clarification for two enigmas involved in the transmission of *Natāʾiǧ*. Section X in IBN ALHAYTAM'S treatise reports *On the specific properties of the things that have specific, extraordinary, and wondrous effects on each other without any medical use*. Now, on the one hand such a section is a very likely origin for the sequence of non-medical quotes labelled as *Nat III.2* in this dissertation (ie the geponic excerpts). This interpretation would find some additional support in a similar sequence transmitted in ALMADĀʾINĪ'S *Ḥawāṣṣ* (for which see below). Then, the contents of the final part of this Section X (for which see HASANI 1999: 23, figure 3) seem to coincide with one of the units copied in the composite Damascus manuscript. As pointed out in the description of the contents of D, in addition to the text clearly identifiable as *Natāʾiǧ*, that manuscript includes also an item that parallels (at least partially) *Nat IV REGIMEN* and according the catalogue description of that manuscript unit no. 3 is a collection of instructions on how to get rid of stains, which is exactly what is found on the last folio of the Tashkent copy of *Iktifāʾ*.

Regardless of its significance for the particular history of *Natāʾiǧ*, this Section X is clearly inspired in a miscellaneous chapter that AṬṬABARĪ includes, with a remarkably similar title, in his *Firdaws*.¹ This confirms, I think, that the anonymous compiler of ^α*Ḥawāṣṣ* had direct access to *Firdaws*, from which he drew not only a high number of passages not included previously by ARRĀZĪ in his *Ḥawāṣṣ* but also further inspiration for his own treatise.

¹ Cf. AṬṬABARĪ, *Firdaws* VII.II.2–4 (§ 524₁–536₂₃).

<i>Nawṣ</i>	<i>Faṣl</i>	<i>Iktifāʾ</i>	<i>Saḡullōt</i>	<i>Natāʾiḡ</i>
I		كلام كليّ + وتقاسيمها + ومعنى الخاصيّة وماهيّتها	בסגולות בכלל	—
II		في أمراض الدماغ	בחליי המוח	
II	I	في الصرع	בכפיה	
	II	في الفزع [القرع]	בהתפחדות	
	III	في الحيران	בשמות	
	IV	في النيسان	בשכחה	في النيسان
	V	في النوم والسهر	בשינה ותעורה	في النوم والسهر
	VI	في الصداع	בכאב הראש	في الصداع
	VII	في شعر الرأس وجلدته	בשער הראש ועורו	في شعر الرأس وجلدته
III		في أمراض أعضاء الوجه	בחליי אברי הפנים	في أمراض أعضاء الوجه
	I	في العين	בעין	في العين
	II	في الأذن	באוזן	في مداواة الأذن
	III	في الأنف	באף	في مداواة الأنف
	IV	في الوجه نفسه	בבפנים עצמום	في الوجه نفسه ومداواته
	V	في الأسنان	בשניים	في الأسنان
	VI	في اللسان	בלשון	في اللسان ومداواته

Table 1.1: Sections and chapters in *Iktifāʾ*, *Saḡullōt*, and *Natāʾiḡ*.

<i>Nawʿ</i>	<i>Faṣl</i>	<i>Iktifāʾ</i>	<i>Sağullōt</i>	<i>Natāʾiğ</i>
IV		في أمراض التنفّس	בחליי כלי הנשימה	
	I	في السعال	בשעול	في السعال
	II	في الخواثيق	במחנק	في الخواثيق
	III	في الخنازير	בחזירים	في الخنازير
V		في أمراض الأحشاء	בחליי האברים הפנימיים	في أمراض الأحشاء
	I	في القلب	בלב	في القلب
	II	في المعدة	בבאסטור	في مداواة المعدة
	III	في الأمعاء	במעים	في مداواة الأمعاء
	IV	في القولنج	בקולונג	في القولنج
	V	في المتعدة	בשבעת	في المتعدة
	VI	في الكبد	בכבד	في الكبد
	VII	في الطحال	בטחול	في الطحال
	VIII	[في الكلى]	בכליות ובמקודה	في الكلاء ومداواته

Table 1.2: Sections and chapters in *Iktifāʾ*, *Sağullōt*, and *Natāʾiğ*.

<i>Nawṣ</i>	<i>Faṣl</i>	<i>Iktifāʿ</i>	<i>Səḡullōt</i>	<i>Natāʿiḡ</i>
VI		في التنازل	בחלוי כלי ההולדה	في آلات التنازل
I		في وجع الرحم وحنقه	ככאבי הרחם ומחנקו	في وجع الرحم
II		فيما يُعِين على الحبل		فيما يُعِين على الحبل
III		فيما يمنع الحبل	במה שימנע ההריון II	فيما يمنع الحبل
IV		فيما يحفظ الجنين	במה שישמור העובר III	فيما يحفظ الجنين
V		فيما يُسقط الجنين	במה שישפיל העובר IV	فيما يُسقط الجنين
VI		فيما يُدّرّ الحيض	במה שיגיד הנדות V	فيما يُدّرّ الحيض
VII		فيما يجبس الحيض	במה שיעצור הנדות VI	فيما يجبس الحيض
VIII		فيما يمنع الولادة	במה שימנע הלידה VII	فيما يمنع الولادة
IX		فيما يُسهّل الولادة	במה שיקל הלידה VIII	فيما يُسهّل الولادة
X		فيما يُعِين على الباه	במה שיוסיף בזרע IX	فيما يُعِين على الباه
				XI فيما ينفع المربوط عن النساء
XI		فيما يمنع الجماع	במה שימנע התאוה X	XII فيما يمنع الجماع
XII		فيما يتحبّب	במה שיעזור אל האחבה	XIII فيما يُستعمل للمحبّة
XIII		في قروح الفروج وأورامه	בשהינים בכלי ההולדה והמורסות	XIV في قروح الفروج ومداوماتها

Table 1.3: Sections and chapters in *Iktifāʿ*, *Səḡullōt*, and *Natāʿiḡ*.

<i>Nawf</i>	<i>Faṣl</i>	<i>Iktifāʾ</i>	<i>Saḡullōt</i>	<i>Natāʾiḡ</i>
VII		في أمراض المفاصل	בחליי הפרקים	في أمراض المفاصل
	I	في عرق النسا	בניד הנשא	في عرق النسا
	II	في وجع المفاصل	בכאב הפרקים	في وجع المفاصل
	III	في مرض التقرس	בהנאנקרס	في التقرس
VIII		في أمراض ظاهر الجسد	בהחליים הנראים בנוף	في أمراض ظاهر الجسد
	I	فيما يدفع وجع الأعضاء ويصلح مزاجهما، وفيما يسقم ⁵ البدن	במה שישקיש כאב האברים ויתקן מזוגם ויכריא הנוף	في يدفع وجع الأعضاء
	II	في الفالج والارتعاش والتشنج	בפלג וברעש והכיוץ	في الفالج والارتعاش
	III	في السحج وتورم الجسد	במורסות העור	في السحج وتورم الجسد
	IV	في الهتك والرض وتورم الجسد مبنياً في مكانه	ברצוץ והנפילה ורקיקת הדם	في الرض والهتك والسقطة ونفث الدم
	V	فيما يلات ¹ جراحات العصب ويمنعها من الورم	במה שירביק חברות העצם וימנע ממורסא	فيما يلات جراحات العصب واللحم والعظم ويمنعها من الورم
	VI	فيما يُخرج فضول العصب وغيره من البدن بالعرق	במה שיוציא מותרות העצם וזולתה מן הנוף מן הגידים בייעה	فيما يُخرج فضول العصب وغيرها من البدن بالعرق VII
	VII	فيما يمنع نزف الدم من الجراح	במה שימנע רעיפת הדם מן החבורות וזולתם	فيما يمنع نزف الدم من الجراح وغيرها VI
	VIII	في الطواعين وورم الأريئة والدمامل والرياحين ¹	בשענאן ומורסא והדמאמיל והראחם...	في الطواعين والأورام والدمامل والداחס

Table 1.4: Sections and chapters in *Iktifāʾ*, *Saḡullōt*, and *Natāʾiḡ*.

<i>Nawf</i>	<i>Faṣl</i>	<i>Iktifāʾ</i>	<i>Saḡullōt</i>	<i>Natāʾiḡ</i>
VIII	IX	في الجذام والبرص والتآليل	בצרת הנדמית והבוהק והיבלת	في الجذام والبرص والتآليل
	X	فيما يذهب برائحة الروثة من البدن	במה שיסיר ריח רע מן הגוף	فيما يذهب برائحة الذفرة من الجسد
	XI	<فيما> يُخَذَّرُ العضو عند قطعه أو يقيه	במה שירדים האבר אצל בויתו או התיכתו	فيما تُخَذَّرُ العضو عند قطعه أو يقيه
	XII	فيما يُخْرَجُ الشوك ونبل السهام من الجسد بالعلاج	במה שיוציא החץ מן הגוף	فيما يُخْرَجُ الشوكة ونصول السهام من الجسد
XIII		فيما يقطع الكلف والبرش والقوايي	במה שיסיר הגוף ואלברץ והקובה	فيما يقطع الكلف والبرش والقوايي
		والآثار السود من الجسد	והבוהק השחור ומה שיפיל ואתם מן הגור	والآثار السود من الجسد
IX	XIV	فيما يُطَّلُ نبات الشعر من الجسد	במה שיבטל צמיחת שער הראש והגוף	فيما يُطَّلُ نبات الشعر من الجسد
		في أصناف جميع الحميات	במיני הקדחות	في أصناف الحميات
	I	في حمى الغب وعلاجها	בקדחות אלגב	في حمى الغب
	II	في حمى الربع وعلاجها	ברביעית	في حمى الربع
	III	في حمى الورد وعلاجها	בשלישית	في حمى الورد
X	IV	في سائر أصناف الحميات وعلاجها	בשאר מיני הקדחות	في أصناف الحميات
		في خواص الأشياء التي تفعل بعضها في بعض أفاعيل خاصة بديعة عجيبه خلوا من العلاج بها	בסגולות הדברים אשר יפעלו קצתם בקצתם והפעולות המיוסדות החזקות אשר נמנע מן הרפועה בהם	[ومن الفلاحة]?

Table 1.5: Sections and chapters in *Iktifāʾ*, *Saḡullōt*, and *Natāʾiḡ*.

Natāʾiḡ II.IV*Iktifāʾ* II.IV (=HASANI 1999: 24)*Saḡullōt* II.IV (L–M 301₂₄–302₃)

¹ قال الطبري: «إن أخذ لسان الهدهد وحُفِّف وشُرب بطلاء، أذهب النسيان وأكثر الحفظ». ² وقال: «إن غُلِّت عين الهدهد ولسانه على مَنْ يعتره النسيان الكثير، اذْكَر ما قد نسي». ³ وقال الرازي: «إذا تُدخِّن صاحب النسيان بشعر إنسان، نفعه». ⁴ وقال: «إذا أُدمِن مَنْ به النسيانُ أكل الحفَّاش، عاد حافظًا وقلَّ نسيانه وجاد حفظه».

² Al-Ṭabarī said: “If those who suffer from forgetfulness will carry on their person the [dried] eye and tongue of a hoopoe, they will remember everything they have forgotten”.

¹ He also said that forgetfulness with vanish and memory will improve if one takes the dried and crushed tongue of a hoopoe.

⁵ Al-Rāzī said that rubbing lion fat on the head prevents forgetfulness.

⁷ אמר דיושקורידיס: «אבן היהודים (לפיש גודאיקוס) נ"א נחש. יקה ממנה אשר בה ג קוים (חוטין): יועיל מן השכחה». ² ואמר אל טברי: «אם יתלה [—] (נ"א עין התרנגול הבר ולשונו) ההוד הוד ולשונו על מי שיעטרהו השכחה, יזכר יותר ממה ששכח». ³ ואמר כשיקוטר בעל השכחה בשיער האדם, יועילהו. ⁶ וכן כשיקוטר בקשטור.

Table 1.6: Comparison between *Iktifāʾ*, *Saḡullōt*, and *Natāʾiḡ* (II.IV *On oblivion*)

Natāʾiḡ III.v*Iktifāʾ* III.v (HASANI 1999: 20)*Saḡullōt* III.v (L–M 306_{9–13})

¹ قال ديسقوريدس: «إذا طبخ سلخ الحية بخلّ
وتمضمض به، سكن وجع الأسنان».

¹ Dioscorides says that if one boils the skin of a snake and washes the ailing tooth [with this decoction], the pain will ease.

⁴ وقال أرسطاطاليس: «خاصة التنكارية تنفع من
تأكل الأسنان وتأكل دودها، وتسكن ضربانها
وتجلوها بخاصة فيها».

² Aristotle said: “A special quality of borax is that it is useful in preventing the breakup of teeth, tooth decay, [that it] halts pain and aids shine [of the teeth]”.

³ Al-Ṭabarī said: “If one hangs on a child [as an amulet] a shell which has been left by a snail, the child’s teeth will appear without pain”.

² ואמר: «אם תבשל עור הנחש בחומץ והערער
בו, ישקוט כאבם».

³ ואמר אריסטו: «סגולת אלחנכאר, שיעיל
מאכול השנים והמלחעות וימית תולעותם.
וישקוט רפיקתם וימרקם. בסגולה שבו».

Table 1.7: Comparison between *Iktifāʾ*, *Saḡullōt*, and *Natāʾiḡ* (III.v *On the teeth*).

1.4.2 IBN ALBAYṬĀR'S *Almuġnī*

ABŪ MUḤAMMAD ṢABDULLĀH B. AḤMAD ḌIYĀʿUDDĪN ALMALAQĪ (d. 1248), a towering figure of Andalusī pharmacognosics, hardly needs to be introduced to the reader. Information on his life and travels as well as on his scientific output is easily available in modern sources.¹ His *Ĝāmiʿ* is probably the most often-cited Andalusī text as far as pharmacognosy and even medicine in general are concerned. However, the apparent high esteem in which the author is held in some quarters has not translated, unfortunately, in a critical edition or even in a systematic study of this colossal and quite consequential compilation. The *Ĝāmiʿ*, like all its predecessors with the sole exception of IBN WĀFID'S *Mufradah*, still awaits a modern integral edition and scholars must still resort to the deficient Būlāq print, which has to be painstakingly checked against any manuscripts of the work that may be available.²

Now, as an exhaustive compilation of compilations IBN ALBAYṬĀR'S *Ĝāmiʿ* is instrumental to any exercise of source criticism in the field of pharmacognosy, and in the commentary on *Nat* III it has been extensively cited as an additional witness for the indirect transmission of several eastern and western treatises. I cannot tackle here its place in the Andalusī tradition (and the extent to which it depends on but also supersedes ALĠĀFIQĪ'S *Mufradah*) or its rôle as *the* Arabo-Islamicate pharmacognostic reference from the 13th c. onwards.³ In what concerns the limited research conducted in this dissertation, the *Ĝāmiʿ* contributes two valuable explicit quotes from the original *Iktifāʿ* that shall be reproduced and commented on below.

It is on a different work by the Malaqī pharmacognostic that I must focus here: on *Almuġnī*. While certainly not so consequential for the history of medicine as the *Ĝāmiʿ*, this text is a rich quarry that yields many a parallel quotation and also some preciously rare passages. This interest notwithstanding, it

¹ Cf. particularly the corresponding entry by CABO-GONZÁLEZ 2009 in the *Biblioteca de al-Andalus*, which must be complemented with a wealth of specific data in KĀS 2010: 149–160.

² It would be unkind, and even dishonest, not to acknowledge the effort done by NAVARRO 1997 (letter *bāʿ*, which remains unpublished), CABO-GONZÁLEZ 2002 (letters *ṣād* and *ḍād*) and 2005 (letter *ṣīn*), and SALEM 2022 (letter *wāw*). However, not only do the sum of these small steps cover “einfach zuwenig Text” (KĀS 2010: 149 n. 1), but it is also based on too scarce manuscript evidence. According to the data base HATA, an edition and translation (into Spanish) is currently being prepared by M. P. TORRES PALOMO, C. ÁLVAREZ DE MORALES, and F. GIRÓN IRUESTE, but their selection of manuscripts is again limited. I am liable to the same criticism, of course, but my aim here is not even tangentially to produce a critical text of *Ĝāmiʿ*.

³ In spite of a proliferation of papers devoted to this work (some of which are certainly interesting with regard to particular aspects related to it), the single best survey of its historical significance and of its sources is the brief but dense analysis in KĀS 2010: 149–153.

had been virtually ignored by all modern scholars until the excellent analysis of its sources conducted by KĀS, whose lead has not been followed yet.¹ If I may borrow that scholar's words to describe the status of *Almuġnī* in Islamicate studies,

Die Wissenschaft hat dieses Buch trotz seines qualitativ und quantitativ gewichtigen Inhalts bisher stiefmütterlich behandelt, obschon es in einer größeren Zahl von Handschriften auf uns gekommen ist. Grob geschätzt dürfte der Muġnī von seinem Umfang her etwa dem Ğāmi' gleichkommen.²

It is not the least of KĀS' merits to have clearly stated the main difference between *Almuġnī* and the *Ğāmi'ī*: if the latter is a pharmacognostic treatise, the former can only be described as a *therapeutic* text. The therapeutic means recorded in *Almuġnī* are further restricted to simple drugs and they are arranged according to a head-to-toe criterion,³ which shows beyond doubt the medical (rather than pharmacognostic or medico-botanical) focus of the work. It is, from a genre perspective, an *Euporista* in which the sources of the remedies are often (but not systematically) mentioned. With regard to the quoted sources, an exhaustive comparison would be needed to substantiate my claim, but I cannot subscribe the view that *Almuġnī* contains only a few quotes or authorities not collected in the *Ğāmi'ī*.⁴ That is certainly not the case for much ḥawāṣṣic material that shall be discussed below.

On the other hand, a remarkable difference in the wording of the passages in the *Ğāmi'ī* and in *Almuġnī* is already noticed by KĀS, who interprets it as a tendency to strong paraphrase on the side of the compiler.⁵ While this might

¹ Cf. KĀS 2010: 154–159, which is limited both thematically (only mineral substances are considered there) and with regard to manuscript evidence (the only manuscript available to the author was London, British Museum MS Or. 2408, which corresponds to my L). The briefness of that account belies its thoroughness and each and every footnote on those pages represents a mine of data that shall prove invaluable for further research.

² KĀS 2010: 154.

³ Cf. KĀS 2010: 154, where the previous allusion in ULLMANN 1970: 281 to an alifatic order is duly corrected.

⁴ Cf. "Eher selten finden sich im Muġnī zusätzliche Zitate, die dort [sc. im Ğāmi'ī] keine Parallele haben" in KĀS 2010: 154. In fact, the extensive list of authors and passages selected exclusively for *Almuġnī* and noted down in KĀS 2010: 157–158 would seem to negate that affirmation.

⁵ Cf. KĀS 2010: 155. There this feature is explained as a natural consequence of the need to distribute the original item-centred quotes according to a different, ailment-centred, criterion. The segmentation of originally complex passages into smaller pieces would also obey, in KĀS' opinion, to the same compilational strategy. This task, however, had already been accomplished two centuries earlier by the author of *Ḥawāṣṣ* for a number of simple drugs.

be true in some cases, after intensive perusal of the text I am inclined to interpret some of those differences rather as reflective of *differential transmission*. In other words, IBN ALBAYṬĀR does not specifically reword his passages for *Almuḡnī* (which would be a rather unexpected strategy) but simply inherits them from a source that already transmitted a reworded version of the original passage. Let me put some examples directly related to our subject.

Coalescence of parallel traditions

That in the case of a late compiler any given quote may have been borrowed indirectly through a number of intermediaries rather than extracted directly from the original source is a platitude. That any link of this transmission may introduce some minimal changes in the primitive text is the very reason for the existence of textual criticism and also the basis on which stemmatology and cladistics are built. Now, when one of the transmitters of the passages is the anonymous author of *Ḥawāṣṣ* the task of source criticism becomes far less strenuous—and occasionally even too easy.

The entry in DIOSCORIDES' *Materia medica* on the αἰθουα (traditionally identified as the shearwater),¹ shall be analysed in more detail in Chapter 3, but the two versions of it recorded by IBN ALBAYṬĀR in the very same epigraph in *Almuḡnī* are probably the most compelling example of the feature that I am trying to highlight here:

Almuḡnī X,5 المئانة الكلى والماناة (M 144v 20–21 | P¹ 264v 15–17 | P² 286v 12–14)
 ≡ *Ḥawāṣṣ* 1–18 اثوا (B I 139–11 | P¹ 8r 24–25)

اثوا — ديسقوريدوس في الثانية: «هو صنّف من الطير أسود، يُقال إنّ كبده، إذا مُلحت
 وشُرب منها قخليارين بالشراب المستقى أدرومالي، فتت الحصاة التي في المئانة».

اثوا [اسبوا M | ديسقوريدوس] د P² | قخليارين [فحلارين P²، فنجارين M].

¹ Cf. LIDDELL–SCOTT, *Lexicon* 37b 'diving-bird, prob. *shearwater*'. In ADRADOS, *DGE* *** the species *Puffinus puffinus* Brünnich (ie the Manx shearwater) and *Puffinus assimilis* (the little shearwater) are suggested as probable identifications, yet the distribution of the former is essentially northern Atlantic, and that of the latter is Oceanic! Given that in the Greek tradition this bird is never described as a foreign species (the word is already attested in the *Odyssey*), the Yelkouan shearwater (*Puffinus yelkouan* Acerbi) may be a more plausible candidate. In a specifically western Islamicate context the Balearic shearwater (*Puffinus mauretanicus* Lowe) would have been the natural re-identification of the bird but, as I shall show later, this never happened.

Almuġnī X.5 المئانة الكلى وفي حصة الكلى والمئانة X.5 (M 186r 20–21 | P¹ 166r 9 | P² 289r 9–10)

كبد بط الماء — إذا ملحت وحققت وشرب منها بماء وعسل، فتت الحصاة التي تكون في المئانة.

ملحت [طبخت P² | بماء وعسل] بما عمل P¹.

The explicit quote from DIOSCORIDES reproduces indeed the text of IŞTIFAN'S Arabic translation of *Materia medica*,¹ whereas the second version of the passage is identical to *Nat* V.VIII.2 in its wording and, much more importantly, in the unparalleled identification of the bird as a “water duck”. Even if the passage is unasccribed in *Almuġnī* (and this is a problem that shall be tackled below), its descentance from ^α*Ḥawāṣṣ* can hardly be doubted.

At times differences are less conspicuous and some of this pairs could even be interpreted as two genuinely different passages, which they certainly were for the compiler. However, the parallel testimony of *Nat* III and/or *Saġullōt* combined with external evidence makes the hypothesis of a double transmission much more plausible than any alternative explanation. Thus, in the following example one might simply assume that two different active elements (namely raven droppings and a raven's foot) are attributed the exact same effect:

Almuġnī VI.7 في السعال (L 150r 12–15 | M 89v 5–7 | P¹ 81r 12–13 | P² 136v 5–7)

زبل الغراب اليهودي — إن صرّ في خرقة وعلق على الصبي الذي لم يبلغ، نفعه من السعال المزمّن وقطعه بالخاصية.
وقد قيل إنّ رجل الغراب، إن علق في خرقة على صبيّ به سعال، سكّنه.

The pattern is far from rare in the Helleno-Islamicate corpus. It often seems as if the animal itself, and therefore any part of it, were associated with a certain medicalised subject (mules with barrenness or sparrows with libido, for instance). Now, in this particular case the two passages are not only contentually identical but also suspiciously similar to each other in their form. A survey of the corpus shows that the first passage is quite probably borrowed from ZUHR (the qualification *Yahūdī* and the specification of an adolescent child being distinctive traits)² whereas the second one ought to be compared to *Nat* IV.I.3. The primitive reading was “droppings” (زبل) in AṬṬABARĪ'S *Firdaws*,³ for which an

¹ Cf. *Ḥašāʾiṣ* 2:46 اثوا (B 69r 13 – 69v 1 | P 34r 3–4 | T 144_{15–16}) ≡ *Mat. med.* 2:55 αἰθυῖα (W I 138_{3–4}).

² Cf. ZUHR, *Ḥawāṣṣ* غـ1 غراب (B 104r 2 – 104v 1 | H 159_{9–11} | P 67v 14 – 68r 2 | T 325_{8–10}).

³ Cf. *Firdaws* IV.VIII.6 في علاج السعال (§ 234_{20–22}). The correctness of AṬṬABARĪ'S reading is ultimately confirmed by PLINY, *NH* XXX.14.[137] «*Fimum corvi lana adalligatum infantium tussi medetur*»

apomorphic reading “foot” (رجل) emerged already in some manuscripts of ARRĀZĪ's *Ḥawāṣṣ*.¹ The majority reading of the Islamicate tradition preserved the original version of the remedy,² whereas the compiler of ^α*Ḥawāṣṣ* either inherited the marginal apomorphy or misread himself the word. In either case it is only its descendance that transmits “a raven's foot”, which makes of the anonymous quote in *Almuḡnī* an additional witness to the text of ^α*Ḥawāṣṣ*.³

Ghost-quotes, ghost-sources, and other synapomorphies

I cannot reproduce here all the results of the analysis of *Almuḡnī*, which is moreover incomplete (as it is based on a limited number of manuscripts) and provisional (because the Arabic text of *Iktifāʾ*? could not be included in the comparison). I shall nonetheless add yet another piece of evidence for the origin of some of the ḥawāṣṣic materials transmitted in IBN ALBAYṬĀR's treatise and a final remark on an unsolved question related to this transmission.

In view of the compilatory strategy assumed for *Almuḡnī* and given the meticulousity of its author in sourcing his passages,⁴ the presence of some very characteristic ghost-quotes provides a clue for the intermediary source from which they were borrowed. In IBN ALBAYṬĀR's idiosyncratic wording some of these ghost-quotes actually become ghost-sources—or at least that is how any reader would interpret the author's ambiguous reference.

(J–M IV 470_{5–6}); SEXTUS PLACITUS, *Lib. med. ex anim.* XXVII.2 «*Corui sterCUS lana conlectum si infanti tussienti collum tetigeris, remediabis eum*» (H–S 281_{10–11}). A further witness to the primitive reading is *Rūmiyyah* XI.7 أمر السعال (M 356_{8–10}).

¹ Cf. ARRĀZĪ, *Ḥawāṣṣ* ١–1 غراب (I 88v 18–19 | Q 32_{17–18} | T 112r 2–3), for which manuscript V 26v 10–11 reads «رجل» (with a consistent feminine concordance). This minority reading surfaces also in the ARRĀZĪ-ascribed zootherapeutic *Sexaginta L De corvo* (A 71ra 1–2 | V 109rb 6–8), but it is not received either by ALBALADĪ, *Ḥabālā* III.37 (M 289_{12–13}) or ALQALĀNISĪ, *Aqrabādīn* XLIX s.v. غراب (B 310_{12–13}).

² Especially *Ḥayawān* texts, in which the use of the synonym ذرق for ‘droppings’ prevented the word from being misread, cf. IBN ʿALĪ, *Ḥayawān* [59.16] الغراب (R 380); IBN BUḤTĪŠŪʿ, *Ḥayawān* VI.8 غراب و غُذاف و عَمَقَق (G 166_{4–6}) ≡ *Naʿīʿ* 47r 6–8; also ALQAZWĪNĪ, *ʿaḡāʾib* II KĀʾINĀT II.III.6.38 غراب (W 4218–9).

³ No parallel can be found in *Saḡullōt*, but the wording of *Saḡ* IV.1.4 (L–M 307_{2–4}) on the sponge stone is highly suspect and may conceal a conflation of two consecutive passages, cf. in fact the sequence sponge stone – raven foot in *Hārūniyyah* LXIII.4 (G 239_{15–16}); these two periapts feature already in collocation in *Firdaws*. In view of the limited circulation of the *foot*-version perhaps the same origin (ie ^α*Ḥawāṣṣ*) ought to be assumed for a slightly reworded paraphrase of this passage in ALʿIDRĪSĪ, *Ġāmiʿ* ʿ ١٥–15 غراب (S III 518_{15–16}).

⁴ As pointed out by KĀS 2010: 155 there is a remarkable difference in this regard between the systematic mention of the sources for virtually each quote in the *Ġāmiʿ* and the abundance of anonymous (ie unsourced) passages in *Almuḡnī*.

No one should doubt that the phrase «من خواص ابن زهر» does refer to ZUHR's *Ḥawāṣṣ* and, with a few exceptions, passages introduced by this reference in *Almuǧnī* can be indeed located in that source. The same should apply, in principle, to «من خواص الرازي», for there is a compilation by ARRĀZĪ that bears this title. However, the analogous reference «من خواص الطبري» might induce the reader to assume that IBN ALBAYṬĀR had somehow access to an otherwise unattested monographic treatise by AṬṬABARĪ—and this would affect drastically the interpretation of some ghost-quotes ascribed to this Iranian physician in *Nat III* that cannot be located in his *Firdaws*. A wiser reader might be inclined to understand it rather as a sort of abbreviation for “from AṬṬABARĪ's [chapter(s)] on *ḥawāṣṣ*” (which, coincidentally, may indeed have had an independent circulation). However, definitive clarification is provided by the use of an identical phrase for AṬḤŪRUSFUS («من خواص أطهر سفوس»), which cannot be interpreted as a reference to a particular *title* (or even to a chapter) but rather as a generic allusion.¹ In sum, one should not read these references *prima facie* as meaning unequivocally “from So-and-so's *Ḥawāṣṣ* [book]” but rather as “from the specific properties [mentioned] by So-and-so” (which in a few cases does coincide with the title of a treatise).

This alternative interpretation can be corroborated in the case of some quotes from AṬṬABARĪ's and ARRĀZĪ's “*Ḥawāṣṣ/ḥawāṣṣ*” that are nowhere to be found in those sources. For example, an explicit quote on bats apparently from ARRĀZĪ's *Ḥawāṣṣ* is not borrowed from that treatise (for it is not included there)² but rather from the same source as *Nat II.IV.4*, with which it further shares an identical wording:

Almuǧnī I.11 المزينة في الدماغ والعقل، المحدة للذهن، النافعة من النسيان

L 25v 9–10 | M 15r 12–13 | P² 24r 4–5

الحقّاش — من خواص الرازي: «إن أدمن أكله، كان حافظًا وقلّ نسيانه وجاد حفظه».

¹ As shall be seen in Chapter 3, with the sole exception of AṬṬABARĪ (and, of course, any texts depending on him) all explicit AṬḤŪRUSFUS-materials enter the Islamicate tradition through ARRĀZĪ's *Ḥawāṣṣ*.

² Cf. ARRĀZĪ, *Ḥawāṣṣ* 4-خاش (I 87r 13–17). This passage is analysed in the commentary in Chapter 4.

As for other synapomorphies not related to sources but rather to the reinterpretation of lexical items, IBN ALBAYṬĀR inherits the most idiosyncratic transformation of the raven into a leek in a passage cognate to the one analysed above for *Nat* II.VII.2 ≡ *Sāḡ* II.VII.6:

Almuḡnī XVII.7 المسودة للشعر (M 295r 15–18 | P¹ 243v 9–11)

الكزاث — إذا أخذ وطرح نية كما هو في إناء حديد مقير ويصّب عليه ثلاثة سكرجات من الخلل التقيف ويترك فيه حتى يعفن، ثم يُخرج منه ويُسحق على صلاحية من رصاص ويُطلى به الشعر: فإنه يُسوده.

نية – [حديد | حديد P¹ | مقير] مقتر P¹ | يعفن] مع P¹.

All passages in *Almuḡnī* related either directly or indirectly to the history of the corresponding quotes in *Nat* III have been included in the commentary to that section, as well as those that match quotes transmitted exclusively by *Sāḡul-lōt*. An exhaustive analysis of all the materials probably inherited from ^α*Hawāṣṣ*, in turn, remains to be conducted if the chance arises to check my provisional data against the testimony of the Arabic *Iktifāʿ*? Given the sketchy transmission of several of the texts involved, my following remarks should be taken with more than a pinch of salt.

Unascribed passages stemming ultimately from ^αHawāṣṣ

In *Almuḡnī* there is a non-negligible number of passages that, while certainly belonging to the family of ^α*Hawāṣṣ*, cannot be assigned a particular origin with any degree of certainty. Judging from IBN ALBAYṬĀR's own explicit mentions of his sources, the most plausible transmitters for such anonymous passages would be IBN ALHAYṬĀM's *Iktifāʿ*? and IBN ŠUʿAYB's *Hawāṣṣ* (for the latter, see a separate section below); only in some rare occasions ALʿIDRĪSĪ's *Ġāmiʿ* too ought to be considered. Now, the access to the integral original text of the two former treatises is problematic. In the case of *Iktifāʿ*? for the reasons stated above; in the case of IBN ŠUʿAYB's book on the specific properties of things, because the only extant copy of it bears all the signs of being an abridgement—and not a particularly careful one, indeed.

It is impossible, therefore, to draw any definite conclusions about these un-sourced passages. In principle they might derive from a (perhaps anonymous) copy of *Natāʿiḡ* or even from the parent text itself, but that is highly implausible. Even if we do not know the exact criteria and copy-and-paste mechanisms involved in the compilation of *Almuḡnī*, it may be safer to assume that most of the materials that stem demonstrably from ^α*Hawāṣṣ* were accessed through either of the two aforementioned texts rather than to postulate a proliferation of

intermediary sources for which there is no evidential support.¹ But even that is speculation. Here and now I can only bring to the fore some of the most indisputable cases in the hope that future research may shed some light on their origin.

I have already analysed the anonymous passage involving the identification of DIOSCORIDES αἰθουα as a “water duck” and I have mentioned that it is virtually identical in its wording to *Nat* V.VIII.2. There is no parallel in *Saḡullōt* and the cognate passage in the edited text of the *Hārūniyyah* is slightly different—enough, perhaps, to discard it as a possible source. For the passage on the raven foot there is some ground to suspect that it may have been included in the original text of *Iktifāʿ*? and this should be checked. The *Hārūniyyah* contains an abridged version of it, but as seen above ALḤIDRĪSĪ is also involved in the transmission of this apomorphy and must not be ruled out as a source for this passage in *Almuġnī*. The remarkable case of whole sequences in which the direct source has been bypassed and only the ultimate authors are mentioned is dealt with in the commentary on *Nat* IX *On fevers* in Chapter 4. A probable origin in *Iktifāʿ*? is suggested there, which should also be confirmed.

As an illustration of the complexity of the analysis of this transmission on the basis of fragmentary and dubious evidence, I reproduce here a passage on the aphrodisiac property ascribed to the heart of the bustard (*hubārā*):²

Almuġnī XII.1 في الأدوية الباهية (M 203v 4–5 | P¹ 17or 8)

قلب الحبارى — إن غلّق على الرجل وقت الجماع، هيج الشهوة.

This is identical to *Nat* VI.x.1 and only slightly different from *Hārūniyyah* 169₁₄, whereas no match is found in either *Saḡullōt* or *Niṣyōnōt*. The passage appears to be an additional apomorphy either inherited or introduced by the compiler of ^a*Ḥawāss*, since there is no external support for this remedy in the whole corpus. The bustard (*hubārā*) is dealt with by AṬṬABARĪ in *Firdaws* alongside the bat, the swallow, and the hoopoe, and there only the hair-blackening virtue of

¹ The case of the *Hārūniyyah*, which is analysed immediately after this text, suggests however that the family may have been larger than suspected.

² The name ‘bustard’ is used here in its widest sense possible. While in an Arabic-speaking African context *hubārā* refers to *Chlamydotis undulata* Jacquin (known in English precisely as the ‘houbara bustard’ or the ‘African houbara’), in Andalus it must have been applied to the local *Otis tarda* L., ie the ‘great bustard’ mentioned already by PLINY as being called *aves tardas* in Hispania and ὠτιδᾶς (singular ὠτις) in Greece, cf. PLINY, *NH* X.22.[29] (I–M 172_{17–18}). I have been unable to locate any reference to a libido-stirring power being attributed to this bird in Greek sources (in fact, PLINY does not record any medical or para-medical use at all for it).

its eggs is mentioned.¹ Now, this epigraph in *Firdaws* includes a passage suspiciously identical in its wording to the one with which we are concerned here. After dealing with the bat's two brains and their psilothric virtue and immediately following the description of an antihypnotic amulet made of a bat's heart, AṬṬABARĪ's text runs like this before moving on to the properties of swallows:

Firdaws VI.IV.31 (§ 436₁₋₂)

وإن عُلق قلبه وقتَ الجماع، هيج عليه.

Whether he worked on a Vorlage that transmitted a different arrangement of the passages or he simply misrelated this property of bats to the preceding mention of bustards, the fact is that the author of ^α*Hawāṣṣ* put into circulation a reinterpreted version of the passage that was then transmitted marginally in parallel to the original one, which is preserved, for instance, by ZUHR.²

The influence of the tradition represented by ^α*Hawāṣṣ* (probably through IBN ALHAYṬAM's *Iktifāʾ*?) manifests itself not only in a remarkably high number of passages drawn from it but also in the inspiration that IBN ALBAYṬĀR took for the architecture of *Almuḡnī*. Showing the striking parallelism of many rubrics in the latter treatise and the original ones in ^α*Hawāṣṣ* would only fill a few more pages with tables and it would not be, in the end, particularly probative, as inscriptions of the type *On the kidneys* or *On things that prevent bleedings* are standard since pre-Galenic times. There is, however, one particular chapter title that betrays its source. As the closing section of his monumental *Euporista* IBN ALBAYṬĀR compiles a miscellaneous chapter the second *faṣl* of which bears virtually the same rubric as Section X of IBN ALHAYṬAM's *Iktifāʾ*? and is essentially non-medical in its contents:

<i>Almuḡnī</i> XX.2	في خواص الأشياء التي تفعل بعضها في بعض أفعالا عجيبية بديةة خلوا من العلاج
<i>Iktifāʾ</i> ? X	في خواص الأشياء التي تفعل بعضها في بعض أفاعيل خاصة بديةة عجيبية خلوا من العلاج بها

¹ Cf. *Firdaws* VI.IV.31 (§ 436₁₄₋₁₆). For this property, cf. also IBN BUḤṬIŠŪṢ, *Ḥayawān* V.9 حبارى (G 65₁₀-66₂ | P 37r 1-4).

² Cf. ZUHR, *Ḥawāṣṣ* 5-خفاش (P 31r 9-10), where it is explicitly ascribed to «ط» (which in this and many other cases must be interpreted as AṬṬABARĪ against the index of abbreviations provided by the author at the beginning of the treatise).

Let me close this subsection with one last piece for the puzzle. It is not extracted from IBN ALBAYṬĀR's *Almuġnī* but from his *Ġāmiṣ*, because the data garnered from either of these two texts should always be combined with the parallel testimony (or the lack thereof) of the other. In the entry on swallows an anonymous quote describes a preparation the main ingredient of which is the bird's eye, which must be beaten up with sesame oil and smeared over a woman in labour:

Ġāmiṣ ٥-89 خطاف (B II 652-3)

غيره: «عين الخطاف، إذا سحقته بدهن زنبق ومسحت بها سرّة المرأة النفاس، نفعها».

There is nothing to be suspected from the eyes of an animal entering a ḥawāṣṣic recipe and some readers may immediately recall the second witch's "Eye of newt and toe of frog | Wool of bat and tongue of dog" in *Macbeth*.¹ The same readers may also remember that this ingredient happened to be an innovative reinterpretation of "[the mud from] a swallow's nest" attested exclusively by the descendants of ^α*Ḥawāṣṣ*.² This appears to be the case here too, because it is again the mud from a swallow's nest that is mentioned by ARRĀZĪ as the main ingredient of an identical remedy (mark the presence of *Rāziqī* oil = *zanbaq*) for difficult child-delivery:³

Ḥawāṣṣ ٥-5 خطاف (I 87v 6-7 | Q 297-9 | T 110v 6-7 | V 25r 17 - 25v 1)

إن يؤخذ من طين عش الخطاف فيسحق بدهن الرازقي ويُمزج به عانة المرأة وحقويها، فيسهل ولادتها.

[إن - | T - | الخطاف] الخطاطيف | QT | ويُمزج | وحر | I | وحقويها | T - | فيسهل | فانه يسهل | T | ولادتها] + وهو مجرب T.

This particular remedy, however, is not selected by any of the descendants of ^α*Ḥawāṣṣ* known to me and the question of its exact origin, as so many others raised in this chapter, must remain open to further research.

¹ That those may have actually been *Decknamen* for drugs of plant origin does not alter the popular interpretation of such ingredients from SHAKESPEARE's days to the present.

² Cf. *Nat* V.viii.11 ≡ *Saj* V.viii.6 ≡ *Hārūnīyyah* I.xiii.1 (G 239₁₋₂).

³ The primitive reading of *Ḥawāṣṣ* is apparently received by ALBALADĪ, *Ḥabālā* I.52 (M 171₁₋₂, «طيب عش الخطاطيف» may be a later misreading or a misprint but it can hardly be original), where it is ascribed to ALEXANDER; and also by ALQALĀNISĪ, *Aqrabāḍin* XLIX s.v. خطاف (B 308₁₂₋₁₃), where the *Filāḥah* is mentioned as the source. This is the same remedy transmitted also in IBN BUḤTĪŠŪṢ, *Ḥayawān* VI.10 (G 176₂₋₄ | Q 90r 9-11 | P 48v 4-6) ≡ *Nāṣiṭ* 55r 4-7. With a very different wording the passage is also reflected by ALQAZWĪNĪ, *Ṣaġāʾib* II KĀʾINĀT II.iii.6,15 خطاف (W 411₂₀₋₂₁, «عش الخطاف»).

1.4.3 The *Hārūniyyah*

«Aus den genannten Gründen allein der gesamten Risāla die Authentizität abzusprechen, wäre kurzsichtig. Dennoch ist davon abzuraten, aus den Belegen der hier untersuchten beiden Abschnitte allzu weit reichende Schlussfolgerungen auf die älteste Schicht der arabischen Drogenkunde ziehen zu wollen.»¹

and yet I shall try (not out of recalcitrance but rather of necessity) to argue that this enigmatic text contributes a fundamental piece to the reconstruction of the parent text from which *ALḤILBĪRĪ*'s *Nat* III and *IBN ALHAYTAM*'s *Iktifāʾ* descend.

Let me emphasise from the outset that my main concern here and now is not with the authorship of the book or with the exact history of its compilation but rather with the plausible origin of *some* of its contents. In the course of my research I have nevertheless garnered pieces of evidence that can shed some light on certain aspects that are only tangential to my study but may interest other scholars. Given that one of the main aims of this dissertation is to make available as much information as possible in the hope that it may spur, or at least facilitate, further investigations, I shall try to summarise hereunder much concrete data and some provisional conclusions. Readers in a hurry are encouraged to skip the discussion below and to jump directly to the conclusion.

Little was known about a book bearing the title of *Arrisālatu lkāfiyah* and a complementary inscription *Hārūniyyah* before *GIGANDET*'s edition in 2001, and despite its publication the text remains largely unexplored with the remarkable exception of its mineral-related contents, which have been exhaustively analysed in *KĀS*' momentous concordance, and a most enlightening comparison conducted by *BRUNING* with another no less enigmatic and even less studied text, namely the *Tuḥfatu lḥātibbāʾ* ascribed to *ḤUNAYN B. IṢḤĀQ*.² Unsurprisingly, most allusions to the *Hārūniyyah* have to do with its supposed pseudepigraphic nature, the authenticity of its attribution to early-ninth-century *MASĪḤ*

¹ *KĀS* 2010: 25. The abridgement of my current analysis of the *Hārūniyyah* below does not do justice to the interest of this treatise for the history of medical traditions in the Islamicate west. I hope to amend this in the near future with a more systematic study that shall include the examination of additional manuscript evidence for the circulation of this and other allied texts.

² Cf. *BRUNING* 2011: 203–212. The description of the *Tuḥfah* provided there shows that this text ought to be included in a future analysis not only of the *Hārūniyyah* but also of *Natāʾiḡ* itself (particularly of *Nat* II.1–2). On the nature of the link between the *Tuḥfah* and the *Hārūniyyah*, cf. “[t]here seems to be an internal relationship between the texts that cannot be understood except by acknowledging that there must have been one original text upon which both [...] were based” (*BRUNING* 2011: 206).

B. ḤAKAM ADDIMAŠQĪ being generally suspected—but not actually ruled out—by modern scholars.¹ Highly consequential evidence in this regard was brought to light by LANGERMANN, whose industrious research into little-known and generally overlooked texts has added a new piece to the puzzle. An important piece indeed, for it may not only support the authenticity of the authorship of the *Hārūniyyah* (or rather of its core) but also provides a wider intellectual context for MASĪḤ, who might have belonged to the so-called “Judaeo-Christian” Ḥisāwiyyah.²

The main argument for suspicion so far has been the fact that the *edited* text is apparently not identical (in fact not even close) to the *Kunnāš* that is often cited in ARRĀZĪ’s *Alḥāwī* and later by Andalusī pharmacognostics, and that there is not one single significant coincidence to be found between these two terms of comparison.³ That this could be adduced as evidence for the pseudepigraphic origin of the text is arguable, and with regard to the *Hārūniyyah* that assert may not even be entirely true.

A quick look into the passages explicitly ascribed to MASĪḤ in *Alḥāwī* and in IBN ALBAYṬĀR’s *Ġāmiʿ* will certainly persuade any reader that the author alluded to there and the compiler of the edited *Hārūniyyah* are not one and the same person. The quoted MASĪḤ is the author of a quite comprehensive medical pandect comprising therapeutics and also some diagnostic information, as well as a knowledgeable pharmacognostic who meticulously notes down the secondary and tertiary qualities of his simple drugs and even an exact degree of their intensity, whereas in the only epigraph devoted to a few simple drugs in the

¹ It is worth noting the caution exercised in this regard since ULLMANN 1970: 112 “[i]hre Echtheit is nicht verbürgt” down to KĀS’ aforementioned assessment. The alleged authorship is ruled out on chronological grounds by BRUNING 2011: 208, but its description as “a forgery written hundreds of years after Masīḥ, probably in the Islamic West” in BOS, KĀS, LÜBKE, and MENSCHING 2020: 86 is quite a strident exception. The explicit assumption of its authenticity by KAHL 2020: 17–18 n. 129, 98 n. 68 is equally surprising. The question is aptly summarised by the editor of the text: “Il me paraît très délicat de formuler un jugement sur cette question de la paternité de la *Hārūniyya* [...] Je crois donc qu’il faut se contenter d’hypothèses et de probabilités” (GIGANDET 2001: 11).

² Cf. LANGERMANN 2004. For obvious reasons this lead cannot be followed here and a sketch of the intellectual profile of the author of the *Hārūniyyah* remains a desideratum.

³ Cf. ULLMANN 1970: 112 for a painstaking register of quotes from this *Kunnāš* in ARRĀZĪ’s *Alḥāwī* and in IBN ALBAYṬĀR’s *Ġāmiʿ* (some of the latter might actually be mediated by the former). Additional references to the indirect transmission of MASĪḤ’s *Kunnāš* in Andalus are provided by KĀS 2010: 23 n. 1. On a side note, I shall not take into account the observation that “Alles in Allem würde man sich aber von einem Masīḥ etwas anderes erwarten” (KĀS 2010: 25). Even if it may find some justification in the nature of the fragments under scrutiny there, such an assessment is as subjective as my own repeated allusion to “style” throughout this dissertation.

edited *Hārūniyyah* no degree is ever mentioned,¹ and in the rare cases for which we can compare both traditions the two descriptions are remarkably different from each other. At the present I have no explanation for this divergence but, with regard to the minimal pharmacognostic fragment found in the edited text, it must be noted that (1) it is perfectly integrated within a section introduced explicitly by «*qāla Masīḥu bnu Ḥakam*» and dealing successively with trophog-nosy and this abridged pharmacognosy, (2) it includes two cross-references to later loci in the treatise,² and (3) the description of the drugs features a genuinely archaic qualification *layyin* instead of the standard *raṭīb*. Besides, the lack of correspondence regarding pharmacognostic data cannot be made extensive to the whole text. Without conducting an exhaustive research and limiting my survey to IBN ALBAYṬĀR's *Ġāmiʿ*, I could find at least two explicit quotations from MASĪḤ that have literal matches in the edited *Hārūniyyah*. One of them has already been mentioned in Part I in the overview of *Nat IV REGIMEN* regarding the epigraph on clothing; the other is the medical benefit against hemiplegia and facial paralysis attributed to the oil of nigella.³ Let it be noted that the two parts of the edited text are represented by these two quotes.

The truth is, in fact, that apart from the most evident Amazighic and Western Arabic glosses and perhaps also a few interpolations of dubious origin, the materials of which the edited text of *Hārūniyyah* is made are for the most part venerably old. There cannot be any doubt about this: the overall style and terminology are all too characteristic, and so are the sources from which the text draws. The presence of a mysterious Indian physician called *FLṬĪS may perhaps not be sufficiently significant in itself,⁴ but the way in which ARISTOTLE, HIPPOCRATES, GALEN, PAUL (of Aegina but also a homonymous monk), and even PTOLEMY, are regularly invoked is most uncharacteristic of later medical texts. The actual source for many of these passages is pseudepigraphic. This is certain for ARIS-

¹ Cf. *Hārūniyyah* I.v.2^v (G 111₄–113₂₀).

² Cf. *Hārūniyyah* 111₁₃₋₁₄ on mustard, which announces the recipe for mustard oil in 453₈₋₁₃; and *Hār* 113₆, where the explanation of the qualities and the rectification of nigella are announced. The recipe for the oil of nigella is found in *Hār* 453₁₋₇ but it does not seem to be the locus referred to.

³ Cf. IBN ALBAYṬĀR, *Ġāmiʿ* كتاب 18-ك (B III 51₂₄₋₂₈) ← *Hārūniyyah* I.v.8 (G 135₁₋₄); and *Ġāmiʿ* 91-ش (B III 73₇₋₈) ← *Hār* II.IX (G 453₂), respectively.

⁴ A purely conventional reading of this name («فلطيس» in the edited text) as FALAṬĪS is proposed by GIGANDET. There seems not to be any additional evidence for the existence of this author in the Islamicate tradition and I had previously adhered to the same transliteration until I came across a rather harsh criticism of the use of *Falaṭīs* and *Amqat* voiced by KAHL 2020: 17–18 n. 129. To be honest, given that no alternative reading is proposed that might be backed by Indian sources, the reproval may be unwarranted and while *Falaṭīs* is an educated guess, “*Flṭys*” (without an asterisk) was assuredly not the name of that Indian sage.

TOTLE, and in addition to the obvious use of *Aḥḡār*¹ a systematic examination might reveal echoes from the dietetic and physiognomic sections of a version of the pseudo-Aristotelian *Sirr* different from the one edited by BADAWĪ.² The same applies to a HIPPOCRATES who recommends camphor, musk, and algalia,³ and overall to the entire initial section of the book, which is in so many regards extremely reminiscent of *Nat* II.1 with its doctrine of cosmological correspondences and sympathies, its description of human physiology and of the seasons of the year, and the absolute prevalence of regimen (Helleno-Islamicate δῆαιτα / *tadbīr*) over therapeutics.

The latter branch of medicine is not excluded, however, for the text as transmitted by the western manuscripts used for the edition contains a number of epigraphs clearly therapeutic in nature. Pharmacopoeia is also present, in the second part of the book, in the form of discontinuous sequences of recipes. Some of the compound drugs handed down there are so characteristic as the “Hārūnī *muḡīt*” prepared for caliph HĀRŪN ARRAŠĪD by an Indian physician whose name is perhaps to be emended as MANKAḤ. His arrival in the caliph’s court in a medical mission involves also IBN MĀSAWAYH and apparently resulted in MASĪḤ’s three- (or much less likely thirty-)year stay in India and in his becoming fully conversant with (Ayurvedic?) medicine—but that is

¹ Cf. KĀS 2010: 23. The qualified conclusion of that survey is that the version of *Aḥḡār* accessed by the author of *Hārūniyyah* is not identical either to the one edited by RUSKA or to the one reflected in the Qayrawānī tradition. The testimony of *Hārūniyyah* is of some consequence, therefore, for the study of this pseudo-Aristotelian treatise, especially regarding its alchemical contents, to which MASĪḤ makes repeated allusions that could not be covered in KĀS’ concordance.

² Explicit quotes from ARISTOTLE on waters and on bathing do not find an exact equivalent in the corresponding loci in the edited *Sirr*, but the resemblance is too strong to be insignificant. For the quote on waters in *Hārūniyyah* I.v.4 (G 121₁₄₋₂₀), cf. *Sirr* II (B 100_{4-101₄}); for the excerpt on bathing in *Hār* I.v.5 (G 123_{3-125₅}), cf. *Sirr* II (B 105_{4-107₅}). A remarkable coincidence obtains between «*fā?idā ra?ayta rraḡula yanḡuru ilayka walā yastaḡīḡu an yutbita fika naḡarahū...*» in *Hār* II.vii (G 431₁₄₋₁₇) and «*idā ra?ayta raḡulan yukḡiru nnaḡara ilayka...*» in *Sirr* II (B 118₅₋₆), but physiognomical descriptions are only vaguely similar to the ones transmitted in that version of *Sirr*, which also suggests either a parallel use of elements from a common stock or access to a different version of the pseudo-Aristotelian physiognomy. In *Hār* II.1.6 (G 311₈), within a segment on remedies for several ailments of the eyes, ARISTOTLE’s report is quoted on aged eagles (*ḡuqāb*) eating wild lettuce in order to restore their eyesight. As I shall show below, the compiler exploits a *Ḥayawān* treatise that may well have included this and other passages with an explicit ascription to ARISTOTLE and a direct use of *Nat* cannot therefore be confirmed (mark, however, that this passage is not included amongst *Ḥayawān*-materials but rather integrated within therapeutics). A more exhaustive look into the pseudo-Aristotelian materials in *Hārūniyyah* may yield interesting results.

³ Cf. *Hārūniyyah* I.v.9 (G 137₃₋₅). To be compared with PSEUDO-GALEN in *Nat* II.1 prescribing Byzantine and even post-Byzantine drugs.

another story and shall be told another time.¹

The author of the core of the edited *Hārūniyyah* (like that of the *Tuḥfah*, who might happen to be the same person) aims expressly at comprehensiveness² and to this effect he brings together a number of blocks of information extracted not only from some (pseudepigraphic) texts ascribed to universally reputed Greek authors but also from Indian sources. The motivation of this compilation, moreover, would have been a request coming from the caliph himself.³ This core—I insist: this core, not the whole text edited by GIGANDET—represents a genuine *kunnāš* that is essentially not so different from AṬṬABARĪ's *Firdaws*, with which it actually overlaps to a large extent and with which it further shares a consistently primitive pre-standard terminology.⁴

Let me call just one witness to back my intuition before proceeding to a more pressing matter. As a justification (and also, no doubt, as a merchandising strategy) ALMAĠŪSĪ (d. 994) includes in the prologue to his own medical summa, which bears the self-confident title of *Alkāmīl*, a critical survey of his predecessors in the field (and competitors in the market). Amongst the authors singularised by him there is MASĪḤ with his *Kunnāš*. Even if we allow for a dose of exaggeration in the Iranian physicians's invective against his Damascene colleague, the overall depiction of a badly planned and chaotic compilation could be equally applied to the edited *Hārūniyyah*:⁵

¹ Cf. *Hārūniyyah* II.ii (G 333₇–335₁₁). GIGANDET's manuscripts transmit the name of the Indian physician as «أعنة» (BGD) or «الحكيم أدمعة» (T). For MANKAH (< Māṇikya / Mañkha), who features amongst the Indian physicians summoned to Baghdad by HĀRŪN ARRĀŠĪD, cf. ULLMANN 1970: 106; KAHL 2015: 14–16. The drug mentioned here is quite probably the same one alluded to as the “Indian *muġīt*” in *Nat* II.2.

² Cf. «*waʔinnamā naḍkuru hunā lʔaḥġāri šayʔan muḥtaṣaran litakūna hādīhi rrisālatu kāfiyah*» in *Hārūniyyah* I.xiv (G 259₁₄).

³ Cf. «*waʔilā hādā lmaʔnā qaṣada lʔawāʔilu ilā dīkri lʔadwiyah, waqad aḡabtuka, yā amīra lmuʔminīn, fīmā saʔaltani ʔanhu*» in *Hārūniyyah* II.v (G 407₄₋₅).

⁴ Mark, for example, the use of *riḥ* (glossed as *hawāʔ*) and *turāb* (with no gloss) for the elements ‘air’ and ‘earth’, respectively, in a passage drawn from HIPPOCRATES in *Hārūniyyah* 71₇₋₈, then again in *Hār* 75₁₆ and 95₇. The corresponding adjectives *riḥī* and *turābī* and are derived from *FLṬĪS in *Hār* 97₁₈₋₁₉, 99₁₋₂. The text also includes exceptional mentions of nosonyms mentioned in IBN MĀSAWAYH's *Nuġh*, as for instance *dīqrārah* in *Hār* 87₁₂ and *ʔinabah* in *Hār* 241₇. As shown in Part I, the prevalence of fossilisation in the written tradition precludes any chronological certainty regarding such features, but once again the old date of some of these elements cannot be negated by the late chronology of the compilations in which they are transmitted.

⁵ In view of the complex transmission of the text and given that there are no traces of an original numeration for its chapters, one should be cautious about identifying ALMAĠŪSĪ's reference to a pharmacopoeical Chapter 9 of MASĪḤ's *Kunnāš* with the edited *Hārūniyyah* II.ix (G 439₁–461₁₇).

Kāmil I.1 (S 511–15)

فَأَمَّا مَسِيحٌ، فَإِنَّهُ وَضَعَ كِتَابًا نَحَا فِيهِ النُّحُو الَّذِي نَحَاهُ أَهْرَزَنُ فِي قَلَّةٍ شَرْحَهُ لِلْأُمُورِ الطَّبِيعِيَّةِ،
مَعَ سُوءِ تَرْتِيبِهِ لِمَا وَضَعَهُ فِي كِتَابِهِ مِنَ الْعِلْمِ، وَقَلَّةِ مَعْرِفَتِهِ بِتَصْنِيفِ الْكُتُبِ — حَتَّى أَنَّهُ ذَكَرَ
الْقَوَائِنَ الَّتِي يُعْمَلُ عَلَيْهَا فِي تَرْكِيبِ الْأَدْوِيَّةِ فِي الْبَابِ التَّاسِعِ مِنْ كِتَابِهِ، وَأَتَّبَعَهُ بِذِكْرِ شَيْءٍ
مِنَ الْأُمُورِ الطَّبِيعِيَّةِ؛ ثُمَّ ذَكَرَ بَعْدَ ذَلِكَ أَمْرَ الْعِلَلِ وَالْأَمْرَاضِ الَّتِي تَعْرُضُ لِلرَّأْسِ وَمَا يَلِيهِ،
وَعَبَّرَ ذَلِكَ مِنْ تَقْدِيمِهِ مَا يَنْبَغِي أَنْ يُؤَخَّرَ وَتَأْخِيرِهِ مَا يَنْبَغِي أَنْ يُقَدَّمَ.

There is, perhaps, some grounds for the identification of at least *some parts* of the edited text with the old *Kunnāš*.¹ However, as already discussed with regard to *Natāʾiḡ*, neither style (which is, after all, a vague and highly subjective concept) nor the use of early sources are indisputable proof of the old date of any text, and the question of the origin of the edited version of the *Hārūniyyah* and its exact relationship (or lack thereof) to MASĪḤ's *Kunnāš* cannot be tackled here. In the following analysis I shall deal with the text as achronous, with no preconception imposed by the date of its presumed author.

Genre, textual topography, and ḥawāṣṣic materials

I cannot delve into the details of the compilatory strategy that underpins the *Hārūniyyah*.² Suffice it to insist here that comprehensiveness does not correlate with scrupulous organisation. At the macro-level, there is some overlap between the two major sections of the treatise, especially with regard to therapeutics. Segments of a head-to-toe nature are included in both parts in a non-linear and actually mostly inverted order. Part I contains a discontinuous sequence of chapters (sporadically marked as *bāb*) on warts, reproduction-related issues, ailments of the kidneys, micturition, and jaundice; then there follow, with no transition, epigraphs on cough, quinsy, scrofulas, the teeth, etc. Epigraphs on migraine, headache, conditions of the face, the throat, etc. in turn, are found in Part II. It is worth noting that even if there is an explicit mention of MASĪḤ at the *incipit* of Part II stating that this is “the second part” of the book, later on, at

¹ The comparison between the *Tuḥfa* and the *Hārūniyyah* leads a modern scholar to “wonder[s] whether the first two parts of the *Tuḥfa* and the corresponding parts in the *ar-Risāla al-Hārūniyya* have been taken from the same source, whose author is Masīḥ b. al-Ḥakam” (BRUNING 2011: 207–208). This assessment only strengthens my aforementioned intuition on the authenticity of the core text.

² Interesting clues in this regard might be provided by alternative versions of the *Hārūniyyah*, some of which are easily available in digital form. This comparison should include IBN ʿAZ-ZŪZ ALMARRĀKUŠĪ's *Dahābu l-kusūf*, which has been mentioned and commented upon in Part I Chapter 9 and which I suspect that might be, at least in part, an additional Maḡribī witness to the western circulation and exploitation of MASĪḤ's old *Kunnāš*.

the end of the epigraph on physiognomy, the author refers his reader to the explanation of the “four climates” that “follows this at the end of the book”. Yet, as pointed out by GIGANDET, such matters are nowhere discussed in the remaining chapters of the book but they feature conspicuously *at the beginning* in the opening chapters of Part I,¹ and ALMAĞŪSĪ’s negative review also states that the discussion of natural matters (ie *res naturales*) followed, rather than preceded as it should, the explanation of the preparation of compound drugs. This might be of some significance for the reconstruction of the primitive text.

Part I comprises a whole section of the specific properties of stones that is introduced by the mention of the alleged author (ie MASĪḤ) and which is large and by derivative, as seen above, from the pseudo-Aristotelian *Aḥğār*. It is, therefore, an example of deautonomised genre demoted to the rank of a section within a larger pandect. This same Part I includes also a series of well-defined and clearly rubricated epigraphs from a *Ḥawayān* text, which shows the same genre deautonomisation and has a well-known precedent in the zootherapeutic section within AṬṬABARĪ’s *Firdaws*. There is probably nothing in either of these two sections that could be interpreted as incompatible with their ascription to MASĪḤ (early representatives of both epistemic genres were in circulation, both in Syriac and in Arabic, in the early 9th c.) and they may have formed part of the original *Kunnāš*, but that hypothesis cannot be explored here.²

On the other hand, there is absolutely no transition between the ending of the sequence of zootherapeutic chapters (ending with the camel) and the beginning of the aforementioned series of head-to-toe epigraphs that opens, quite irregularly, with warts. Furthermore, in what concerns medical treatment there is an unmistakable difference between these epigraphs contained in Part I and the therapeutic contents of Part II. The former are either entire sequences of purely ḥawāṣṣic passages or, less frequently, hybrid paragraphs in which ḥawāṣṣic remedies and a few medical recipes are aggregated; the latter contain almost exclusively conventional instructions and remedies. An impression of the hybrid nature of some epigraphs in Part I can be gained from inspection of the paragraph on tooth- and molar-ache:

¹ Cf. *Hārūniyyah* II.VII (G 433₉); and GIGANDET 2011: 432 n. 86.

² For these *Ḥawayān* materials, cf. *Hārūniyyah* I.XI.1–2 (G 203₁–225₇). A provisional examination of these chapters allows to dismiss IBN ʿALĪ’s and also IBN BUḤTĪŠŪʿĪ’s *Ḥayawān* treatises as the direct contributors. I am inclined to favour the hypothesis of an original compilation from some early *Ḥayawān* text on the basis of some very peculiar passages (cf. especially the selenology implied in *Hārūniyyah* 223_{4–6}) and of the inclusion in the chapter on the specific properties of the mole of an anecdote introduced by MASĪḤ himself about MŪSĀ B. NUṢAYR’s incursion in Siğilmāsah (cf. *Hārūniyyah* 211_{7–8}).

Hārūniyyah I.XIII.7 (G 241₁₇–241₉)

باب خواص يذهب بوجع الأسنان والأضراس

شَبَّ بِمَا تِي وَعَصِيرِ خَشْخَاشٍ (وهو أبو النعمان البستاني): يُحْشَى بِهِ الْمَوْضِعَ الْمَتَأَكَّلَ. أَوْ
يُؤْخَذُ أَوْقِيَّةَ عَسَلٍ وَأَوْقِيَّةَ خَلِّ وَأَوْقِيَّةَ زَنْجَارٍ، يُغْلَى الْخَلُّ وَالْعَسَلُ حَتَّى يَنْعَقِدَ، وَيُطْرَحُ
عَلَيْهِ الزَنْجَارُ، وَيُجْمَلُ عَلَى الضَّرْسِ.
وَإِذَا شَوِيَ الْفَارُ وَأُطْعِمَ لِلصَّبِيِّ، ذَهَبَ عَنْهُ اللَّعَابُ. وَإِذَا عُلقَ أَصْلُ الْكَأَكْبِجِ فِي الرِّقْبَةِ،
أَذْهَبَ عَنْهُ وَجَعُ الْأَسْنَانِ؛ وَكَذَلِكَ أَصْلُ الشَّيْطِرْحِ (وهو العصاب) [...].
وَمَنْ أَخَذَ الثُّومَ الْمَنْقِيُّ الْمَدْقُوقَ وَجَعَلَهُ فِي قَارُورَةٍ، وَجَعَلَهُ مَعَ الْعَاقِرْقَرِحَا مِثْلَ عَشْرَةِ مَسْحُوقًا
مِنْخُولًا [...].

This combination of different approaches to medical treatment is by no means exclusive to the *Hārūniyyah* and a similar feature can be perceived in AṬṬĀBARĪ's *Firdaws*, in which brief strings of specific properties are occasionally appended (usually towards the end) to strictly therapeutic epigraphs. Now, the overwhelming presence in the *Hārūniyyah* of entirely and exclusively ḥawāṣṣic epigraphs (often introduced by a specific mention of *ḥawāṣṣ* in the rubric) and, above all, the identity of these passages with the tradition reflected by *Nat* III call for a different explanation. It is as if throughout the *Hārūniyyah*, and even within Part I, two different texts were being quoted from and, indeed, it is my current persuasion that this is the most likely origin for such a radical difference. With the exception of some segments, epigraphs in Part I stem from a *Ḥawāṣṣ* text (one the features of which I shall try to define below), whereas the therapeutics in Part II is exclusively medical and might stem, judging from a terminology that is characteristically close to that of IBN MĀSAWAYH's *Nuḡh*, from the original *Kunnāṣ*.¹

It is here that the analysis of genre conventions and of the exact placement of the materials within the text becomes instrumental to the correct interpretation of intertextual relationships. With regard to the quotes comprised in *Nat* III, several coincident (and even almost literally identical) passages can be found in the *Ḥawayān* and *Aḥḡār* epigraphs included in the *Hārūniyyah*, but these are reflective of a different transmission and they are only remotely related to them in genetic terms. As reflections of an ultimately common source, those passages can no doubt contribute external evidence for a reading if necessary,

¹ Other hypotheses are equally plausible, of course, but I suspect that a systematic comparison of the *Hārūniyyah* to what can be retrieved from IBN MĀSAWAYH's treatise would be worth trying.

and they may also provide typological parallels, but they cannot be considered close cognates. The ḥawāṣṣic sequences integrated into the therapeutic layer of the *Hārūniyyah*, on the contrary, stem from a compilation of the *Ḥawāṣṣ* genre, one that was medicine-centred and arranged according to a head-to-toe criterion. This should be obvious even from internal evidence, but comparison ALḤILBĪRĪ's *Natāʾiğ* and IBN ALHAYTAM's *Iktifāʾ* leaves no possible doubt in this regard.

Intertextual comparison: Hārūniyyah vs Natāʾiğ/Iktifāʾ

Exhaustive comparison of all ḥawāṣṣic passages transmitted in the edited text of *Hārūniyyah* with *Nat* III and *Sağullōt* reveals that the formal identity of the contents of all three texts can only be described in genetical terms as cognacy. It is not a case of vague resemblance or of a few random coincidences in the selection of passages from a stock that is, after all, rather limited. It is true descent from a common parent text.¹

Shared quotations involve some characteristic wordings not to be found elsewhere in the corpus (ḥawāṣṣic, pharmacognostic, or otherwise):²

¹ Neither the complete catalogue of the parallel loci nor the extended analysis of each passage can be reproduced here. A provisional concordance is provided in Table 1.8, while the circumstances and the significance of all these passages are to be examined in the commentary on *Nat* III (see below Chapter 4 for a few illustrations). On a side note that applies not only to this but also to other texts compared to *Nat* III in this dissertation, my protracted familiarity with these materials may have convinced myself of the compellingness of the arguments expounded here. At this point only external evaluation can assess whether these coincidences are truly significant of cognacy or not and whether the existence itself of *Ḥawāṣṣ* is a mere figment of my imagination.

² The property of the golden thistle (σκόλυμος, *Scolymus hispanicus* L.) is almost universally echoed across all epistemic genres, but not in this particular form. As shall be shown in Chapter 3, the passage shared by *Nat* III and the *Hārūniyyah* appears to blend Dioscoridean and Galenic materials in a new formulation. It is also selected by IBN ALHAYTAM for *Sağullōt* VIII.X.1 (L–M 323i–v) and the true extent of the parallelism cannot be reflected in the quote above, as it is the one single passage of the chapter in all three texts, which further share a virtually identical rubric. Tangentially, in his report on *scolymos* PLINY describes it as a strong diuretic and also as a drastic aphrodisiac according to HESIODUS and ALCAEUS, then adds a curious reference to a property attributed to it by XENOCRATES: «*Mirum est, quod Xenocrates promittit experimento, vitium id ex alis per urinam effluere*» NH XXII.22.[43] (J–M III 467^{–11}).

Nat VIII.x.1

Hārūniyyah I.xi.3 (G 225₁₅₋₁₆)

<p>قال ديسقوريدس: «النبات المستقى "سقلوس" (وهو الخرشف): خاصته، إذا سلق بشراب وشرب، أذهب برائحة الإبطين ورائحة الجسد كله. لأنه يُحدر بولاً كثيراً منتناً — وهو حارّ في آخر الدرجة الثانية.»</p>	<p>قال دياسقوريدوس الحشائشي إنّ النبات المستقى "سقلوس" (وهي الخرشف): خاصيته، إذا سلق بنبيذ، إذهاب رائحة الإبطين — وهو حارّ يابس في آخر الدرجة الثانية.</p>
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Identity extends likewise to a number of idiosyncratic reinterpretations (originally misreadings) that must be classed as synapomorphies as they are not such as could have been introduced independently by the different authors and they overall distinguish *Ḥawāṣṣ* and its descendants from the rest of the texts in this genre. Examples of significant innovations shared with *Nat|Ikt* are the transformation of raven droppings into a raven's foot in *Hārūniyyah* 239₁₆,¹ the metamorphosis of lions into hares in *Hār* 239₈, or a probable mistransmission of camels as donkeys in *Hār* 225₄₋₅, to mention just three conspicuous cases.

Highly significant shared identifications of items accessible only in transliteration in the original Graeco-Arabic translations include: DIOSCORIDES' αἴθουα being rendered as *baṭṭ* 'duck'; his σκόλυμος, as seen in the quote above, by *ḥaršuf* (perhaps originally *huršuf*); and τέτιξ as *šarrār*. The systematic use of *ḥalazūn* rather than *šadaf* ought to be added to this category too.

Furthermore, the relative order of the passages in any given sequence is essentially identical to that of the series that can be reconstructed by comparison of *Natā?iğ* and *Iktifā?*. This phenomenon in itself is usually understood as an indicator of genetic affinity in cladistic analysis.

In any case and as it might be expected, a complex set of concordances obtains within this triad of texts and a separate *Hārūniyyah*-centred analysis would be required to examine all available evidence and to establish definitely the affiliation of the materials that it transmits. However, the combination of the frequency of the above features with concrete statistics (which can be seen in Table 1.8) gives the hypothesis of cognacy even greater strength as the the most plausible explanation for such a degree of coincidence between these three texts.

¹ The same apomorphy is documented elsewhere through a misreading transmitted in some of the copies of ARRĀZĪ'S *Ḥawāṣṣ* and it emerges in *Sexaginta* too.

Could the Hārūniyyah be the parent text?

With regard to the place of these materials within the textual family of ^α*Hawāṣṣ*, it is important to stress that coincidences can be found not only with *Nat* III but also with passages transmitted exclusively by *Saḡullōt*. The sum of the ḥawāṣṣic epigraphs transmitted in the *Hārūniyyah* is not a subset of either Andalusī text, as it includes not a few quotes that were apparently not selected by either ALḤIL-BĪRĪ or IBN ALHAYṬAM for their respective treatises. But nor is it a superset, for it lacks many a passage included in its two siblings. Since it does not depend on either of them but borrows, necessarily, from a different compilation within the same clade, it can contribute new materials for the reconstruction of the parent text.

In some instances it is the name of a source left unmentioned by the other two texts that is provided, as in the case of the contraceptive property of clove, which is here explicitly ascribed to CLEOPATRA in *Hārūniyyah* 233₁₈.¹ Greater additions to the stock are represented by a few quotes as remarkable as a passage involving the use of a fox's teeth against earaches in *Hārūniyyah* 247₁₋₂ that the modern editor decides to ascribe to GALEN against three of the manuscripts, which read rather BALĪNĀS. Also the detailed instructions for the fabrication of a signet or ring censured to avail against calculi and ascribed by the text to ALEXANDER in *Hārūniyyah* 237₁₀₋₁₃.

In any case, at least in the version edited by GIGANDET *Hārūniyyah* cannot possibly be the origin of the materials transmitted in ^α*Hawāṣṣ*. The most obvious reason is quantitative: it simply does not contain *all* the passages that can be traced back to the parent compilation. A very different and in a sense more compelling argument is the lack of a consistent mention of the sources for the passages. With only a few significant exceptions, the compiler has quite systematically anonymised his materials—or otherwise he accessed a copy that included this information only partially.² Given that the ascriptions in ^α*Hawāṣṣ* are overall correct (ie they were not improvised and projected onto an unsourced compilation), there is no doubt about the direction of the dependence between these two texts.

¹ The importance of this explicit ascription could not be overrated and its link to the Qayrawānī tradition shall be commented on below.

² Selective anonymisation of the passages may have obeyed to an identifiable purpose here. The sporadic mention of DIOSCORIDES “the Herbalist”, CLEOPATRA, BALĪNĀS, or ALEXANDER enhances noticeably the appeal of the treatise and tallies perfectly with other Greek figures mentioned in it, and “Ibn Yūḥannā” is unproblematic if identified as the same physician alluded to as IBN MĀSAWAYH elsewhere in the text. Now, the presence of AṬṬABARĪ and ARRĀZĪ would have raised suspicion even in the less attentive reader.

There is, nonetheless, an alternative hypothesis that I currently consider far less plausible but which must be outlined here. The *Hārūniyyah* (particularly an earlier, perhaps more complete, form of the edited text) could have been a *precedent* to ^α*Ḥawāṣṣ*. In principle it would be possible that the anonymous compiler had extracted the ḥawāṣṣic materials from this text (the latest mentioned author being IBN MĀSAWAYH) and supplemented it with additional quotes culled from other sources and especially from later ones (namely AṬṬABARĪ and ARRĀZĪ). That the explicit and correct ascriptions transmitted in ^α*Ḥawāṣṣ* are a forcible argument against such an assumption has just been mentioned. A further argument of no less probative force is the fact that the *Hārūniyyah* contains passages demonstrably borrowed from AṬṬABARĪ and from ARRĀZĪ's *Ḥawāṣṣ* and therefore at least these materials in the *Hārūniyyah* could only be contemporary to or later than ^α*Ḥawāṣṣ*. Now, some of the passages for which a parallel can be found in ARRĀZĪ's *Ḥawāṣṣ* show either an entirely different ascription (the periapt of fox teeth is quoted from IBN MĀSAWAYH in *Ḥawāṣṣ*) or might have been borrowed directly from the original source (in the case of the copper ring, from ALEXANDER OF TRALLES). There is, perhaps, some room for legitimate doubt if one is to rely exclusively in the evidence presented here, but a global and careful look at the texts involved should make any doubts disappear.

At this point I would like to draw the reader's attention to the most likely locale for the compilation of the treatise that circulated in the Islamicate west as MASĪḤ's *Hārūniyyah*. From an examination of all the information related to minerals contained in this text KĀS finds the likeliest context of these data "in dem westlichen Traditionsstrang der Pharmacognosie", and when commenting upon the manifest anonymisation of sources in the *Hārūniyyah* he further notes that "der Verfasser der Hārūniya sein Werk unter Benutzung eines Zeugen der Ibn 'Imrān-Tradition geschrieben hat".¹ Let it be noted that this conclusion is totally independent from the ḥawāṣṣic materials that I have analysed here, which lends even more strength to the scenario drawn in the preceding paragraphs. It seems that at some uncertain date a western compiler had access to MASĪḤ's *Kunnāṣ* and supplemented it with a number of additions from different sources. One of these sources was either the no longer extant ^α*Ḥawāṣṣ* itself or some unidentified descendant from it.

¹ Both affirmations in KĀS 2010: 24. Incidentally, KĀS also points out that some of the names that feature in the manuscripts edited by GIGANDET are attested only 900 years later, which is strongly reminiscent of the chronological problems posed by some lexical items in *Nat I* APOTHECONOMY but may have an entirely different explanation as the manuscripts of *Natā'iğ* fix a *terminus ante quem* in the 12th c.

Conclusion

Let me recapitulate my working hypothesis with regard to the *Hārūniyyah*. The text that has circulated for some centuries in the Islamicate west under the title of *Hārūniyyah* cannot possibly be in its entirety, at least in the version edited by GIGANDET, the product of its putative author MASĪḤ B. ḤAKAM. It nonetheless appears to preserve long excerpts (including entire chapters) from what may well have been his original *Kunnāš*. On the other hand, this particular version also transmits a substantial fraction of ^α*Ḥawāṣṣ* and reveals itself, therefore, as a cognate to both *Natāʾiġ* and *Iktifāʾ*. But there are still more members in this family.

<i>Hārūniyyah</i>			<i>Nat</i>	Shared
باب خواص للتأليل	225 ₉₋₁₃	[3]	VIII.IX	[3/9]
باب إذهاب نتن الإبطين	225 ₁₄₋₁₆	[1]	VIII.X	[1/1]
باب للأورام وغيرها من الأمراض	227 ₁₋₇	[6]	VIII.III	[1/2]
[erotica]?	227 ₁₂₋₁₄ , 229 ₁	[4]	VI.XIII	[1/4]
لعرق النساء	229 ₂₋₆	[3]	VII.I	[1/2]
لأوجاع المفاصل	229 ₇₋₉	[2]	VII.II	[1/2]
باب الخواص التي تسهل الولادة	231 ₂₋₁₃	[8]	VI.IX	[5/6]
باب ما يمنع من سقوط الجنين	231 ₁₄₋₁₆	[2]	VI.IV	[1/2]
باب ما يسقط الجنين	231 ₁₇₋₂₃₃₄	[9]	VI.V	[5/8]
القول في ما يدرّ الطمث	233 ₅₋₈	[4]	VI.VI	[2/4]
باب ما يعين على الحمل	233 ₉₋₁₄	[7]	VI.II	[3/5]
باب ما يمنع الحمل	233 ₁₅₋₂₃₅₆	[10]	VI.III	[5/7]
باب لوجع الرحم	235 ₇₋₁₁	[6]	VI.I	[3/3]
باب خواص لمرض الكليتين	237 ₂₋₂₃₉₂	[17]	V.VIII	[14/19]
باب ما ينفع من بول الدم	239 ₃₋₈	[7]		
[يرقان / كبد]	239 ₁₀₋₁₂	[4]	V.VI	[4/6]
باب السعال	239 ₁₃₋₁₈	[7]	IV.I	[5/7]
باب للخنق	241 ₁₋₈	[6]	IV.II	[3/7]
باب خواص تبرأ الخنازير من غير قطع ولا كي	241 ₉₋₁₅	[9]	IV.III	[6/8]
باب خواص تذهب بوجع الأسنان والأضراس	241 ₂₀₋₂₄₃₉	[8*]	III.V	[2/8]
باب خواص تبرأ الأوجاع من الأذن	245 ₁₅₋₂₄₇₈	[8]	III.II	[7/10]
(باب في علاج الوجه C) الآثار والمجديري	249 ₁₃₋₁₇	[4]	III.IV	[3/4]
وللغطيظ (وهو البخير)	325 ₇₋₁₀	[3]	II.V	[1/3]

Table 1.8: Concordance of ḥawāṣṣic passages in the *Hārūniyyah*.

1.4.4 ALMADĀʿĪNĪ'S *Ḥawāṣṣ*

When compared to the baffling complexity of the transmission of the *Hārū-niyyah*, the analysis of a relatively short treatise on the knowledge of the specific properties ascribed to IBN ŠUʿAYB ALMADĀʿĪNĪ might give a deceiving impression of simplicity.¹ This twenty-odd-page text was published, with a brief introduction and some two-hundred useful annotations on parallel loci, from a unique manuscript in 1982 in the *Journal of the Institute of Arabic manuscripts* and I only came to know of its existence thanks to KĀS' use of it in his monographic on minerals, which proved to be once again instrumental to this research.²

According to the colophon, the copy was finished on 23 Šaʿbān 598 H (ie 1202 CE), which is the only *ante quem* currently available.³ A few quotes by IBN ALBAYṬĀR and IBN ALŠAWWĀM are of little help in this regard but they nonetheless attest to the circulation of the work during the first half of the 13th c. as far as Andalus, where the latter's agronomical treatise was compiled.

These two indirect witnesses are extremely informative, in turn, about the fact that the Ankara manuscript quite probably does not preserve the whole original text. In IBN ALBAYṬĀR's *Almuǧnī* a passage is quoted explicitly from ʿALĪ B. ŠUʿAYB'S *Ḥawāṣṣ* that cannot be located in the modern edition:⁴

¹ The full name of this author as transmitted in the only manuscript of its work (ie ABULḤASAN ʿALĪ B. MUḤAMMAD B. ŠUʿAYB ALMADĀʿĪNĪ) bears a striking resemblance to that of ʿALĪ B. MUḤAMMAD B. ʿABDILLĀH ALMADĀʿĪNĪ, who would have authored an early zootherapeutic treatise (*Kitābu manāfiʿi aṣnāfi ḥayawān*) that ALĠĀḤIḌ would have extensively exploited for his own *Ḥayawān* (cf. SEZGIN 1970: 366–367). For obvious chronological reasons (in IBN ŠUʿAYB'S text ARRĀZĪ is mentioned) they must be considered two different authors.

² The Arabic text, for which the editor provides an introduction, can be found in MAKKĪ ALŠĀNĪ 1982: 297–320. Even if it does not deal with the author separately, KĀS 2010 cites ALMADĀʿĪNĪ'S *Ḥawāṣṣ* no less than thirty-three different times for almost as many different mineral items, and references to this text in KĀS 2012 are less in number, but not in importance, only on account of the briefness of the treatise under study there (ie IBN ALĠAZZĀR'S *Ḥawāṣṣ*).

³ For the date of the manuscript (namely Ankara, Saib MS 1682), cf. MAKKĪ ALŠĀNĪ 1982: 290–291. No source or reference is provided by SEZGIN 1970: 379 for the decision to date the author to the 10th c., nor is any date assigned to him by ULLMANN 1972: 129, 410.

⁴ This quote is already signalled by KĀS 2010: 158 n. 1. Let it be noted that in this particular case ZUHR'S *Ḥawāṣṣ* cannot be the source for this passage, since ALMADĀʿĪNĪ does not feature in the catalogue of authorities for that compilation.

Almuǧnī IV.1 (L 103r 13–15 | M 61r 11–13 | P¹ 56r 6–8)

ومن خواص عليّ بن شعيب المدائنيّ، قال: «برادة قرن الثور الأيمن يُسقى منها مسحوقهً وزن مثقال بخلّ وماء بارد لمن يُرعى من المنخر الأيمن، فيبرأ؛ ومن برادة القرن الأيسر لمن يُرعى من المنخر الأيسر».

شعيب [سعب P¹، شعب L | قال L | وزن مثقال LM – | وماء بارد LM – | فيبرأ سيراً L، M –.

As for the roughly contemporary quote by IBN ALṢAWWĀM, an excerpt from “Almadāʿinī’s *Book of the specific properties*” is included his *Filāḥah* in which instructions are provided to obtain black-and-white or two-coloured (*ablaq*) gillyflowers (*ḥīrī*); then a second one on how to make honey out of grape juice. Both passages derive quite obviously from some geponic section but they are not to be found in the *Filāḥah* varieties extant in the modern edition.¹

To these two further quotes in a treatise on the specific properties of stones compiled by ASSUWAYDĪ (d. 1292) must be added.² The first passage mentions a benefit of the Roman carnelian stone (*ṣāqīqun Rūmī*) against white of the eye or leukoma; the second one, with a specific reference to the author’s *Kitābu ḥawāṣṣ*, that of the jet or *sabaǧ* stone against ulcers on the penis and the groins, as well as a property against insomnia:

ASSUWAYDĪ, *Aḥḡār* 150₅₋₇, 160₇₋₉)

العقيق — [...] وقال المدائنيّ: «العقيق الروميّ الجيد ينفع من البياض العتيق في العين: يكتحل به بكرة خمسة أميال وعشيتة مثلها. ومن اختار جلا بصره بغير علة، فيكتحل به في الشهر مرتين، ولا يزيد يضرّها».

السيج — [...] وقال المدائنيّ في كتاب الخواص: «ينفع من القروح العارضة في المذاكير والحالبين إذا أطخ عليها بدهن ورد. وإذا علّقه إنسان عليه، أعانه على السهر معونةً جيدةً، ولم يضرّه السهر».

¹ For the first quote, cf. IBN ALṢAWWĀM, *Filāḥah* I.15 (B I 655₆₋₂₂), which is reported (without an exact reference) by SEZGIN 1970: 379 echoing a previous study by MILLÁS 1954 [n.v.]. The geponic materials in *Ḥawāṣṣ* 317₉–319₃ shall be commented upon below. The second quote is already located by ULLMANN 1972: 410 n. 2 and corresponds to *Filāḥah* II.30 (B II 419₉₋₂₂). A third passage in *Filāḥah* II.32 (B II 493₁₋₃) is included by ULLMANN amongst the testimonies to ALMADĀʿINĪ’s text but the unascrbed *Kitābu ḥawāṣṣ* cited there might be ARRĀZĪ’s, cf. ARRĀZĪ, *Ḥawāṣṣ* كهربا 10–11 (I 83v 12–13).

² Cf. ULLMANN 1972: 129, 410 n. 2, where a reference is given to Berlin, SBB MS or. 1182 [= Ahlwardt 6215] fols. 79v 5 and 80v 7, which is fortunately available online (the reference in the excerpt below is to the original pagination of the manuscript).

Neither stone is mentioned in the extant text of *ALMADĀʿĪNĪ'S Hawāṣṣ*, which confirms that the Ankara manuscript is a remarkably abridged version of the original treatise. This external evidence is extremely relevant to the discussion below and ought to be combined with the express testimony given by the copyist of the unicum:

Hawāṣṣ 325₁₄₋₁₆

نُجِرَ الْكِتَابُ فِي عِلْمِ الْخَوَاصِّ، تَأَلِيفِ الشَّيْخِ أَبِي الْحَسَنِ عَلِيِّ بْنِ شَعِيبِ الْمَدَائِنِيِّ. كَتَبَهُ لِنَفْسِهِ الْفَقِيرَ إِلَى رَحْمَةِ رَبِّهِ عَبْدِ الْوَهَّابِ بْنِ عَمْرِ بْنِ جَعْفَرٍ، نَفَعَهُ اللَّهُ وَرَزَقَهُ الْعِلْمَ النَّافِعَ وَالْعَمَلَ.

The extant text was, thus, a copy for personal use. This may explain both its briefness and the apparent disarray of the materials especially in the second part of the treatise.

Regardless of its relevance for the prehistory of *Nat* III, this concise treatise has an indisputable interest of its own as a witness to the complex interface between the genres of *Hawāṣṣ*, *Hayawān*, and *Ahḡār*, as all three are represented in it. Besides, it appears to transmit some materials for which a clear precedent cannot be pinpointed in the standard corpus. None of these aspects can be dealt with here but, just like in the case of the *Hārūniyyah*, the discussion of the contents of this *Hawāṣṣ* requires a preliminary analysis of its structure and a few observations on typology and chronology. Given that the published text may not be easily available to all readers, the prologue is reproduced here in its entirety:

Hawāṣṣ Proem (M 297₈-298₁)

أَمَّا بَعْدُ — فَإِنَّ اللَّهَ، جَلَّتْ أَسْمَاؤُهُ وَتَقَدَّسَتْ آلَاؤُهُ، جَعَلَ فِي كَثِيرٍ مِنَ الْحَيَوَانَ وَمِنَ النَّاسِ وَالْأَنْعَامِ وَالطَّيْرِ وَالْهَوَامِّ، وَفِي الْعُشْبِ وَالنَّبَاتِ وَالشَّجَرِ، وَالْحَجَرِ، مَنَافِعَ وَمَضَارَّ لِهَذَا الْعَالَمِ. وَجَعَمَتِ الْأَوَائِلُ مِنَ الْحُكَمَاءِ مَا وَقَفْتُ عَلَيْهِ مِنْ ذَلِكَ فِي كِتَابِي، وَدَوَّنْتُهُ فِي عِلْمِيهَا، وَجَعَلْتُهُ إِرْتَاً لَهَا لِيَبْقَى لَعِينًا جَمِيلَ أَثَرِهِ وَحَسَنَ مَخْبَرِهِ. إِذَا كَانَتْ أَفْنَتْ أَعْمَارُهَا بِالْأَدَبِ فِي طَلَبِ الْعُلُومِ لَنَا وَابْحَثَ عَنِ الْمَنَافِعِ لِنَسُوقِهَا إِلَيْنَا، وَالْمَضَارَّ لِتُصَرِّفَا عَنَّا. فَحَمِينَا مَا أَدْرَكْنَا مِنْ أَقَاوِيلِهِمْ فِي كِتَابِنَا، وَأَفْرَدْنَا كُلَّ جِنْسٍ بِمَا فِيهِ لَهُ وَعَلَيْهِ؛ وَجَعَلْنَاهُ مَوْئَلًا عَلَى سَبِيلِ الْإِخْتِصَارِ فِي جَزْئٍ لِنَتَخَفَ عَلَى مُتَفَهِّمِهِ وَمَنْ يُرِيدُ طَلَبَ الْعِلَاجِ مِنْهُ. وَنَحْنُ نَعْلَمُ أَنَّهُ سَيُدْفَعُ بَعْضُ مَا ذَكَرْنَاهَا فِي طِبَاعِ أَعْضَاءِ الْحَيَوَانَ وَغَيْرِهَا قَوْمٌ لَجْهَلِهِمْ كَثِيرًا مِنَ الْعُلُومِ، وَبِمَا وَكَلَّ بِهِ خَلْقٌ مِنَ النَّاسِ مِنْ طَلَبِ بَعْضِهِمْ عِيُوبَ بَعْضٍ — وَقَلَّ مَا نَجَا مَوْلًى كِتَابٍ مِنْ مُرْصِدٍ بِمَكِيدَةٍ أَوْ نَاقِبٍ عَنِ خَطَاةٍ. وَلَوْ ذَهَبْنَا إِلَى تَرْكِ مَا يَدْفَعُهُ الْجَاهِلُ بِجَهْلِهِ، لَضَيَعْنَا مَا يُحْصِلُهُ الْعَاقِلُ بِعَقْلِهِ؛ لَكِنَّا جَمَعْنَا مَا أَمَكَّنَّا جَمْعَهُ، وَعَوَّلْنَا عَلَى إِمْكَانِ التَّجْرِبَةِ فِيهِ وَالْإِمْتِحَانِ يَأْتِي عَلَيْهِ. فَإِنْ كَانَ مَا قَالُوهُ بَاطِلًا، لَمْ يَضُرْنَا مَا مَضَى مِنَ الْوَرَقِ فِيهِ؛ وَإِنْ كَانَ حَقًّا، لَمْ نَكُنْ ضَيَعْنَا عِلْمًا يُحْتَاجُ إِلَى مَعْرِفَتِهِ بِأَقَاوِيلِهِمْ وَتَكْذِيبِهِمْ إِيَّانَا — وَبِلِلَّهِ التَّوْفِيقُ.

The intellectual framework of the text is made manifest from the outset and ALMADĀʿINĪ's proemial note sounds very much like a restatement of ARRĀZĪ's prologue to his own *Ḥawāṣṣ*, with a remarkably less self-apologetical ring to it. As for the arrangement of the materials, the author clearly states that the book has *two parts* and that this organisation obeys to his wish for the text to be easy to consult by those who may approach it to find some knowledge and by those, let me emphasise this, *who seek for remedies in it*. The explicit twofold arrangement and the allusion to these two different categories of readers refer, in my opinion, to the book having originally comprised both item-centred and an organ/ailment-centred sections. The reasons underlying these two different strategies have been analysed above, but let it be recalled here that an item-centred layout (such as is found in *Ḥayawān* texts and also in alifatic *Ḥawāṣṣ*) can hardly meet the needs of a physician who is looking for a remedy for any given disease or condition.

The text transmitted in the Ankara manuscript does indeed reflect a two-part division. The ending (but not the beginning) of Part I is signalled by an *explicit* at *Ḥawāṣṣ* 315₁₉₋₂₀ and then a *basmalah* and a *ḥawqalah* mark the beginning of Part II. The end of the book is also made explicit by a remark «*wahādā mā ntaḥā mina ḥawāṣṣ*» that precedes the copyist's colophon. With regard to the contents of these two parts, Part I is a brief *Ḥayawān* segment that is perfectly standard in its form, extremely rich in its contents, and most unlikely poor in the sequence of chapters that it comprises. The unicum transmits just *three* chapters: on human beings, on lions, and on hares—the first three entries of the first letter in a *Ḥayawān* arranged according to the alifat. It is hard to believe that the assertive promise made by the author in his proem should have been broken so blatantly. Moreover, the impressive display of resources seen in Chapter 1 (which makes up more than one half of the whole extant text!)¹ does certainly not correlate with this minimal expression of a treatise on the properties (benefits and harms) of animals.²

¹ It extends for over thirteen full pages of the edited text and it appears to reflect an original access to some major texts of the Graeco-Arabic corpus. To mention only the most interesting explicit quotes, there one finds: GALEN, five passages from his *Kitābu l'ṣāqāqīri l'naẓẓūdah* (= Εὐ-πόριστα) in *Ḥawāṣṣ* 302₁₀₋₃₀₃, and seven passages from his *Kitābu mudāwāti l'asqām* 303₃₋₂₁; DĪMUQRĀT in 304₁₅₋₃₀₅; TIMOTHEUS (sc. of Gaza) in 305₆₋₃₀₆; SUṬUWĀLĪS («سطواليس») in 306₁₂₋₃₀₇; MIHRĪYĀRĪS ARRŪMĪ in 308₉₋₁₇ (for the author, cf. MIHRĀRĪS in ZUHR's *Ḥawāṣṣ*; the same passage is diversely ascribed in the corpus). None of these quotes can have been mediated by AṬṬABARĪ or ARRĀZĪ. Chapters 1.2-3 include additional quotes from ARISTOTLE, TIMOTHEUS, AFRICANUS (cf. *Ḥawāṣṣ* 313₁₀₋₁₂), MIHRĪYĀRĪS, IBN MĀSAWAYH (cf. especially *Ḥawāṣṣ* 314₁₃₋₁₄), and SALMAWAYH (his regimen of health is cited in *Ḥawāṣṣ* 314₂₀₋₃₁₅).

² Further evidence of an originally larger compilation can be retrieved, perhaps, from an ap-

As for Part I, it opens with an introductory quote from ARISTOTLE and includes only five epigraphs (on ruby [*yāqūt*], diamond, tincar, malachite [*dahnağ*], and the magnet stone) entirely borrowed from the the pseudo-Aristotelian *Ahğār*.¹ Once again, not only is this selection far from exhaustive (or even representative of the Helleno-Islamicate stock of mineral specific properties) but there are also evident traces of either careless borrowing or, more probably, clerical abridgement.² If the author had set to record the stone-related lore of the ancients, this a poor record indeed, but once again the extension of the entry on ruby seems to conflict with the abrupt interruption of the account on stones.

Unlike Part II, this second major unit of the book is a composite, for after the short sequence on stones there follows, with absolutely no transition, a series of quotes the first of which is introduced by a reference to the *Filāḥah*. Although this opening passage and several others in the series are probably mediated by ARRĀZĪ's compilation,³ there are a few that appear to have been drawn from an alternative source. On the other side, this abrupt *incipit* invoking the *Filāḥah* and opening a segment typologically and thematically unrelated to both the preceding epigraphs and all subsequent paragraphs is strongly reminiscent of the geoponic fragment *Nat* III.2 that is found between the ḥawāṣṣic section and the pharmacopoeia. As a matter of fact, this resemblance involves also a handful of passages shared by the two texts. To be more precise, five out of the nine passages collected in *Nat* III.2 have a virtually identical correlate in ALMADĀʿĪNĪ'S

parently dislocated epigraph on the hoopoe (cf. *Ḥawāṣṣ* 324¹⁰⁻¹⁴) and from an additional two clusters of passages quite randomly subsumed in the last chapter and which are related to dogs and bats (cf. *Ḥawāṣṣ* 325¹⁻⁴ and 325⁵⁻¹², respectively). Despite an explicit rubric «الذئب», *Ḥawāṣṣ* 323⁹⁻¹¹ may well belong to the same medical series discussed below. On a tangential note, the *Ḥayawān* reflected in ALMADĀʿĪNĪ'S treatise is far removed in its comprehensiveness from IBN ʿĀLĪ'S and IBN BUḤTĪŠŪ'S books on the subject and may be considered rather a *Ṭabāʿī*-cum-*Manāfi*, not unlike ALMARWAZĪ'S *Ḥayawān*.

¹ Cf. *Ḥawāṣṣ* II.1-5 (M 316₃-317₈). ALMADĀʿĪNĪ'S excerpts are overall closest (often word by word identical) to *Ahğār*^T, the exact correspondences being: *Ḥawāṣṣ* 316₆₋₁₁ ≡ *Ahğār*^T 105₂₋₉, *H* 316₁₇₋₂₀ ≡ *A*^T 120₄₋₈ (remarkably abridged), *H* 317₁₋₃ ≡ *A*^T 162₁₂₋₁₄, *H* 317₄₋₅ ≡ *A*^T 117₈₋₁₁₈. The general remark on “magnets” (ie stones possessing the power to draw gold, silver, etc to themselves) in *Ḥawāṣṣ* 317₆₋₈ has the same origin.

² Apparently within the extant epigraph on ruby in *Ḥawāṣṣ* 316₁₁₋₁₅ the text actually reproduces a passage from the entry on the carnelian stone in *Ahğār*^T 114₁₄-115₄. Then the following passage derives from the entry on the jet or *sabağ* stone, cf. *Ahğār*^T 124₉₋₁₀. Both are remnants of the entries from which ASSUWAYDĪ must have extracted his two quotations.

³ For the first quote from the *Filāḥah*, cf. an exactly identical wording in ARRĀZĪ, *Ḥawāṣṣ* ب-10 د ج (I 80r12-13). The “Aristotle” quoted on ivory in *Ḥawāṣṣ* 317₃₋₄ happens to be rather AṬḤŪRUSFUS, cf. ARRĀZĪ, *Ḥawāṣṣ* فيل 5 (I 85v 11-14). Even AṬṬABARĪ-ascribed passages are likely borrowed indirectly from the same source.

text. The latter is a much more comprehensive selection of geponic quotes, however, and such a level of coincidence is interesting but far from probative—statistics is a hard science and the evidence is too weak.

This sequence of *Filāḥah*-related passages ends as abruptly as it started only to give way to a new series of unrubricated paragraphs that focus almost exclusively on *medical* matters. The series is far from coherent but thematic affinity within minimal clusters reveals a sketchy head-to-toe arrangement, particularly beginning with oblivion, then epilepsy and oblivion again, the eyes, the ears, the teeth, the mouth, the neck (five consecutive passages on scrofulas), the heart, womb-ache, intercourse- and reproduction-related matters, and finally gout. For the same reasons adduced above, I suspect that this is the wreckage of a more systematic and probably also more complete organ/ailment-centred section in ALMADĀʿINĪ's original *Ḥawāṣṣ*. It is hardly conceivable that the author should have not at least provided some rubrics for his materials, as such a practice would defeat the purpose of a treatise that was conceived, in the author's own words, as user-friendly.

Regardless of this possibility, it is the contents of this segment that concern us here. The first passage in the series describes a collyrium made of a viper slough that avails against all ailments of the eyes and also blackens the pupil—that is almost word by word *Nat III ḤAWĀṢṢ III.1.15*, but the wording is actually already the same in AṬṬABARĪ, *Firdaws* 441_{17–18}. The next passage is not found in *Nat III* but it has a close match in *Saḡullōt VI.IV.4.*. As can be seen in Tables *****,¹ these sixty-odd passages comprised in Part II of *Ḥawāṣṣ* overlap large and by with the sum of quotes transmitted by *Natāʿiḡ*, *Iktifāʿ*, and the *Hārūniyyah*. It is not a vague resemblance but lexical identity to a much higher level than what obtains with any other representatives of the genre, and this is especially noticeable when the quotes are compared with the original sources from which they derive.

The cluster of remedies against oblivion in *Ḥawāṣṣ* [17–20] may contribute a more concrete piece of evidence. There are a few conspicuous differences in the

¹ The second column records the authors explicitly mentioned in ḤAWĀṢṢ (to the self-evident abbreviations, add IMW = IBN MĀSAWAYH). For *Nat III* the reference is to subsection, chapter, and passage; for the chapters preserved in *Saḡullōt* but not in *Natāʿiḡ* (ie on epilepsy and on fright), to page in line in LEIBOWITZ's and MARCUS' edition. Only the beginning of each passage is indicated. The information recorded in the last column of each table is incomplete; the meaning of the abbreviations used there is: *Fird* = AṬṬABARĪ, *Firdaws*; *Ḥaw* = ARRĀZĪ, *Ḥawāṣṣ* (folio and line in the Istanbul manuscript); *Ḥay* = IBN ʿALĪ, *Ḥayawān* (number of passage in RAGGETTI's edition). In addition to usual symbols, ⊕ indicates a noticeable reinterpretation of the original passage. Hereunder I shall refer to individual passages in *Ḥawāṣṣ* by their numeration in these tables.

exact wording of the passages, for sure, but the reader is encouraged to consider the odds of two authors selecting independently from each other the exact same sequence of four passages out of the mass of remedies against oblivion available in the corpus:

<i>Ḥawāṣṣ</i> 320 ₁₅₋₁₈	<i>Natāʾiḡ</i> II.iv
وقال: «عين الهدهد ولسانه، إذ غُلِّقا على الإنسان، نفعاً من النسيان».	قال الطبري: «إن أخذ لسان الهدهد وُحِّفَ وشُرب بطلاء، أذهب النسيان وأكثر الحفظ».
«وإذا شُرب لسان الهدهد محرقاً بطلاء، أذهب النسيان وأجاد الحفظ».	وقال: «إن غُلِّقت عين الهدهد ولسانه على مَنْ يعتره النسيان الكثير، اذَّكر ما قد نسي».
قال: «ومَنْ تدخَّن بشعر مَمَّ يعتره النسيان، أذهبه».	وقال الرازي: «إذا تُدخَّن صاحب النسيان بشعر إنسان، نفعه».
قال: «ومَنْ أكل خفَّاشاً، عاد حافظاً وقلَّ نسيانه وجاد حفظه».	وقال: «إذا أُدمن مَنْ به النسيانُ أكل الخفَّاش، عاد حافظاً وقلَّ نسيانه وجاد حفظه».

This four-passage sequence includes, moreover, two rather rare remedies and it is not a subset of any known treatise in which *ALMADĀʿINĪ* and *ALʿILBĪRĪ* could have found it. The missing node connecting these texts must have been a head-to-toe *ḥawāṣṣ*ic compilation later than *ARRĀZĪ* (who is explicitly mentioned by *ALMADĀʿINĪ*) but earlier than *IBN ALHAYTAM* (who already inherits this material), and we do not know that there were so many of them in circulation in the 10th c. That common source had some peculiarities too, such as a number of apomorphic readings by which the originally intended meaning of the passages had been quite radically transformed. Thus, the remedy for ptyalism that *Ḥawāṣṣ* [32] ascribes (incorrectly, like *Səḡullōt*) to *GALEN* is actually a very idiosyncratic misreading of a locus in the pseudo-Aristotelian *Aḡḡār* in which the opposite effect is attributed to onyx. So far I could find one single subtradition in the whole corpus (and in this case it is a large one, for it includes lithognomic texts) that inherits and transmits this apomorphy, and it is no other than the descendance of ^a*Ḥawāṣṣ*. More compellingly, that common source had incorporated a number of Dioscoridean passages, as proved by *Ḥawāṣṣ* [44], which even features the exact same transliteration of the Greek phytonym *κραταιόγονον* than *Səḡullōt*, each text showing its own distortion of the original spelling. That, again, was one of the major innovations, alongside the organ/ailment-centred arrangement, of the compiler of ^a*Ḥawāṣṣ* with regard to *ARRĀZĪ*'s modelic treatise.

The contribution of ALMADĀʿINĪ's sequence to the reconstruction of the parent text is substantial. It can occasionally help to decide the best reading when *Natāʿiq*, *Saḡullōt*, and *Hārūniyyah* disagree, as for instance *Ḥawāṣṣ* [25], which confirms that the key ingredient for the mixture in which the wick must be soaked is neither fat and wax (as in *Nat*), fat and gall (as in *Saḡ*), lion fat (as in *Nisyōnōt*), or vulture gall (as in *Hār*), but *vulture fat*. The correctness of this reading is corroborated by parallel passages in *Ḥayawān* literature and the derivation of all the variants in its sibling texts can be explained on palaeographic grounds.¹ Some of its misinterpretations of received passages are certainly similar to the ones shown by the author of the postulated parent text. Thus, in *Ḥawāṣṣ* [7] the teeth and hair of a hyena are described as an apotropaic device for children, but in the original passage in ARRĀZĪ's *Ḥawāṣṣ* these items are affirmed rather to prevent miscarriage. However, given that the edited version of ALMADĀʿINĪ's text contains its own exclusive apomorphies and in the absence of further evidence, there cannot be any certainty that those reinterpretations were already present in the parent compilation. With all due caution, it is quite probable that also the passages not shared with either of the Andalusī texts ought to be assumed to have belonged to ^α*Ḥawāṣṣ*. This seems to be the case for *Ḥawāṣṣ* [23], which is included in the parallel (according to my hypothesis, cognate) locus in *Hārūniyyah* explicitly ascribed to BALĪNĀS. Mark that the obviously corrupted reading «الخاوري» in *Ḥawāṣṣ* [29] can be safely emended as حلزون 'snail', which is the characteristic synonym used by the compiler of ^α*Ḥawāṣṣ* for the animal to which most other texts (from the Arabic translations of DIOSCORIDES to *Firdaws* and ARRĀZĪ's *Ḥawāṣṣ*) refer unanimously as *ṣadaf* (a blanket term for all kinds of shelled molluscs). The ascription to AṬṬABARĪ, in turn, is correct, for the origin of the quote can be located in *Firdaws*, where the animal involved appears to have been originally a frog (ضفدع), but as indicated by the editor of ALMADĀʿINĪ's treatise ALBALADĪ transmits an explicit quote from the same locus that reads indeed *ṣadaf* (صدف / ضفدع being, in either direction, a quite plausible misreading).

All the above considerations beg the question whether ALMADĀʿINĪ's *Ḥawāṣṣ* could actually be ^α*Ḥawāṣṣ*. At the moment there is not one simple answer to this question. It can be safely established that the treatise transmitted in the Ankara manuscript is definitely *not* the parent of the twin Andalusī texts on the specific properties of things. This *Ḥawāṣṣ* does not ever show a more complete text

¹ In the case of *Ḥawāṣṣ* [53], in turn, it is impossible to decide whether its reading (namely "dill") is better than "alum" in *Saḡ*, for the direct transmission of the source passage is divided between the two readings and, furthermore, the transformation of شَبْت into شِبْت (سب / سب in unpointed script) and vice versa can have happened spontaneously in every act of copy.

than what can be reconstructed from the combined testimony of *Natāʿiğ* and *Iktifāʿ*?—in fact, it often *abridges* the passages.¹ It further contains its own set of particular apomorphies and in all cases its reading is diachronically *incorrect*.² The most compelling argument, however, is the overall omission of the authorities to which the quotes should be ascribed. For the fifty passages included in ALMADĀʿINĪ's text only four explicit sources are provided—yet *Ḥawāṣṣ* I.1 shows clearly that the author was quite punctilious in the ascription of his passages and this might be a clerical omission.

Nor is this *Ḥawāṣṣ* a descendant of either Andalusī text. As shown in the concordance in the appended tables, there are several passages for which no parallel is transmitted in *Nat* III or in *Səğullōt*. At least one of these (*Ḥawāṣṣ* [23]) has a match in the *Hārūniyyah*, where it is explicitly ascribed to BALĪNĀS. Several others must stem from ^α*Ḥawāṣṣ* too and one can even guess from which exact chapter they were taken.³

In sum, regarding the head-to-toe sequence of passages transmitted by ALMADĀʿINĪ, statistics is clearly on the side of relatedness: the extent of the overlap between it and the family of texts represented by *Natāʿiğ*, *Iktifāʿ*, and *Hārūniyyah* cannot be satisfactorily accounted for by mere stochastic coincidence. Lexical identity and a number of synapomorphies define more precisely this relatedness as close cognacy: all these texts are siblings. A few of these synapomorphies are highly characteristic and distinguish the parent text from all other members of the genre. The chronological span for the parent text is also limited to approximately half a century, between the diffusion of ARRĀZĪ's *Ḥawāṣṣ* and the compilation of IBN ALHAYTAM's *Iktifāʿ*. That is essentially the definition of ^α*Ḥawāṣṣ*, of which the edited (and probably abridged) treatise of ALMADĀʿINĪ transmits a new fraction to be added to the three already dealt with in the preceding epigraphs.

¹ The only apparent exception to this rule is *Ḥawāṣṣ* [1], but *ğiddan* in the parallel locus in *Natāʿiğ* is quite irregular and ought to be suspected.

² Cf. especially *ḥadīq* instead of *ḥadīq* in *Ḥawāṣṣ* [1] (the correctness of the latter reading is confirmed by the source locus in *Firdaws*). In *Ḥawāṣṣ* [2] the green signet with the image of a scorpion engraved in it is described as an abortifacient, which is a reinterpretation born from a wrong parsing of the original text, where a *protective* power is attributed to this item, cf. *Səğ* VI.IV.4 for the correct reading. Whether this misreadings and reinterpretations are to be ascribed to ALMADĀʿINĪ or to the copyist cannot be inferred from available evidence.

³ Thus, *Ḥawāṣṣ* [8–9] are probably related to the *erotica* in *Nat/Səğ* VI.XIII; parallels for *Ḥawāṣṣ* [13] are found in *Nat/Səğ* II.VII. The gall of a hyena for the eyes in *Ḥawāṣṣ* [21] and the tooth of a hyena for the teeth in *Ḥawāṣṣ* [30] reflect an evident (and therefore non-significant) principle of analogy, but the position in the sequence strongly suggests that they may share a common origin with their respective neighbouring passages.

An additional datum that may be indicative of a connection to the western side of the Islamicate world is a reference in the probably dislocated cluster of passages on bats. There an intriguing synonym for ‘bat’ is said to have been *heard* by the author («*samiḥnā*») “from some people *in* [*bi-*] the Maḡrib”.¹

Finally, a hypothesis that may prove impossible to confirm must be mentioned here, namely that ALMADĀʿINĪ’s *Ḥawāṣṣ* might be the as yet unidentified source for a great number of passages in IBN ALBAYṬĀR’s *Almuḡnī* that must derive from some reflection (by descendance or by borrowing) of ^α*Ḥawāṣṣ* but cannot be located in *Saḡullōt*. As in so many instances throughout this study, the Arabic copy of *Iktifāʿ* may shed definitive light on this particular question and it would be certainly interesting if IBN ALHAYṬĀM’s treatise could be shown *not* to be the source.

¹ Cf. *Ḥawāṣṣ* 325₁₀₋₁₁. This western name of the bat reads «البطريضة» in the edited text and the footnote no. 199 to which the reader is referred is nowhere to be found. The name as transmitted in the Ankara manuscript is quite probably corrupt and even if it appears to contain a first element *bu-* so typical of animal names in Moroccan Arabic (cf. for instance, amongst the formally closest ones, *buferṭitu* ‘butterfly’), all lexicographic sources available to me register exclusively *ṭir lil* (literally ‘night bird’), cf. LERCHUNDI, *VEADM* 533b s.v. *murciélago*; SOBLEMAN–HARRELL, *DEM* 19a s.v. *bat*. But then, ALMADĀʿINĪ’s *Maḡrib* does not necessarily mean the far west. One might consider the possibility of a non-attested **bufarṭasah* ‘the mangy one’, ‘the bald one’, cf. CORRIENTE, *DAA* *{FRṬS} and, of course, the Late Latin type *calva sorice*. An entirely different explanation might involve a transcription of *νοκτερίς* (namely **niqṭariṣah*), which would not be impossible (not even implausible) in palaeographic grounds but is perhaps rather unwarranted from a linguistic perspective.

Source	Organ/ailment	Element	ALMADĀZĪNĪ	Nat	Səġ	Hār
1	eyes	viper slough	319 ₁₄₋₁₅	≅ III.1.15		<i>Firdaws</i> 44 ₁₇
2	abortifacient	scorpion signet	319 ₁₅₋₁₆		⊕ VI.IV.4	⊕ <i>Ḥay</i> 80.12 13
3	afterbirth	camel “fang”	319 ₁₆₋₁₇			prob. apom.
4	afterbirth+foetus	pigeon droppings	319 ₁₇₋₁₈	≅ V.v.8	+	+
5	gout	tortoise feet	319 ₁₉₋₂₀			<i>Ḥaw</i> 84v 8
6		frog feet	319 ₂₁₋₂₂			≅ <i>Ḥaw</i> 88v 15
7	child apotropaic	hyena teeth and hair	319 ₂₃₋₂₄			⊕ <i>Ḥaw</i> 88v 2
8	social acceptance	hyena vagina	319 ₂₄₋₂₅			<i>Ḥaw</i> 88v 3
9	<i>erotica</i>	hyena testicles	320 ₁₋₂			
10	flies	narcissus etc	320 ₃₋₄			
11	colic	dog (transference)	320 ₅₋₆			
12	dog bite	dog fang	320 ₇			<i>Ḥaw</i> 82r 10
13	curly hair	ram lung	320 ₈			
14	oblivion	hoopoe eyes, mole heart	320 ₉₋₁₀			
15	apotropaic	cockerel stone	320 ₁₁₋₁₃			
16	epilepsy	cockerel comb	320 ₁₄			
17	oblivion	hoopoe eye+tongue	320 ₁₅	II.IV.2	+	
18		hoopoe tongue	320 ₁₅₋₁₆	II.IV.1		
19		human hair	320 ₁₇	II.IV.3	+	
20		bat	320 ₁₈	II.IV.4	(+ <i>Muġ</i>)	

Table 1.9: Correspondence of ^a*Ḥawāṣṣ*-related passages in Almadāzīnī's *Ḥawāṣṣ*.

Source	Organ/ailment	Element	ALMADĀʿINĪ	Nat	Sāḡ	Hār	
21	eyes	hyena gall	320 ₁₉₋₂₁				
22		partridge gall	320 ₂₂₋₂₃	III.I.10	+		
23	ears	fox tooth	320 _{24-321₂}			BALĪNĀS Ḥaw 87r 6 (IMw)	
24		bull gall	321 ₂₋₃	III.II.6-7	+	+	
25	RĀZ	vulture fat	321 ₄₋₅	III.II.9	+	+	⊗ Ḥaw; Ḥay [46.3]
26		cattle gall	321 ₅₋₆	III.II.10	+		
27	GAL	bleeding	hen blood	321 ₆₋₇	III.III.2	+	
28		teeth	carnelian	321 ₈₋₉	III.V.5	+	+
29	ṬAB		حازون * < †	321 ₁₀₋₁₁			Fird 281 ₂₂ (صدف/ضفدع)
30		hyena tooth	321 ₁₂₋₁₃				
31		human tooth	321 ₁₄₋₁₅	III.V.7	+		
32	GAL	ptyalism	onyx/jaza3	321 ₁₆₋₁₇	III.VI.2	+	⊕ Ahḡār ^T 115 ₁₃
33		uvulitis	321 ₁₈₋₁₉	III.VI.1	+	+	
34		dumbness	monkey blood	321 ₂₀		III.VI.2	
35		scrofulas	sorrel	322 ₁	IV.III.1	+	+
36			donkey hoof	322 ₁₋₃	IV.III.2	+	+
37			weasel blood	322 ₄		IV.III.3	+
38			liquorice	322 ₅	IV.III.3	+	
39			fox kidney	322 ₅₋₆	IV.III.5	+	+
40	RĀZ	heart	musk	322 ₇₋₉	V.1.1	+	

Table 1.10: Correspondence of ^αḤawāṣṣ-related passages in Almadāʿinī's Ḥawāṣṣ.

Source	Organ/ailment	Element	ALMADĀZINĪ	Nat	Saġ	Hār
41	womb-ache	human/goat hair	322 ₁₀₋₁₁	VI.I.1	+	+
42		ewe dirt	322 ₁₁₋₁₂	VI.I.2		+
43	gender selection	bear gall	322 ₁₂₋₁₃		VI.II.2	
44		χραταιόγονον	322 ₁₃₋₁₆		VI.II.1	
45	proconceptives	mouse testicles	322 ₁₇₋₁₈	VI.II.1		+
46	[aphrodisiac]	wild carrot	322 ₁₉	≈ VI.X.5	+	+
47		hare rennet	322 ₁₉	≅ VI.II.4		
48		ādaryawūn	322 ₂₀	≅ VI.II.3		
49	gout	beaver skin (جد ستور)	322 ₂₁			⊕ Ḥay 30.19 (زيل ستور)
50		menstrual blood	323 ₁₋₂	VII.III.3	+	
51	child fright	wolf eye	323 ₁₀₋₁₁		30 ₁₄₋₅	
52		wolf teeth	323 ₁₁			
53	fright+snoring	dill (شبت)	323 ₁₂₋₁₃		30 ₁₂₋₃ (شبت < אלוים)	Ḥaw 86v 6 (شبت/شبت)
54	epilepsy	donkey liver	323 ₁₄₋₁₅			
55		donkey hoof	323 ₁₆			
56		stag horn filings	323 ₁₆₋₁₇		299 ₂₇ -300 ₂	
57		horse sweat	324 ₁₋₂		?300 ₂₋₃	
58	ALEX	coral stone	324 ₃		300 ₂₁₋₂₂	Ḥaw 80v 6
59		hedgehog gall	324 ₄			

Table 1.11: Correspondence of ^αḤawāṣṣ-related passages in Almadāzini's Ḥawāṣṣ.

1.5 Reconstructing the parent compilation: ^α*Ḥawāṣṣ*

There remains little to be added (other than rhetorical recapitulation) to the above discussion. Most of what I currently know and is worth telling about the ḥawāṣṣic materials transmitted in this constellation of texts has already been said. The complete story could not possibly be told here and some of the characters in that narrative are still too imperfectly known. If the argumentation has been so far highly interpretive, any further remarks must be perforce speculative.

Besides, the reconstruction of the parent text is not the main goal (not even a secondary one) of this dissertation but rather a byproduct of the analysis of the contents of *Nat* III. This could not be conducted without a survey of the corpus, and that inquiry has led to unexpected conclusions. I cannot foresee whether by the time I defend my thesis I shall still stand by my current assumption that there was an ^α*Ḥawāṣṣ* from which IBN ALHAYTAM and ALʿILBĪRĪ borrowed their materials. The task is not over yet and any new piece of evidence can alter drastically the picture drawn so far.

Let me put an end, by now, to this matter with a recapitulation of some of the essential features of this hypothetical parent text.

Head-to-toe arrangement

The absolute prevalence of the anatomical top-to-toe criterion in the arrangement of the information in most medical genres has been already noted in the survey of *Nat* II.2 in Part I of this dissertation. The application of the same criterion to medicine-centred *Ḥawāṣṣ* is just what might be expected in this context and from IBN ALHAYTAM's prologue (and perhaps also from ALMADĀʿINĪ's) we can see that the advantage of this layout was certainly acknowledged. Now, the emergence itself of a *medicine-centred* subgenre of *Ḥawāṣṣ* needs to be explained. Neither ARRĀZĪ nor IBN ALĠAZZĀR in his wake favoured that format despite their being physicians. A particular trend within the *Ḥayawān* thematic genre seems to have focused especially (but never exclusively) on uses and benefits with a medical application, yet that did never translate into a reform (in a structural sense) of the inherited animal-centred arrangement. The same holds true of *Aḥqār*: no genuine iatrolithognomics appears to have developed in the Islamicate tradition and the pseudo-Aristotelian order of the items (which might respond to some scale of nobility) was kept large and by unaltered by later representatives of that genre.

The epistemic tradition of *Ḥawāṣṣ* contrasts with those two allied thematic genres in its comprehensiveness (its materials are not limited to one single realm) and in this regard it comes close to pharmacognostics, and only

slightly less so to trophognostics.¹ Within *Ḥawāṣṣ*, organ/ailment-centred medical *Ḥawāṣṣ* is distinguished both by its almost exclusive focus and by its arrangement of the materials from item-centred *Ḥawāṣṣ* and also from *Ḥayawān* and *Aḥḡār*, and only by its layout from *Mufradah*. On a structural and thematic level it overlaps largely, in turn, with therapeutics, of which it could even be considered a subgenre defined by its absolute reliance on simple drugs attributed with a specific property. From this perspective, head-to-toe *Ḥawāṣṣ* could even be seen as an Islamicate update of the Graeco-Byzantine *Euporista*.

Differences between the traditional *Euporista* and head-to-toe *Ḥawāṣṣ* are nevertheless substantial and no continuity can be presumed to have obtained between these two genres. The systematic sourcing of the quotes described in Chapter 1 shows clearly that at least in its standard formulation *Ḥawāṣṣ*, whether item- or organ/ailment-centred, is a cohesive continuum distinct from other genres from which it actually derives its materials. It is therefore within *Ḥawāṣṣ* that one should look for the precedent of IBN ALHAYTAM'S *Iktifāʾ*,² for he was certainly not the first to apply this structural criterion to his materials—nor was the compiler of ^α*Ḥawāṣṣ* if my hypothesis is accepted.

There is at least one ninth-century precedent that might have provided the blueprint and perhaps even the basic materials for this Andalusī compilation, namely IBN MĀSAWAYH'S *Dikru ḥawāṣṣa muḥtabarah ṣalā tartibi lʿilal*. The text, however, is exceedingly brief and judging from his own *Ḥawāṣṣu lʿaḡḡiyah* or from the ḥawāṣṣic materials incorporated into his *Ḥummayāt*, it is possible that no sources are mentioned in it, which would rule it out as the Vorlage of ^α*Ḥawāṣṣ* or *Iktifāʾ*.³ On typological grounds, however, IBN MĀSAWAYH would certainly be a perfect candidate to be the contributor of pre-Iṣṭifanī Dioscoridean passages combined with Galenic materials and showing archaic terminology and his explicit association (albeit not necessarily as an author) with a *Ḥayawān* text in ARRĀZĪ'S *Ḥawāṣṣ* might even explain the obscure origin of the quotes ascribed to an anonymous *Book of animals* in ^α*Ḥawāṣṣ*. Given the early presence of his *Nuḡḡh* in Andalus, moreover, the co-circulation of these two text would not be altogether impossible. And yet this whole paragraph shall probably be nullified by a quick look at the Ayasofya manuscript that transmits this text.³

¹ For no other reason than the obvious fact that minerals (with the exception of salts and some kinds of earth) could have hardly entered the standard catalogue of edibles in the Helleno-Islamicate tradition.

² With the only exception of the passage on a fox's teeth in ARRĀZĪ, *Ḥawāṣṣ* ث-1 ث (I 87r 6–8), all the ḥawāṣṣic passages related to IBN MĀSAWAYH mediated by ARRĀZĪ stem ultimately from *Ḥummayāt*, which is explicitly mentioned as the source. The only exception are the properties of the emerald and the ruby, which, by the way, do not derive from his *Ġawāhir*, cf. ARRĀZĪ, *Ḥawāṣṣ* ز-2 زمرد (I 80v 14–15) and ياقوت-3 (I 82r 7).

I know of no other head-to-toe *Ḥawāṣṣ* text prior to *Iktifāʿ*, which makes it the earliest extant dated representative of this genre in the western tradition.

A particularly exacting use of the sources

Whether it was an earlier now-anonymous compiler or IBN ALHAYṬAM himself, someone gained access to a copy of ARRĀZĪ's *Ḥawāṣṣ* and extracted from it a remarkable amount of quotes. So far there is nothing special with such a task and pretty much the same was done by IBN ALĠAZZĀR, by ALBALADĪ, by ALQALĀNISĪ. The differential trait of ^α*Ḥawāṣṣ*, however, is that those passages were not simply used as a blueprint into which additional materials could be intercalated, nor were they appended as semi-autonomous blocks within a larger text. The incorporation of passages from an item-centred list into an organ/ailment-centred treatise necessitated a redistribution of the materials on an individual basis. One by one quotes related to stags, vipers, spiders, etc were relocated in the chapters on epilepsy, quinsy, fevers, etc. After having spent so many hours basically reverting that work, I know only too well the implications of such a task. Moreover, the anonymous compiler (or, again, IBN ALHAYṬAM) combined the topological distribution of the passages with a chronological criterion that is evident even in the prologue of *Iktifāʿ*. Specific properties reported by GALEN, ALEXANDER, AṬHŪRUSFUS, BALĪNĀS, IBN MĀSAWAYH were noted down in that precise order and not help in this regard could be expected from the source text.¹

The compiler's task was not much easier in the case of AṬṬABARĪ's *Firdaws*. Some specific properties are extracted, to be sure, from the therapeutical section and their relocation was relatively straightforward. Most passages, however, stem from the animal-centred zootherapeutic chapters and the required the same painstaking redistribution. That essentially the same operation was conducted on DIOSCORIDES's *Materia medica* and on GALEN's *Simpl. med.* is admittedly puzzling. Even if the likelihood of the use of a pre-existing compilation of Dioscoridean-Galenic materials cannot be discarded, the authorial work at the origin of ^α*Ḥawāṣṣ* is impressive and can only be compared to that of Andalusī *Ġāmiʿ* authors, whose task was greatly facilitated by the fact that most of them worked on sources that were already arranged according to the same criterion.²

³ Its is Istanbul, Ayasofya MS 3761/5, fols. 332v–336r according to SEZGIN 1970: 234 no. 12.

¹ To give just one example, in the entry on the oak-snake (*alʿafṣā lballūṭiyyah* ≡ δρυῖνας) in ARRĀZĪ, *Ḥawāṣṣ* 1–4 (I 79r 9–18) the order of the passages is (PSEUDO-)GALEN (*Ther. ad. Caes.*), AṬṬABARĪ, AṬHŪRUSFUS, GALEN (*Simpl. med.*).

² At an even earlier phase a similar redistribution of the original materials according to an alifatic

An expert in Dioscorides

From the analysis of *Nat* III and allied texts a number of identifications have emerged some of which improve on IŞTIFAN's translation of *Materia medica* and most of which differ from other known equivalences both in Andalus and elsewhere. A systematic comparison of all available witnesses must be conducted, however, in order to reach any definite conclusions. Such a survey must include the *Vetus* translation and also all echoes of even earlier paraphrases of DIOSCORIDES's text, either quoted directly from the Greek or mediated by Syriac versions. Perhaps then some certainty could be gained as to which linguistic features of this Dioscoridean material are to be ascribed to the compiler and which stem rather from his unidentified Vorlage.

As stated above when dealing with *Iktifāʿ* and as shall be shown below in Chapter 3 in the epigraph devoted to DIOSCORIDES as a source for *Nat* III, IBN ALHAYTAM was one of the few physicians that in mid/late-tenth-century Qurṭubah were especially devoted to the identification of the items that IŞTIFAN had left untranslated and simply transcribed in *Hašāʿiṣ*. That there never was any commission shall become clear there, but that an intense pharmacognostic activity took place in Qurṭubah during that period cannot be doubted. Far more than the prologue of *Iktifāʿ* (which, like most proems, is full of *topoi* and borrowed elements) and than any chronological considerations, it is this status as a qualified expert in DIOSCORIDES' texts and an adept to pharmacognostic identification that lends some force to the possibility that IBN ALHAYTAM may have been at the epicentre of the tradition that I have labelled here as ^a*Hawāṣṣ*. I still think that there is too much evidence against this assumption, but I admit that many may prefer a well-known name and a tangible treatise over an anonymous untitled compilation the existence of which is probably condemned to remain inferential.

Chronology

The plausible chronology of the arrival of some of ARRĀZĪ's texts in Andalus has been given some attention in Part I, where the inaccuracy of the date of his demise in 925 as a *terminus post quem* has been also discussed. The question of

order must have been conducted, but later compilers elaborated mostly on pre-existing alifatically ordered catalogues of simple drugs. Amongst those that apparently did not but rather accessed *Hašāʿiṣ* and *Mufradah* directly, it is worth noting that IBN WĀFID deviates from common practice and follows rather the Qayrawānī tradition of arranging the simple drugs according to their degree of intensity—yet he combines this criterion with the Galenic (and partially already Dioscoridean) division into drugs of plant, animal, and mineral origin.

the earliest date at which ARRĀZĪ's *Ḥawāṣṣ* might have been available for an Andalusī physician to draw complementary quotes from it is closely connected to that discussion. However, there are too many *ifs* involved. If IBN ʿABDIRABBIH's *Dukkān* was compiled roughly at the same time as his *Urjūzah* and if ARRĀZĪ's *Ḥawāṣṣ* had travelled alongside his *Aqrābādīn*,¹ then the *terminus post quem* for might be as early as the 930s. That would leave plenty of time for the production of a ^α*Ḥawāṣṣ* prior to *Iktifāʾ*?

Turning the attention now to the Dioscoridean materials in *Nat III* and its textual family, one might easily surmise that the innovative identifications found in that tradition must be somehow linked to the Andalusī transmission of *Materia medica*, which would again point towards IBN ALHAYTAM as the possible author of those identifications. In this regard IBN ĞULĞUL's probable prologue to *Tafsīr* as preserved by IBN ABĪ USAYBĪFAH (for which see Chapter 3.***sect/ref) provides an interesting piece of information that is usually overlooked and which suggests that the local interpretation of *Ḥašāʾiṣ* may have much older roots than often acknowledged. Much attention is devoted to the alleged Qurṭubī commission (which is actually nowhere mentioned in that text) but IBN ĞULĞUL informs us that IṢṬĪFAN's Arabic translation was already available in Andalus prior to the arrival of the Byzantine embassy. That there was not a soul in Andalus able to understand the text must be interpreted, no doubt, as a rhetorical exaggeration by an interested party. Moreover, Qurṭubah was already the locale of a particularly active pharmacognostic community when the Byzantine monk NIQŪLĀ arrived in the city. His knowledge of Greek must have greatly facilitated the task of those Andalusī scholars but he did certainly not originate that tradition. As seen above, IBN ALHAYTAM was one of those Qurṭubī physicians mentioned by IBN ĞULĞUL and he was thus in a perfect position to supply the equivalences of those items that remained unidentified in *Ḥašāʾiṣ*. The evidence provided by the actual texts clashes, however, with the narrative of the Qurṭubī revision of which IBN ĞULĞUL might reflect the official results and also with the straightforward identification of IBN ALHAYTAM as the pharmacognostic lying behind the Dioscoridean materials transmitted in *Nat III*. The example of *Materia medica* 2:55 αἰθυα is quite telling of the contradictions implied by that narrative. If IBN ALHAYTAM is to be credited with the identification of IṢṬĪFAN's اثوا (ايشويا* >) ≡ αἰθυα) as a water duck (*baṭṭu lmāʾ*?), then his informant cannot have been the same that inspired IBN ĞULĞUL's نغرة/نغير (on which see Chapter 3.1.2).

¹ As shown in Part I, ḤAWĀṢṢ certainly predates *Aqrābādīn* and an early cotransmission of the two texts is by no means implausible.

An idiosyncratic reader and a committed physician

I would like to close this chapter on an empathetic note. When discussing here (and also in Chapters 3–4) the peculiar apomorphies shown by the text handed down by ^a*Hawāṣṣ* I have been a little too hard on its compiler. While it is true that the relative frequency and above all the quality of the innovative readings of that text are quite exceptional, most authors in the Islamicate tradition (and, to be sure, also in other linguistic and cultural contexts) have their fair share of misreadings and reinterpretations. That much has become obvious to me after devoting some years to the survey of the written corpus.

Some of the apomorphic reinterpretations signalled for this textual family may not even be datable to the original compilation and might have been introduced later in the transmission (cf. particularly the ambiguous evidence on jasper/alum/dill or vulture/he-goat). Others are to be partially justified by the nature of the material sources. It is hard to imagine what may have looked like a tenth-century copy of *Hašāʾiṣ* or of ARRĀZĪ's *Hawāṣṣ*, but it may not have been the easiest text to decipher. Misreadings such as *عش* > *رجل* > *زبل*, *كراث* > *غراب*, or *عش* > *عین* (probably also *حباری* > *خفّاش*) show that the manuscript (or manuscripts) was largely unpointed and not precisely a high-end product.

Whether the now-anonymous compiler was a somewhat distracted reader or rather had the worst of lucks with his Vorlages we may never know. That he cared enough to try to make some sense of his misreadings, in turn, cannot be doubted. The latter trait tallies quite well indeed with his strenuous effort to produce a remarkably comprehensive and physician-friendly treatise apparently unprecedented in the Hellenic-Islamicate tradition. Its fortunes not only in the west but also in the east (if I do not err in my analysis of ALMADĀʾINĪ's *Hawāṣṣ*) are a testament to its perceived usefulness amongst its intended readership (ie physicians). Only the author of the ultimate *Ġāmiʿ*, IBN ALBAYṬĀR, would follow that lead and put together, three centuries later, the disproportionately larger (and therefore unwieldy and far less readable) *Almuḡnī*.

On the specific properties of things

«وقد كان الواجب عليهم، لو كانوا أهل رأيٍ وثبَّتِ وتوقَّفِ، أن لا يُبادروا إلى إنكار ما ليس عندهم على بطلانه برهانٌ — فإِنَّه ليس البرهان على إخبارنا أَنه قد كان كذا وكذا بأوجب منه على إخبارنا أَنه لم يكن كذا وكذا. فلو لم يكن في هذا الأمر إلا هذه الواحدة، لوجب منه التوقُّف والتثبُّت عن دفع ما لا يوجد على دفعه برهانٌ وتزكّه موقوفًا إلى أن يُصحَّح أو يُبطل برهان.»

«Our modern choice of terms shapes the very questions that we bring to these late antique objects. Thanks to contemporary scholars, the term ‘magic’ is no longer used to mean ‘incorrect science’ or ‘incorrect religion.’ Magic overlaps (rather than competes) with religion and medicine. Magical thinking – regardless of venue – is an act of faith in which individual belief itself, embedded in language, is the seat of power.»²

An exploration into rationality

As shown already in the previous chapter, the mischaracterisation of the knowledge of the specific properties of things as either irrational medicine or magic has longstanding roots and nowhere is it more prevalent than in the historiography of the Islamicate science. A look at the diachronical manifestations of the concept, however, may give quite a different impression about how “irrational” this doctrine may have been in its origin. In this chapter, which made it into the

² ARRĀZĪ, *Ḥawāṣṣ* Proem (I 77v 5–9 | V 1r 6–10) and TUERK-STONBERG 2021: 3, respectively.

final draft in the very last minute, some notes are collected for a future systematisation of the subject. For obvious limitations of time and space, some fundamental subjects as, for instance, the capital rôle of experience (πειρα \equiv *tağribah*) in the validation of this particular knowledge, or the fascinating interfaces of the lore of the specific properties with so-called magic and with religion, had to be excluded from this survey.

By leaving undiscussed the links between the science of the *ḥawāṣṣ* and the multiple manifestations of what is traditionally labelled as magic a bias is certainly introduced. This bias is only enhanced by the decision to prioritise the intersection of this knowledge with pharmacognosy and medicine. But then that it precisely the express intention of much of this chapter. The link of the science of the specific properties to the so-called magical arts has never been doubted—if anything, it is in fact universally overrated—and therefore it is its prevalence *also* in sciences and professions of unblemished reputation as to their rationality that needs to be emphasised. My insistence in this regard is only proportionately reactive. Moreover, *Nat* III is a typical representative of medicine-centred *Ḥawāṣṣ* (as opposed, for instance, to ARRĀZĪ's treatise) and all other applications of the specific properties of things are almost entirely excluded from the anthology. There is no reason to misinterpret the medical nature of the text by imposing onto it a conceptual frame that was quite probably alien to its author. He was definitely not compiling a collection of magical recipes, nor did he consider that the remedies that he transmits from DIOSCORIDES, GALEN, ALEXANDER OF TRALLES, or AṬṬABARĪ were in any meaningful way related to “magic” as reflected, for instance, in the *Ġāyah*.

A few friendly reminders to the reader: the recurrent coinage ‘ḥawāṣṣic’ is a provisional solution to the lack of an adjective relative to specific properties and it refers also to the involvement of a specific property (a *ḥāṣṣīyyah*) in any given procedure (eg ‘ḥawāṣṣic remedy’ or ‘ḥawāṣṣic therapeutics’). When not preceded with the name of an author, *Ḥawāṣṣ* is a label for an epistemic genre, whereas ‘the ḥawāṣṣic corpus’ refers here to the summation of all written manifestations of this concept across genre boundaries, be it as isolated items, epigraphs, chapters, or monographic treatises. Then, ‘medicine-centred *Ḥawāṣṣ*’ is, as explained in the previous chapter, a subgenre within the written tradition of the knowledge of the specific properties, *Nat* III and its textual family being the major (but not the sole) representatives thereof. Accordingly, ‘medico-ḥawāṣṣic’ is used on occasion as a specification of a medical (or medicalised) utilisation of a property, as distinguished from non-medical uses—although in some limit cases the difference between medical and non-medical approaches to an issue becomes rather blurry.

Last but not least, the fact that in the final version of this dissertation only a sample of the commentary to *Nat* III could be included has prompted me to offer here as wide a preview as possible of the contents of that section. This has resulted in a number of digressions and side-notes that were perhaps better justified in their original context than in this chapter, but here, as elsewhere in this study, I have adhered to the guiding principle of inclusiveness—with the hope that in the future a more aesthetic and better organised arrangement of the materials may be implemented.

2.1 On concepts and names

The basic idea that underlies the concept of ‘specific property’ is that some beings (mostly, but not exclusively, animals, plants, and minerals) have an intrinsic capability to produce a certain effect the cause of which has hitherto eluded all attempts to provide an analytical or logical explanation. By analytical or logical explanation I mean the epistemic framework within which an active or efficient cause other than mere chance or divine intervention is sought in order to account for a perceptible effect.¹ There is, moreover, an unequivocal sense of contingency associated to this lack of rationale (hence the inclusion of ‘hitherto’ in the above definition) at least as far as the early Islamicate scientific tradition is concerned: what the present generation is unable to reduce to a conventional cause-and-effect relationship might be elucidated by future, hopefully wiser, generations.

In this regard the knowledge (otherwise science) of the specific properties of things would not be different in its theoretical approach from any other epistemic tradition focusing on natural phenomena, and its programmatic cumulative nature could have translated into actual *progress* in the sense that ARRĀZĪ, writing at the turn of the 10th c., might have been better informed about the quiddity and mechanics of the properties that he collects than the authors (some of them as ancient as THEOPHRASTUS) from whom he borrows them. By the same token, had any genuine inquiry been conducted in the “science of the specific properties” (the phrase *ʿilmu ḥawāṣṣ* is actually well documented in the corpus), ZUHR, and even more so IBN ALBAYṬĀR, should have known more *about* the specific properties than their predecessors. All evidence shows, however, that even if later authors usually knew (or at least garnered) more—but not *new*—specific properties and despite the apparent reiteration of experiments on the efficacy of a few of them,² no noticeable change was introduced in the ac-

¹ Both “*scientific* explanation” and “*philosophical* explanation” may have elitist implications and do not reflect properly the noetic approach to the subject of *all the agents* involved in the tradition—such qualifications may be unproblematic when discussing the doctrines of ARRĀZĪ or DEMOCRITUS, for instance. A fortiori I deliberately avoid resorting to the adjective ‘rational’ throughout this research (except, of course, when translating from the original texts) because of its positivistic and potentially demeaning overtones. Insofar as it is opposed to ‘irrational’, it is not only overtly anachronistic but also takes for granted a dichotomy that, as has been shown once and again, is most unhelpful to the study of this matter. The wish to explain the universe has never been a prerogative of “philosophers” and “scientists” and there have always been many more ways to attempt this explanation than what would be currently qualified as “rational”.

² I shall not delve into this polemic matter here (it would take me too far from my main subject), but the reader may infer that I have no qualms about using the word ‘experiment’ (and alterna-

tual concept of specific property. In other words, the knowledge of the specific properties is a paradigmatic example of tralatitious ἐπιστήμη and its materials (ie the quotes and passages through which it is transmitted) are essentially written artefacts, to the point that a typical *Ḥawāṣṣ* text can be aptly described as an anthology in which the authorial voice may only sporadically been read in the form of glosses, scholia, or remarks of approval. Overall it is, in one simple word, an essentially *bookish* knowledge.¹

The above consideration ought to be substantiated, of course, with concrete examples and elaborated on within the much wider context of epistemic literature (alternatively known as texts on science and technology) in an Islamicate context. That might be the preamble to a history of the *Ḥawāṣṣ* genre that remains to be written. In what concerns the actual object of analysis here, suffice it to highlight that there is nothing either in the concept itself of specific property or in the intellectual approach to its study and transmission that might point towards a context of non-rationality. This branch of science is not essentially different from the knowledge of other natural phenomena, although it is admittedly less dynamic and less open to development at least with regard to the theory that underpins it.

This concept of specific property is expressed in Arabic (and through borrowing also in Persian, Urdu, etc) by three derivatives of the lexeme $\sqrt{ḥṣṣ}$, which conveys a general meaning ‘to distinguish particularly or specifically’, ‘to char-

tively also ‘trial’) as the most natural and straightforward equivalent of the Helleno-Islamicate $\pi\epsilon\iota\rho\alpha$ / *taḡribah* (*experimentum* in the Latin tradition) when used in a concrete sense (ie as an action noun), nor accordingly about ‘experimented’ (occasionally also ‘tried’) for $\pi\epsilon\pi\epsilon\rho\alpha\mu\acute{\epsilon}\nu\omicron\nu$ / *muḡarrab*. It is obvious that no experimentation in pre-modern times can be equated, in absolute terms, to modern scientific *testing* (and therefore I do avoid the word ‘test’), but resorting to the euphemistic ‘experience’ does not bring, in my opinion, any improvement over the taboo word, since being rather an abstract noun it is either unnecessarily ambiguous or necessitates cumbersome periphrases to convey quite a simple thing. The opposition to this terminology, moreover, is far from universal, and such a qualified scholar as LLOYD 1964: 68–70 could allude without any problem to the “practical tests” in the Hippocratic collection.

¹ This affirmation would need to be nuanced, however. Whole categories of drugs that were considered to be efficient through a specific property were certainly used in therapeutics (purgatives and emetics, for instance) and there is some evidence for the integration of *ḥawāṣṣic* lore into actual medical practice beyond dubious references to experimentation. In Chapter 3 a passage from IBN ALBAYṬĀR’s *Almuḡnī* shall be quoted according to which the ZUHR dynasty of physicians resorted to emerald power for the treatment of internal blood discharge, which is exactly the ailment against which the specific property attributed to that gem was affirmed to avail. It is quite evident that to the different classifications of the active elements that shall be discussed below an additional spectrum ought to be added ranging from those that are documented in real practice to those that are pure pure bookish artefacts (but assessing the level of “reality” may prove to be an exceedingly difficult task).

acterise' someone of something by some peculiar trait.¹ These three words are *ḥāṣṣah*, *ḥāṣṣiyyah*, and *ḥaṣūṣiyyah/ḥuṣūṣiyyah*,² which are strict synonyms.³ The first two, in fact, are often hardly distinguishable in manuscript transmission (being written حاصه and حاصه respectively in unpointed script). In the plural, in turn, all three words converge in the form *ḥawāṣṣ* (with only a marginal attestation of *ḥuṣūṣiyyāt* in a particular, rather than generic, sense).

In the context of the transference and assimilation of Graeco-Byzantine knowledge into the Islamicate tradition *ḥawāṣṣ* is, of course, the translation of a foreign concept, but unlike *hayūlā* or *falsafah*, it is one that could be (and actually was) immediately grasped even by a lay person and could also be quite easily *added* to the semantics of a pre-existing Arabic word. That is the reason why instead of tackling directly the equation δύναμις = *ḥāṣṣiyyah* I shall try hereunder to show how this semantic integration was virtually seamless and that there is just a matter of gradual specification that leads from *ḥawāṣṣ* as general characteristics to *ḥawāṣṣ* as specific properties that can produce an unexplained effect.⁴

¹ Cf. LANE, *AEL* 746 s.r. √خص. In most senses √ḥṣṣ is opposed to √ḥmm but this is of no consequence here, since “generic properties” is not a working category in the Helleno-Islamicate tradition.

² According to normativist lexicographers, *ḥaṣūṣiyyah* (with an /a/) should be considered the chaster form, whereas *ḥuṣūṣiyyah* (with a /u/) is usually disregarded as exclusive to the populace, cf. IBN HIŠĀM, *Taqwīm* I 64₄₋₅. Since virtually none of the texts in the corpus under study is vocalised, there can be no certainty as to the exact realisation of the word in each particular case. In view of the not exceedingly high level of compliance with the *Fuṣḥā* norms shown by some texts in the corpus (especially by the pseudo-Aristotelian *Aḥḡār*, which is one of the main sources for the use of this particular word) I provisionally lean towards the more popular form and I shall simply use *ḥuṣūṣiyyah* throughout instead of doubling the word every time as “*ḥaṣūṣiyyah/ḥuṣūṣiyyah*” or introducing a rather unpleasant hybrid form “*ḥa/uṣūṣiyyah*”.

³ In what follows it is the *concept* of specific property that shall be analysed and therefore all three words will be dealt with in undifferentiated manner. From a diachronical (and also philological) point of view, however, a survey of their distribution would be most interesting, and particularly the presence of the word *ḥuṣūṣiyyah* in a later text is often indicative of intertextual dependence. On the other hand, the duality of words *ḥāṣṣ(iyy)ah* and *ḥuṣūṣiyyah* appears to go back to the early Graeco-Arab translations, as can be seen in the passages quoted throughout this chapter.

⁴ These preliminary remarks are perhaps unessential to the study of Islamicate *Ḥawāṣṣ* as a genre, but they may nevertheless be of some interest to demonstrate (1) that despite being ultimately an imported concept the specific properties were never seen by Islamicate authors as entirely alien either in form or in contents, and (2) that there is no breach of rationality whatsoever at any point in the path that connects the particular features of an elephant, the almost universal belief in national characters, and the inexplicable power of the magnet stone to draw the iron towards itself. There is therefore little justification to describe the former two as representative of rudimentary zoology and ethnography, whereas most instances of the latter

Characteristics

The original meaning of ‘characteristic feature’ or ‘trait’, which must predate the period of Graeco-Arabic translations, is abundantly documented in the written corpus. It is as *hawāṣṣ* that the still anonymous translator of ARISTOTLE’S zoological works renders παθήματα in a descriptive context:¹

Hist. anim. 486a 25 – 486b 8

Ḥayawān I (B 7₁₀₋₁₃)

Διαφέρει δὲ σχεδὸν τὰ πλείστα τῶν
μορίων ἐν αὐτοῖς παρὰ τὰς τῶν πα-
θημάτων ἐναντιώσεις, οἷον χρώματος
καὶ σχήματος, τῷ τὰ μὲν μᾶλλον αὐτὰ
πεπονθέναι τὰ δὲ ἥττον, ἔτι δὲ πλήθει
καὶ ὀλιγότητι καὶ μεγέθει καὶ σμικρό-
τητι καὶ ὄλως ὑπεροχῇ καὶ ἐλλείψει.

وكثرة أعضائها تختلف من قبيل دُمِّيَّات
خواصها، مثل اللون والشكل. فإنَّ ذلك يعرِد
لبعضها أكثر ولبعضها أقل، وتختلف أيضًا
بالكثرة والقلة، والعظم والصغر — ويقول
كَلْبِي: بالزيادة والنقص.

Such particular traits can be predicated of humans as well, even to whole ethnic groups, as when ŠĀḤĪD AL-ĀNDALUSĪ attributes to the Persians a particularly outstanding commitment to medicine:

ومن خواص الفرس: عناية بالغة بصناعة الطب.

The geometrical properties of some forms are referred to by the same word by ASIĞZĪ (d. ca 1020) in a book inscribed in fact «*fī ḥawāṣṣi lqubbati zzāʿidati walmukāfiʿah*»,² and the same use is shared across genres from belletristic texts to manuals of astrology.³

category are classed as magic. On the other hand, although some of the considerations below are supported by Greek materials and might even be applicable to some extent to the Graeco-Byzantine tradition, my main focus here lies on the Islamicate corpus.

¹ The ascription of the translation of all nineteen books to IBN AL-BIṬRĪQ goes back to IBN AN-NADĪM, *Fihrist* 25¹²¹⁻²² (where an old Syriac version is also mentioned) but it was challenged on linguistic grounds by ENDRESS 1966: 113–115 [n.v.], who proposed rather UṢṬĀṬ (= EUSTATHIUS) as the actual translator. However, evidence is as yet inconclusive and while it seems highly plausible that the text was translated either in the same “school” or by UṢṬĀṬ himself at an earlier stage in his career, “[a]t present we lack the means to solve this problem” (BRUGMAN and DROSSAART 1971: 10).

² Cf. particularly the opening of the treatise as edited in RUSHDĪ 2004: 191.

³ Thus, the qualities of the essential natures are referred to as their *hawāṣṣ* by ABŪ MAṢŠAR in *Madḥal* I.4 (B–Y 96₁₃–98₁₉). In the IḤWĀN’S paraphrase, Pythagorean philosophers attribute as *ḥāṣṣīyah* to each number, cf. *Rasāʾil* III.27 (R–M 96₅–99₄).

These *ḥawāṣṣ* can also be *diagnostic* traits, as when IBN MĀSAWAYH describes the signs of quotidian fevers:¹

Ḥummayāt 4v 4–5

الخواص المبيّنة الدالّة على حمّى يوم ستّة. فالخاصّة الأولى: أنّ سبب حمّى يوم حادث ليس
بمتّقاد ولا مزمن.

Or they can be the particular colour, taste, power, movement, and abode of the four physiological humours, which shows that the concept is not exclusively predicative but can also be associative:

AṬṬABARĪ, *Firdaws* II.1.8 (§ 428–12)

. وقال جالينوس إنّ المزاجات تسعة: أربعة مفردة وأربعة مركّبة، [...] ولكلّ مزاج من
المزاجات الأربعة خاصيّة من لونٍ وطعم وقوّة وحركة ومسكن.

In general, in native production as well as in translation, *ḥawāṣṣ* are simply characteristics that are both natural and perceptible by the senses and which differentiate individuals, species, or even higher taxa from other members of the same category.

Some quite particular characteristics

A more concrete nuance of ‘characteristic’ or ‘property’ obtains when a feature possessed by a certain being is singled out not only as distinctive and even exclusive but also as remarkable—even wondrous. Just like in the more general sense, this being particular or characteristic is regularly conveyed in Greek by the adjective ἴδιος (also in the superlative ἰδιαιτάτος) and finds a reflection in Arabic *ḥuṣṣ* too.² According to another book within the same collection by ARISTOTLE:

Part. anim. 658b 33–35

ὁ δ' ἐλέφας ἰδιαιτάτον ἔχει τοῦτο τὸ
μόριον τῶν ἄλλων ζῴων· τὸ γὰρ μέ-
γεθος καὶ τὴν δύναμιν ἔχει περιττήν.

Ḥayawān XII 1098–9

وأما الفيل، من بين سائر الحيوان، فله
في هذا الجزء خصوصيّة ليست هي لسائر
الحيوان؛ لأنّ في آلة مشمته قوّة شديدة
وعظماً فاضلاً.

¹ Probably paraphrasing GALEN's *Diff. febr.*, cf. the same phraseology in ARRĀZĪ, *Alḥawā* XIV (H XIV 195 | B 2209_{13–17}). For a slightly different meaning of *ḥawāṣṣ* also within a medical context, cf. also GALEN, *Aḡlawqun* II (P 313v 16 – 314r 5).

² There is, of course, no imaginary line separating these two nuances, which are distinguished here expressly to draw a sort of semantic gradient that need not have any actual linguistic validity but may still be used as an expository device.

Such ἰδιὰ need not be physical and in zoographic literature indeed they focus largely on behavioural traits.¹ This use shall be inherited by Islamicate polythematic *Ḥayawān* texts either as *naṣt* or as *ḥāṣṣīyyah*, although a less ambiguous reference to the ‘nature’ (*ṭabīʿah* ≡ φύσις) of the animals is favoured by some authors. But all these are still *ineffective* properties, mere morphological and ethological features of purely descriptive interest. A closer link to the specific properties of the *Ḥawāṣṣ* genre is provided, in turn, by the conceptual association of the particular characteristics of the winds to their *effect* on nature:

IBN QUTAYBAH, *Amwāʾ*? [190] (H 1616-7)

قال مؤرخ: «من خواص الجنوب أنها تثير البحر حتى تسوده، وتظهر كل ندا كامن في بطن الأرض حتى تلين الأرض.»

This use is not derived from Graeco-Arabic translations but it appears to reflect a native development. On the other hand, it is quite obvious that such *ḥawāṣṣ* can hardly be utilised by humans, yet one would only need to substitute a stone or a herb for the southern wind and the human body for the sea and the earth in the above quote to obtain a perfectly canonical *ḥawāṣṣic* passage.

The specific *specific properties*

The preceding preamble may have hopefully shown how unremarkable must have been for an Arabic-speaking reader to come across references in a medical text to the specific property (*ḥāṣṣīyyah* / *ḥuṣūṣīyyah*) of any given drug, or allusions to the same concept in a book on stones, to mention just two genres of quite different epistemic status in the eyes of modern scholarship. Thus, any medical author would allude at some point to the particular emetic power of spurge or to the specific property of scammony to purge yellow bile and of hellebore to do the same with black bile, and this power (*quwwah* ≡ δύναμις) may well be referred to as the *ḥāṣṣīyyah* of that drug:²

¹ Cf. particularly AELIAN, *Nat. anim.* VII.19 (S II 126₁₂₋₁₈), and also «Ἰδιον δὲ τῶν ζώων καὶ ἡ φιλικανθρωπία» in *Nat. anim.* XII.21 (S III 38₁₅).

² Scammony (*saqmūniyā* ≡ σαμμωνία, *Convolvulus scammonia* L.) and hellebore (*ḥarbaq* ≡ ἐλλέβορος, *Helleborus sp.*) are the emblematic examples of purgative (*mushil* ≡ καθαρτικός) drugs already in the Hippocratic collection. The choice of THEOPHRASTUS (rather than the more obvious reference to HIPPOCRATES or GALEN) obeys to my wish to offer a wider picture of the reception of the idea under examination. As to the contemporary interpretation of the passage, AMIGUES renders the phrase as “des propriétés médicinales” and feels no urge to justify this allusion, and HORT 1916: II 221 has an identical “have medicinal properties”—as expected, there is no suspicion of superstitiousness or irrationality. For bibliographical references on

THEOPHRASTUS, *Hist. plant.* IX.1.4 (A 4₁₀₋₁₂)

Ἡ δὲ σκαμμωνία καὶ εἴ τι ἄλλο τοιοῦτον, ὥσπερ ἐλέχθη, φαρμακῶδεις ἔχουσι τὰς δυνάμεις.

AZZAHRĀWĪ, *Taṣrif* I.64 (في الفرق بين الغذاء والدواء (S I 20₂₋₃))

وأقول إنّ كلّ واحد من الأدوية المسهلة، له قوّة خاصّة يجذب بها الخلط الذي يُشاكله كالسقمونيا التي من خاصّيتها اجتذاب المرّة الصفراء، وكالحريق الذي من خاصّيته اجتذاب المرّة السوداء [...].

يجذب [تحدث S].

By the same token, any adept to lithognomy would regularly read not only about the iron-attracting magnet but also about the specific property of diamonds through which they are capable of shuttering and piercing any other mineral with which they come into contact. This information was in fact considered relevant in pharmacognosy:¹

IBN ALĠAZZĀR, *Istimād* IV.13 حجر الماس (M 61v 4-7 | S 157₁₃₋₁₆)

وذكر أرسطاطاليس أنّ طبعه البرد واليبس في الدرجة الرابعة، وفيه خصوصيتان: أحدهما أنّه لا يُلصق بجسم من الأجسام المجسّدة إلّا هشّمه؛ وإن ألحّ به على ذلك الجسم من الأجسام، كسره وقلقه وذهب بنوره — يفعل ذلك بقوّة غريزيّة وخصوصيّة طبيعيّة.

خصوصيتان [خصوصيّة T، مخصّيات PS، خاصّيات MT، يلتصق S، يليق P | وقلقه وقلقه S | يفعل ذلك... P].

The context of the passage is strictly conventional (otherwise rational). An exact degree of intensity (itself a GALENIC feature typical of pharmacognostic texts) is provided regarding the primary qualities of the stone and nothing even remotely magical, not even spiritual, is implied by this effect: the power by which it obtains is described as simply inherent (*ḡarīzī* ≡ ἔμφυτος) to the stone and the specific property is a natural one (*tabīʿiyah* ≡ φυσική). Mark, moreover, that the reported property has no medical application and its inclusion in a pharmacognostic text as *Istimād* is not, therefore, automatically motivated.

THEOPHRASTUS and some remarks on his remarkably fluid concept of δυνάμεις, see the section devoted to him in Chapter 3, where the analysis is centred in his book on stones (Περὶ λίθων). Tangentially, mark that in AZZAHRĀWĪ's text the word *ḡarīzīyah* is used first as an adjective and then twice as a substantive.

¹ For the original locus, cf. *Aḡḡār*^T [10] (I 120₃₋₅) [= T in the apparatus], which is remarkably closer than *Aḡḡār*^P [9] (R 105_{12-106₁₀}) [= P]. Incidentally, an echo of this property is included in the entry on the diamond stone in *Nat* I.3.2 *On stones*.

One may argue, perhaps, that the combination of a pseudepigraphic lithog-nomion and IBN ALĠAZZĀR (one of the first authors to follow ARRĀZĪ's lead and to compile his own *Ḥawāṣṣ*) may not be a faithful representation of the overall attitude of physicians towards this subject or towards this kind of literature. Furthermore, regardless of its characterisation as a specific property, the hardness of the diamond was as much of a “scientific fact” in the 10th c. as it is nowadays. The simplest answer to the latter argument is that most specific properties were indeed considered to be “facts” (or at the very least “possible facts”) by the agents involved, either on the basis of their own experience or relying on the credibility of the authority from which they were derived. As for IBN ALĠAZZĀR's not-so-particular leanings (the interest in the specific properties he shared with IBN MĀSAWAYH, AṬṬABARĪ, ARRĀZĪ), the wide reception of the pseudo-Aristotelian *Aḥġār* first in Qayrawān and then in Andalus by virtually all the major representatives of learned medicine, from IBN ṢIMRĀN to IBN ALBAYṬĀR, suggests that its contents were not seen as obscurely magical or even remotely irrational.¹

In Andalus, some years after IBN ALHAYṬĀM had written his *Iktifāʾ* (in which *Aḥġār* is cited as often as in *Nat* III), IBN ĠULĠUL draws extensively from the same pseudo-Aristotelian treatise, and also from some other as yet unidentified source of ḥawāṣṣic nature, in order to supplement the deficiencies of DIOSCORIDES' *De materia medica* with regard to stones. It is worth noting that greater evidentiary value is lent to the report on the vinegar-stone by providing a real (as opposed to bookish) context further enhanced by the reputation of the person alluded to, namely IBN ALHAYṬĀM:²

Tāminah [48–49] (G 232–13)

حجر البهت — هو حجر ألى الحمرة؛ إذا حرّكته، سمعت داخله طنيناً كما يُسمع للجلجل. فإذا
كُسر، لم تجد داخله شيئاً. وهو حجر النسر، يُسهل الولادة على النساء إذا عسر ولادها،
إذا غلق (على) فخذها — وهذا هو خاصيته الثابتة.

¹ For this reception, which is duly emphasised by KĀS 2010: 7, see the section devoted to *Aḥġār* in Chapter 3.

² For *ḥaġaru lbaht*, cf. KĀS 2010: 432–434, where the exceptionality of IBN ĠULĠUL's identification of this stone with the eagle-stone (*ḥaġaru nnisr* ≡ ἀεττίτης) is pointed out. Except for this identification, the first passage is a rewording of *Aḥġār*^p [31] (R 114_{9–12}), remarkably longer and with an elaboration on an Indian tradition in *Aḥġār*^r [30] (I 138₈–139₂). As for *ḥaġaru lḥall*, cf. KĀS 2010: 459–460, according to whom the source of this passage (which is not to be found in *Aḥġār*) must probably be the same quoted from in much more detail by ALḌIRISĪ. Incidentally, mark that IBN ĠULĠUL refers his elder Qurṭubī colleague as “Ibn Hayṭam” here and also in the prologue to his *Tafsīr* preserved by IBN ABĪ UṢAYBĪṢAH, *Ṭabaqāt* 494_{13–27} (a substantial excerpt therefrom is reproduced in Chapter 3 within the section on DIOSCORIDES).

قال أرسطاطاليس إنّ النسور، إذا عسر ولاد إنانها البيض، ذهب الذكر فأقى بالحجر
 ووضعه في العش، فتبيض الأنثى في الوقت؛ ويأخذه الذكر ويرمي به، فحينئذ يوجد.
 حجر الخَلّ — لم يذكره دياسقوريدوس، وهو حجّر إذا طُرح في الخَلّ، خرج منه مُسرّاً؛
 وكلّ ما كُثر في الخَلّ، خرج عنه لا يستقرّ في البتّة. وهو عندنا بالأندلس، وكان عند ابن
 هيثم (رحمه الله).

Back to medicine and pharmacognosy, identifying and meticulously recording the specific properties of all the items in the stock appears to have been one of the main tasks of some physicians of the earliest Islamicate period. This task, as well as that of providing a degree of intensity for all simple drugs, is extremely interesting and ought to be further explored because (1) it was conducted before IŞTIFAN's and ḤUNAYN's Arabic translations, (2) it aimed at synthesising, clarifying, and when necessary filling the numerous gaps left by GALEN (who was not particularly fond of applying his own system to the mass of materials that he culled from preexisting sources for *Simpl. med.*),¹ and (3) the attribution of degrees and specific properties was made extensive to new incorporations to the Graeco-Byzantine repertoire of drugs.

The latter feature is of special importance here as it shows on the one hand that there was no differential treatment from a theoretical perspective regarding those two characteristic traits of drugs (if anything, the identification of the specific properties seems to have been a priority, which is understandable from a medical point of view), and on the other hand that the two concepts were already in the 9th c. entirely naturalised and their application was no longer dependent from ancient authorities. This subject deserves a proper study and in the course of my examination of the corpus for the analysis of *Nat III* some exploratory comparisons have been conducted particularly with regard to IBN MĀSAWAYH that should hopefully take definitive form and see the light in the near future. In the meantime and as a simple illustration of the ubiquity of the concept of medical *ḥāṣṣiyyah*, I reproduce a few characteristic passages from early authors in the medical and pharmacognostic genres:

¹ Partial attempts to supply the missing degrees had been previously made by Byzantine authors and in this regard the work of early Syro-Arabic physicians represents the continuation of a pre-Islamicate trend.

ARRĀZĪ, *Alḥāwī* IX.1 (H IX 26₁₄₋₁₉) [= KAHL 2015: 226 no. 54]¹

الحونر وماسرجويه والقلمان: «الدروخ، خاصته: تحليل الرياح الغليظة، وخاصةً من الأرحام، لأنه لا عدل له في ذلك».
 بدغورس ومسبح وابن ماسويه وماسويه وماسرجويه والحونر قاطبة: «الزرنباد يُحلل الرياح الغليظة، وخاصةً التي في الرحم، لا شبيه له في ذلك».
 ابن ماسويه: «خاصة السنبل: إمساك الطمث الكثير إذا شرب».

BADĪĠŪRŪS, *Abdāl* 1.1 بلاد (A 44v 5-8)²

فن ذلك البلادر، وخاصته إذهب النسيان وتصفية الدهن. وبلده: بوزنه خمس مترات بندق، وربع وزنه دهن بلسان، وسدس وزنه نكط أبيض.

AṬṬABARĪ, *Firdaws* IV.VIII.2 (§ 227₈₋₁₀)

وإن جعلت فيه من حجر اللازورد الذي يُحمل من أرمينية وزن ثمانية درهم، كان أقوى له — في خاصة ذلك الحجر إخراج السوداء.

In neither branch of knowledge is this concept any less canonical than that of ‘temperament’ (*mizāj* ≡ κράσις).³ Now, upon closer inspection these *ḥawāṣṣ*

¹ For *Alḥūz* (= the Ḥūzīs / هوزيس, a collective name for the physicians of Gondēšāpūr), see the most recent and exhaustive survey in KAHL 2015: 36–42, then 211–276, where 228 explicit quotes from this source in *Alḥāwī* are reproduced and translated into English (of those 217 are related by the author to their *Ġāmiʿ* / *Kunnāš*, eight to their glossary [= *ḥawāṣṣ*], and an additional three to the *Ṭabat*). For QAHLAMĀN (otherwise QAHRAMĀN), cf. likewise KAHL 2015: 52–56, then 365–375 (with thirty-six different passages edited and translated), where a compelling conclusion is drawn about the Iranian origin of the author, whose medical text must have been originally written in Pahlavi.

² On BADĪĠŪRŪS (so in the Istanbul manuscript) or BADĪĠŪRAS, cf. the first examinations in ULLMANN 1970: 292–293 and especially 1973; which ought to be updated with KAHL 2015: 49–50, where an identification is proposed for PYTHAGORAS (for he accepts the core of ULLMANN’s hypothesis) as the Alexandrian author of a tract on uroscopy, who would have studied with PAUL OF AEGINA and left the city for Gondēšāpūr after the Arab invasion in the year 641. According to my own inspection of Istanbul, Ayasofya MS 3572, fols. 43v 1–57r 15, out of over one hundred and fifty entries (in some of which more than one single species is mentioned) the overwhelming majority include an explicit mention of the *ḥāṣṣah* (much less often *ḥāṣṣīyyah*) of the drug. On the other hand, I could find no significant coincidences between thus *Abdāl* and the quotes ascribed to BADĪĠŪRAS in ARRĀZĪ’s *Alḥāwī*. While his presence is quite noticeable in the Andalusī pharmacognostic genre as a source for both drug substitutes and specific properties, none of his entries appears to have been incorporated into the proper ḥawāṣṣic tradition.

³ As stated in the introduction to this chapter, to be more representative of the whole tradition the discussion ought to include a number of other disciplines in which the concept of *ḥāṣṣīyyah* is equally fundamental, but this might only result in a proliferation of examples for each one of the epigraphs to the detriment of the overall readability of the chapter.

happen to be similar to and at the same time very different from the ones mentioned so far. The difference does not lie so much in the concept itself (they are still distinctive traits and peculiarities attributed to a certain species) as in the consequences that derive from its admission. Unlike any other kind of specific properties, the existence of this particular category of *ḥawāṣṣ* involves a problematic relation of causality between an unperceived cause and its alleged effect which prompts an intellectual reaction that ranges from uncritical reception and devout transmission to utter incredulity and reject.

2.2 Towards a characterisation of the specific properties

«Da fundamentale Naturgesetze noch unbekannt sind, füllen zwangsläufig falsche Verallgemeinerungen und falsche Analogien die Lücke aus. Die Wirkung des Magneten beruht auf einer okkulten Virtus (*ḥāṣṣa*), aber auch für hunderte anderer unerklärbarer Phänomene werden solche Virtutes verantwortlich gemacht. Die Lehre von den okkulten Eigenschaften der Dinge durchzieht die islamischen Naturwissenschaften wie ein roter Faden; sie rückt die Wissenschaften zugleich in die Nähe der Magie.»¹

2.2.1 Without a known reason but yet not irrational

The complex nature of the relationship that links a cause (even a well-known one) to its effect is problematised (ie described as an *ἀπόρημα*) by THEOPHRASTUS in his main botanical work. There he poses the question—to which he finds no answer—whether the same effect has its origin in one and the same cause or may have more than one original cause:

Hist. plant. IX.19.4 (A 57₅₋₁₁)

Αἱ δὲ τῶν ῥίζων καὶ δι τῶν καρπῶν καὶ τῶν ὀπῶν φύσεις ἐπεὶ πολλάς ἔχουσι καὶ παντοίας δυνάμεις, ὅσαι ταῦτὸ δύνανται καὶ τῶν αὐτῶν αἴτια καὶ πάλιν ὅσαι τὰ ἐναντία, διαπορήσειεν ἂν τις κοινὸν ἴσως ἀπόρημα καὶ ἐφ' ἐτέρων ἀπόρων πότερον ὅσα τῶν αὐτῶν αἴτια κατὰ μίαν τινὰ δύναμιν ἐστὶν ἢ καὶ ἀφ' ἐτέρων ἐνδέχεται ταῦτὸ γίνεσθαι.

¹ ULLMANN 1970: 4. Such expressions of inveterate positivism are not rare in the author, who shows a sporadic tendency to pass judgment, but they do not detract in the least from the superb monument of erudition that is his survey of Islamicate medical literature. To be fair, he does admit that one must bear in mind the historical context, “im Bewußtsein der historischen Distanz die Andersartigkeit und Eigengesetzlichkeit” of a nonetheless somewhat essentialised “mediaeval thinking” (ULLMANN 1970: 3).

The main features of what would become the classical concept of specific properties are already outlined here. An effect can be distinctly perceived by the senses but its cause is impossible to pinpoint. The Peripatetic teacher describes this question as a puzzle, an intellectual problem to be solved through the same mechanisms as any other *ἀπορία*. Although some of these *δυνάμεις* are occasionally qualified as wondrous (more on this below), their examination falls nevertheless entirely within the realm of rationality.

On the other hand a faculty (*δύναμις*) is defined by GALEN as a relative concept, for it is understood as the cause of a certain action or effect. He further specifies that this name ‘faculty’ is bestowed upon phenomena the quiddity of the efficient cause of which is unknown: “and so long as we are ignorant of the true essence of the cause which is operating, we call it a *faculty*”.¹ Examples of such faculties are the blood-making faculty in the veins or the digestive faculty in the stomach:

Nat. fac. I.4 (H 107₁₄₋₂₀ | K II 9₁₂₋₁₀₁)

εὐδηλον, ὅτι καὶ ἡ δύναμις ἐν τῷ πρὸς τι. καὶ μέχρι γ’ ἂν ἀγνωσῶμεν τὴν οὐσίαν τῆς ἐνεργούσης αἰτίας, δύναμιν αὐτὴν ὀνομάζομεν, εἶναι τινα λέγοντες ἐν ταῖς φλεψὶν αἵματοποιητικὴν, ὡσαύτως δὲ καὶ τῇ κοιλίᾳ πεπτικὴν, καὶ τῇ καρδίᾳ σφυγμικὴ, καὶ καθ’ ἕκαστον τῶν ἄλλων ἰδίαν τινα τῆς κατὰ τὸ μόριον ἐνεργείας.

A crystal-clear illustration of this characterisation of specific properties as effects the cause of which is unknown but not by any means non-existent is provided by GALEN himself in his interpretation of the Hippocratic riddle-like apophthegm «Αὐτόματοι καὶ οὐκ αὐτόματοι· ἡμῖν μὲν αὐτόματοι, αἰτίη δὲ οὐκ αὐτόματοι». There he cites the example of a phlegm purging drug:

In Hipp. alim. III.12 (K XV 299₉₋₃₀₀₁)

Τὰ αὐτόματα λέγεται ποτε οὐ τὰ χωρὶς αἰτίας, ἀλλὰ χωρὶς τῆς ἐξ ἡμῶν αἰτίας. ὅταν γὰρ δόντων ἡμῶν χολαγωγὸν φάρμακον τῆς χολῆς γένηται κένωσις, οὐκ ἔτι αὐτὴν ὀνομάζειν αὐτόματον χρή· ἐνίοτε δὲ καὶ τὰ χωρὶς τῆς αἰτίας τῆς ἕξω, ἐνίοτε δὲ καὶ τὰ οἶον ἐξαίφνης οὐδενὸς συμπτώματος προηγησαμένου.

His point is taken by STEPHANUS OF ATHENS in his own commentary on the same passage: spontaneous (*αὐτόματον*) is not what happens of its own accord and without a cause (*ἀναίτιως*) but rather anything of which the natural cause escapes (human) perception:

¹ English translation cited from BROCK 1952: 17 (corresponding to the quoted text).

Hipp. Aphor. I.3 (W 58₃₋₄)

Αὐτόματον δὲ δηλοῖ οὐ τὸ ὑφ' ἑαυτοῦ καὶ ἀναίτιως γινόμενον, ἀλλὰ τὸ ἄδηλον
πρὸς τὴν αἴσθησιν ἔχον τὴν ποιήσασαν αἰτίαν, ὅπερ ἐστὶ τὴν φυσικὴν.

Essentially the same idea is echoed by the mid-9th c. by AṬṬABARĪ, who provides a lengthy list of specific properties to back his argument. In addition to the conventional example of the magnet stone, several *hawāṣṣ* associated with the Galenic tertiary properties are mentioned in this almost exclusively medicine-centred fragment:

Firdaws V.I.1 خواص الأشياء (§ 356₇₋₁₁) ≅ *Hifid* §98 (K 116)

إِنَّ لِكُلِّ شَيْءٍ قُوَّةً يُسْتَدَلُّ عَلَيْهَا بِمَذَاقِهَا، وَهِيَ خَاصَّةٌ لَا يُعْرَفُ عَلَّتْهَا وَلَا تُدْرِكُ غُورَهَا إِلَّا
بِالتَّجَارِبِ — لِأَنَّهَا خَوَاصٌّ غَامِضَةٌ خَفِيَّةٌ فِي الْأَشْيَاءِ، مِثْلَ حَجَرِ الْمَغْنَاطِيسِ الَّذِي يَجْذِبُ بِهِ
الْحَدِيدَ، وَالكَهْرِبَا لِقَشُورِ الْحَنْطَلَةِ. وَمِنَ الْأَشْيَاءِ مَا خَاصَّتْهُ أَنْ يَقْضِدَ الْمَائِنَةَ فَيَنْفَتَّتِ الْحَصَى
مِنْهَا، مِثْلَ الْعَقَابِرِ الْمَحْرَقَةِ وَبِزْرِ الْكَرْفَسِ الْجَبَلِيِّ.

قوة... مذاقتها [مذاقة يُستدل بها على قوته H.]

Some years later QUSṬĀ B. LŪQĀ (d. 912) resorts to the same concept when describing the particular ($\sqrt{h\dot{s}s}$) temperament and constitution of the stomach of some people who happen to dislike certain kinds of food. The cause of this feature is unaccounted for and only the creator of such temperaments can know its reasons. This inexplicability is compared to the workings of the magnet stone and to the antipathy between snakes and deers. Furthermore, the lack of an explanation has nothing to do with the properties themselves (which are simply nature-bound) but lies entirely in the limitedness of human knowledge:

Ahlāq 131₃₋₉

وَأَمَّا كَرَاهِيَتُهُ بَعْضِ النَّاسِ نَوْعًا وَاحِدًا مِنَ الْأَعْدِيَةِ (مِثْلَ اللُّوزِ وَالزَّيْبِ أَوْ اللَّبَنِ أَوْ غَيْرِ ذَلِكَ
مِنَ الْأَعْدِيَةِ)، فَذَلِكَ مِزَاجٌ وَتَرْكِيْبٌ يَخْضُ مَعْدَمٌ مَا لَا يَقِفُ عَلَيْهِ بِاسْتِقْصَاءٍ، وَلَا يَعْرِفُ
حَقِيْقَتَهُ إِلَّا خَالِقُ الْمِزَاجِ تَبَارَكَ وَتَعَالَى. وَالْأَمْرُ فِي ذَلِكَ يَجْرِي مِجْرَى جِذْبِ الْحَجَرِ الْمَغْنَاطِيسِ
لِلْحَدِيدِ، وَهَرَبِ الْحَجَرِ الْمَسْتَمِيِّ «مِبْغُضِ الْحَلَلِّ» مِنَ الْحَلَلِّ، وَهَرَبِ الْحَيَّةِ مِنَ رَأْحَةِ قَرْنِ
الْأَيْلِ، وَغَيْرِ ذَلِكَ مِمَّا يَجْرِي هَذَا الْمِجْرَى مِنَ الْمَعَانِي الْمَوْجُودَةِ فِي الْعَالَمِ، الَّتِي تَعْلَمُ بِالْجَمَلَةِ أَنَّهُ مِمَّا
تَكُونُ بِالْمِزَاجِ وَالتَّرْكِيبِ مِنَ الْحَارِّ وَالْبَارِدِ وَالرُّطْبِ وَالْيَابِسِ، وَلَا نَعْرِفُ مِقْدَارَهَا، وَلَا يَوْقِفُ
عَلَى كَمِّيَّتِهَا، وَلَا نَعْلَمُ عَلَّلَهَا وَأَسْبَابَهَا.

This is certainly something to be taken into consideration when approaching other so-to-speak less conventional examples of specific properties than purgatives. The strict application of the same epistemic principle and of the

same definition allows for the integration into the same category of virtually any experience-proved property. The problem with the approval of some properties and the rejection of some others lies, therefore, not in their *rationality* (for even the cause for the effect of scammony and hellebore escaped any explanation within the framework of the humoral theory) but must be sought for elsewhere.

2.2.2 Neither unnatural nor supernatural: simply natural

A second major element of the classical conceptualisation of the specific properties reinforces this non-irrationality: such properties are all *natural*. As inscrutable and wondrous as they may appear, they all obey to the same laws that govern the universe, especially cosmic sympathy and ἡ ἀπάντων πρὸς ἀλληλα συμπλοκή. It is not by mere chance, in fact, that one of the best-documented names for the elements possessing these properties, and also for the operations involving them, is φυσικόν (≡ *ṭabiṭī*).

A massive amount of both medical and non-medical φυσικά circulated in geponic texts, which are indeed one of the main sources for ḥawāṣṣ materials in the Islamicate tradition:¹

YŪNIYŪS B. ANĀṬŪLIYŪS, *Filāḥah* VIII.36

صفة طبيعية لئلا يسكر الإنسان
 إن وُضع الذي يشرب الشراب إكليلاً من كرافيطس، لم يسكر.
 وإن أخذ أنسان من رؤس الخطاطيف رأس ذكرٍ ورأس أثنى، فأحرقها وسحقها مع شيء
 من مَرّ، وألقاه في الشراب: لا يسكر الذي يشربه.

A few such “natural remedies” are included already by ALKINDĪ in his choice of therapeutic recipes:²

Iḥtiyārāt 130v 5–6, 130v 16 – 131r 1

أدوية طبيعية وغير ذلك لنفث الدم — يُمضغ شيء من البقلة الحماة ويُبلع، فإنه يقطع من
 ساعته. [...]
 دواء طبيعي — إذا بخر بشعر امرأة امرأة قد عسر عليها ولادها، سهل ولادها بإذن الله.

¹ I cite YŪNIYŪS' text from a microfilm of Tehran, Milli MS 796, which shows no foliation or pagination (cf. SEZGIN 1971: 427). For similar remedies against inebriation, see below the commentary on *Nat* III ḤAWĀṢṢ II.11 in Chapter 4.

² Cf. further «*liḥummā rribṣi ṭabiṭyyun muḡarrab*» in *Iḥtiyārāt* 132r 17 – 132v 2.

At least as far as the Muslim learned elites are concerned, this naturalness is not incompatible with theistic doctrines but it is actually further enhanced by the Islamic concept of god-given nature ($\sqrt{\text{تبف}}$). This can be learnt from an author whose rational status is hardly disputable and who both as a physician (or, to be exact, as a theoretician of medicine) and as a philosopher was called to transform profoundly the Islamicate scientific tradition (at least the eastern one) in these two fields. I mean, of course, IBN SĪNĀ (d. 1037).¹ His extensive use of the category *ḥāṣṣiyyah* throughout the *Qānūn* (not only quite systematically in the pharmacognostic section but also in the therapeutic books) is certainly interesting in itself, but echoing it here would only add redundancy to the examples adduced from other sources in this chapter. It is rather an explicit and remarkably elaborate theoretical elaboration on the concept that I find most pertinent to cite here.

That explanation is found in Chapter 11 of his monographic on cordial (*qalbiyyah*) drugs and the argumentation runs for over four full pages in the modern edition. I reproduce here, and also below, just a few passages but the reader is encouraged to access the original text to gain a better impression of the arguments deployed by the author. In what concerns most directly the natural essence of the specific properties, IBN SĪNĀ affirms that :

Qalbiyyah XI (B 245₄₋₆, 248₁₃₋₁₅)

الخاصية ليست في الحقيقة شيئاً غير الطبيعة، وخذو الطبيعة هو آتياً مبدأً لحركة ما هي فيه؛ وسكونه بالذات وسائر أفاعيله بالذات مقولٌ على الخاصية. [...] والخاصية بالجملة طبيعة موجودة بالأجرام المركبة من العناصر من الفيض الإلهي العلوي لما يحدث من الأمزجة الخاصة المفيدة للاستعدادات خاصةً.

It is from a very similar noetic frame that two centuries later ṢABDULLAṬĪF ALBAĠDĀDĪ (d. 1231) adapts a passage from ARISTOTLE's zoology and transforms it into an exhortation to the study of the wonders of nature, particularly the natures of animals, for nothing there was made in vain or randomly:

¹ On a side note, scholarly literature on IBN SĪNĀ's medical and particularly philosophical output is as vast as it is overall excellent and very few Islamicate authors can boast such an exhaustive coverage. However despite the apparent high esteem (verging on glorification) in which he is held in some quarters and the frequent utilisation of his figure in the ideological battlefield, historians of Islamicate medicine are still forced to access such an instrumental text as his *Qānūn* through the nineteenth-century Būlāq edition, which itself did not bring a noticeable improvement over the text printed in Rome in 1593.

Ifādah I.4 (Š 104₁₅₋₂₇)

وهذا نُصُّ كلامه بإصلاحه، قال: «من العجب أن نستحبَّ علم إحكام التصاوير وعمل الأصنام وإفراغها، ونتبين حكمته، ولا نستحبَّ معرفة الأشياء الموقومة بالطبيعة، ولا سببها إذا قوينا على معرفة عللها. ولذلك لا ينبغي لنا أن نكره النظر في طباع الحيوان الحقيقي الذي ليس بكريم، ولا يتقل ذلك علينا كما يتقل على الصبيان. ففي جميع الأشياء الطباعية شيءٌ عجيب، ولذلك ينبغي لنا أن نطلب معرفة طباع كل واحد من الحيوان، ونعلم أن في جميعه شيئاً طباعياً كريماً. لأنه لم يطبع شيءٌ منها على وجه الباطل، ولا كما جاء واتفق، ولا بالبخت — بل كل ما يكون من قبيل الطباع قائماً يكون لشيء (أعني لحال التام)، ولذلك صار له مكانٌ ومرتبة وفضيلةٌ سالحة — فتبارك الله، أحسن الخالقين.»

2.2.3 Different attempts at rationalisation

The above quotes show quite distinctly that unexplained never equated to rejectable and, moreover, that the phenomenon of the specific properties of things was rarely (if ever) considered preternatural. It was, in fact, a pure manifestation of the inner workings of nature that human knowledge fell short at explaining. Now, that the exact cause of an effect cannot be identified does not necessarily mean that an approximation to the problem cannot be tried—the creation itself of the category of *hawāṣṣ* being in a certain way a first step towards that goal. In what follows I shall bring to the fore several different explanations coming from quite diverse contexts. While these notes cannot substitute for a proper inquiry into the history of the concept of specific property in an Islamicate context, I hope that they may be sufficient at least to arouse the curiosity of the reader and to contribute to a more balanced picture of this particular tradition of knowledge.

Some explanations might be objectively described as guesses on the part of the author, but the important thing here is that such guesses are based on the same theoretical premises and are formulated according to the same criteria and phraseology as any other allegedly rational explanation of natural phenomena. In his account on the pumice stone (κίσσηρις) THEOPHRASTUS does not only accept without protest its alleged property (δύναμις) to stop the liquid in a jar from seething (ζέον, ζέσις) but he even appends a remarkably confident interpretation of the process involved in this effect:¹

¹ Mark that this is the exact same property attributed by ARRĀZĪ (quoting AṬHŪRUSFUS) to the unfleshed thigh bone of a frog (originally a toad) in *Nat* IX.11.9. Incidentally, AMIGUES appears to avoid translating the key concept δύναμις (“elle arrête la fermentation”), whereas HORT 1916: II

Hist. plant. IX.17.1 (A 49₂₁-50₅)

τὴν δὲ τῆς κισσήριδος οὕτως ἰσχυρὰν εἶναι **δύναμιν** ὥστε ἐάν τις εἰς πίθον ζέοντα ἐμβάλη, παύειν τὴν ζέσιν οὐ παραχρῆμα μόνον, ἀλλὰ καὶ ὄλως, καταξήραινουςάν τε **δηλονότι** καὶ ἀναδεχομένην τὸ πνεῦμα καὶ τοῦτο διΐεισαν.

In view of its fortunes over the centuries and across cultural frontiers GALEN's conceptualisation of the specific properties and his *ad hoc* created category of effects produced by drugs "through their whole substance" (καθ' ὅλην τὴν οὐσίαν) would be far more consequential than THEOPHRASTUS' explanations.¹ Within the general explanation of the operations of drugs (also of nourishment) on human physiology and after having defined their primary and secondary qualities, there still remains a non-negligible residue of phenomena that cannot be accounted for by this theory. The drastic effect of some drugs (particularly, but not exclusively, that of purgatives and poisons) cannot be explained simply as a consequence of their being hot and dry, or subtilising, for instance.²

The response of the physician from Pergamon to this crux is not to conveniently reject such cases (this could not be done without denying much useful knowledge) nor to place their cause beyond the reach of human understanding. He simply extends his theory to include a sort of fourth quality or property that is, precisely, acting through the whole substance in a way that cannot

307 renders the passage quite faithfully as "the virtue of the pumice-stone dust is so great that". This passage was reproduced by PLINY, cf. «[...] *tantamque refrigerandi naturam esse, ut musta fervere desinant pumice addito*» in *NH* XXXVI.21.[42] (J-M V 363₆₋₁₀).

¹ As shown by THEOPHRASTUS' passage, GALEN was by no means the first author to approach the analysis of specific properties from a would-be rational perspective, but he certainly was the most successful one as far as the Helleno-Islamicate medical tradition is concerned. On the other hand, the enviably vast coverage of GALEN's medical theory by modern scholarship includes this particular concept and the reader is referred for a better-informed analysis to SINGER 2020 [n.v.], and WILKINS 2021. Mark that SINGER relates this concept, as I shall here, to unaccountable phenomena, whereas WILKINS considers that "such cases are rare and that the predominant use of the concept is applied to daily nourishment" (WILKINS 2021: 483). Regardless of its actual frequency in the Galenic collection the ḥawāṣṣic interpretation of καθ' ὅλην τὴν οὐσίαν was quite probably the more influential one in the later tradition.

² For a somewhat dated but clarifying analysis of the system of qualities in GALEN's pharmacognosy, cf. HARIG 1974: 105-115. Regarding this system and especially the status of tertiary qualities (which are not identical to but may occasionally overlap with specific properties), it has been acknowledged that "[t]he explanations are complicated and unclear and the chapter on the Galenic qualities of medicaments is a very intricate one in Galenic pharmacology" (PRIORESCHI 1998: 437) and still that "[t]he co-existence of primary, secondary, and tertiary qualities was not, however, without difficulties, and the delimitations between secondary and tertiary qualities not always clearly defined" (VENTURA 2017: 103-014). The systematisation of secondary and tertiary qualities in the Islamicate tradition, in turn, is quite clear, but I shall not risk venturing into this matter here.

be explained otherwise. Whether this is a “rational” answer to the problem or not (GALEN for one must have thought that it was) is of secondary importance here. What matters most is that this category of effects and the drugs that produce them do not include just some tradition-honoured purgatives but also a virtually unlimited stock of remedies coming mainly from the quarters of the Empiricists.

Thus, to the recipe for a hepatic drug copied from ASCLEPIADES’ *Intern. morb.* III and involving the flesh of snails, he appends his own remark in which he reflects his educated guess or inference (“it seems that it effects that through its whole substance”) but by no means any scepticism of rebuttal:

GALEN, *Sec. loc.* VIII.8 (K XIII 212₃₋₇)

ἔγραψε δὲ καὶ διὰ κοχλιῶν ὁ Ἀσκληπιάδης φάρμακον ἥπατικόν τοιοῦτον. κοχλιῶν χερσαίων εὖ μάλα τὴν σάρκα λεάνας καὶ οἴνου μέλανος ἐπιβαλῶν κούθους τρεῖς καὶ θερμῆνας δίδου πίνειν. **ἔοικε δὲ τὰ τοιαῦτα καθ’ ὅλην τὴν οὐσίαν ἐνεργεῖν**, οὐ κατὰ μίαν ἢ δευτέραν ποιότητα.

As a matter of fact, far from being restricted to the context of reported speech, the concept of καθ’ ὅλην τὴν οὐσίαν is perfectly integrated in GALEN’S own pharmacognostic practice. The conceptual identity of this rationalising label with the specific properties was recognised without any problem by Islamicate physicians. An indisputable example of that identification is the passage on the golden thistle (σκόλυμος, *Scolymus hispanicus* L.) in *Nat* VIII.X.1, which even if explicitly ascribed to DIOSCORIDES can be proved to derive (either through misascription or through hybridisation) from GALEN’S «τοῦτο μὲν οὖν ὡς καθαρτικῶ τοιοῦτου χυμοῦ τῶ φαρμάκῳ καθ’ ὅλην ὑπάρχει τὴν οὐσίαν» in *Simpl. med.*¹ That is how IBN SULAYMĀN understood it too:²

Aḡḍiyah III.III.19 في الكنجر (S III 146₇₋₁₃ | § 444₄₋₈)

ومن خاصّة جوهره أنّه، إذا طُبِّخَ بِشَرَابٍ وَشُرِبَ طَبِيخُهُ، عَقَلَ الْبَطْنَ وَأَحْدَرَ بَوْلًا كَثِيرًا مَمْتَنًّا. وَلِذَلِكَ صَارَ يَذْهَبُ بَنْتَنَ رَائِحَةِ الْإِيطِينَ وَبَنْتَنَ رَائِحَةِ سَائِرِ الْبَدَنِ؛ لِأَنَّهُ يُخْرِجُ مَعَ الْعَرَقِ مِنَ الْبَدَنِ مَا كَانَ مِنْ هَذَا الْجِنْسِ مِنَ الْأَخْلَاطِ — وَهَذَا الْفِعْلُ مِنْهُ يَقَعُ بِجَمَلَةِ جَوْهَرِهِ بِخَاصَّتِهِ، لَا بِكَيْفِيَّتَاتِهِ (أَعْنِي لَا بِجَرَارَتِهِ وَبِيُوسْتِهِ). لِأَنَّ مِنَ الْحَازِ الْيَابِسِ مَا لَا يَفْعَلُ ذَلِكَ.

بجمله [لجملة S | بخاصته] وبخاصته Ḡ.

¹ Cf. GALEN, *Simpl. med.* VIII.XVIII.24 Περὶ σκολύμου ῥίζης (K XII 125₉₋₁₆) ≡ *Mufradah* VII.103 ذكّر الحرشف (E 133r 21–24). The passage is analysed in Chapter 3 as an example of possible hybridisation of Dioscoridean and Galenic materials.

² From *Aḡḍiyah* it was literally excerpted by IBN SAMĀḠŪN in *Ġāmiḡ* >–22 حرشف (S I 172_{15-173i}) and again in *Ġāmiḡ* ككـر 45– (S II 159₁₅₋₂₀) [= Ḡ in the apparatus below].

And so did AZZAHRĀWĪ, and IBN ĠAZLAH, and IBN ALBAYṬĀR, working at different times and places as well as in different genres:

AZZAHRĀWĪ, *Taṣrif* XXVII.II كنجر II.5 (S II 352₂₀₋₂₂)

كججر — حاز يابس في الدرجة الثانية. ومن خاصته: إذا طُبخ بشراب وشرب، عقل البطن وأحدر بولاً كثيراً، ولذلك صار يذهب برائحة الإطيين وتن رائحة سائر البدن.

Minhāj 99—حرشف (L 70v 2)

ويزيل تنن الإبط بخاصيته فيه إذا أُكل.

IBN ALBAYṬĀR, *Almuḡnī* XVII.23 المطيبة لرائحة البدل والعرق (M 315r 16–17 | P¹ 272r 13–14)

الحرشف — خاصيته: إخراج الفضول من البدن بالبول، ولذلك يُحسّن رائحة الإطيين وسائر البدن — يفعل هذا إن أُكل مطبوخاً وبتاً.

GALEN's explanatory device was, of course, inherited by Byzantine physicians. Thus the benefit of a preparation made of a wolf's liver is affirmed by ORIBASIOS to work not by some quality (ποιότης) but some specific property (ιδιότης) of its substance:

Ad Eunapium IV.xcvi.15–16 (R 478₇₋₁₀) ≡ *Synopsis* IX.xviii.15–16 (R 289₃₋₆)

ἡπαρ λύκου λειοῦται μετ' ἀκριβείας καὶ δίδεται < ἄ μετ' οἴνου γλυκέος. τοῦτο πείραν ἰκανὴν δέδωκε καὶ πάσαις ἀρμόττει ταῖς δυσκρασίαις, ὡς ἰδιότητι τῆς οὐσίας ἐνεργοῦν, καὶ οὐ κατὰ τινὰ ποιότητα.

It is worth noting that this Byzantine use of ἰδιότης (which goes back indeed to Galenic terminology) may not be entirely unrelated to the early standardisation of *ḥāṣṣīyyah* amongst pre-Ḥunaynī physicians (some examples of which have been shown above).

Let me quote once again, before turning to less medicine-centred contexts, IBN SĪNĀ's elaborate argumentation in favour of the existence of the specific properties. In this instance it is his closing remark that I reproduce, which is particularly subjective (and not without some pungency) and therefore more reflective of the author's stance than the previous purely philosophical elaboration:

Qalbiyyah XI (B 249₁₋₁₁)

والطبيعة هي قوة تفعل بها الأجسام البسيطة أفاعيلها بالذات — وإلى هذا يذهب الجمهور والضعفاء من أهل النظر. ولو كانت النار مما يعزّ وجوده ويُجلب من بلاد قاصية، لكان الجمهور يُقدّمون خاصيتها على سائر الخاصيات؛ ولكنّ بحمهم عن سبب خاصيتها يكون أشدّ

من بجنهم عن أسباب سائر الخاصيات.
 فإنّ الأفعال الكائنة عن النار عجيبة جدًا؛ وكيف لا؟ وهي تُخرج الإبصار من القوّة ائىءلى
 الفعل، وتمنع عن الجاس، وثرى متصعدةً إلى فوق ومصعدةً لكلّ ما تقوى عليه، ويتولد من
 قليلها دي ساعةٍ واحدةٍ شيءٍ عظيم، وتفسد ما يلاقها وتحتله إلى جوهرها، ولا ينقصها
 الآخذ منها؟.
 ولعمري أن هذا لأعجب كثيرًا من جذب المغناطيس للحديد ومن سائر الخواصس! إلا أنّ
 الشهرة وكثرة المشاهدة أسقطا التعجب عنها والبحث عن سببها، وندور فعل المغناطيس
 أوجب التعجب ودعا إلى البحث عن سببه.

Such are the prevalent explanations amongst physicians familiar with Galenic doctrines (which pretty much equals to all major authors of medical literature), but there circulated alternative interpretations too. Some of those are to be found in epistemic traditions with a stronger leaning towards metaphysics and spirituality.

Elaborating on a cosmic dichotomy remarkably reminiscent of the one analysed for *Nat* IL1, ĠĀBĪR B. ḤAYYĀN provides some insight into a different, non-Galenic, ḥawāṣṣic trend inherited by the early Islamicate tradition. According to his doctrine, *ḥāṣṣah* is the name of a power (*quwwah*) that cannot be perceived by the senses but only grasped by the intellect. The first example of such a power is the traditional one of the magnet stone but the hermeneutics of the phenomenon reflect an entirely different noetic context:

Raḥmah ١٤٤₂₀-١٤٥₆

وأقوى ما في هذا العالم: الأشياء الروحانية اللطيفة التي لا تُدرك بالحواس، وإتّا تُدرك
 بالعقول — كالحجر الذي يجذب الحديد بالقوّة الروحانية التي لا تُحس ولا تُرى، وهي تنفذ
 في الكثيف من الصفر، والصفر بينها وبين الحديد، إلى نفسها. وهذه القوّة يُقال له «الخاصّة»،
 ومعنى الخاصّة اتفاق روحانية الأشياء وفعل بعضها في بعض لاتفاق جسمانيّتها، وهو اتفاق
 ما فرق الطبائع البسيطة والمركبة وامتزاج القوّة الباطنة بالقوّة الباطنة.

A curious (and worth exploring) application of this doctrine appears to underpin the philosophical explanation propounded by MESUE for the working mechanism of purgative drugs.¹ They do not purge, according to the author, be-

¹ On this shadowy figure who, following ULLMANN's advice, is perhaps best labelled as PSEUDO-IBN MASAWAYH, cf. ULLMANN 1970: 304–306. While the conspicuous presence of cites from authors that postdate the true IBN MASAWAYH has been long noted, there is a possibility that not all three parts of the collection are equally pseudepigraphic, or at least not in the same degree. Parallel transmission provides enough authentic material from IBN MASAWAYH's *Iṣlāḥ* and *Mushilah* to conduct a systematic comparison that might throw some definite light on the question.

cause of anything in their constitution, nor through contrariety or similarity, but because of a specific property (*virtus propria*) that is described as celestial (to be compared to ĠĀBĪR's *rūhāniyyah*). The mention of PLATO as an authority for the specific properties is remarkable in itself and it further places the research on this matter beyond the physician's competence:¹

Canones universales I.1.1 *De electione medicinarum* (L 7r 12–29)

Dicimus quod medicina laxatiua non est a re complexionali sic, sed quia talis. Neque ut contrarium in contrarium quia contrarium, sed quia talis. Et neque quia simile attractiuum huius uel eradicatiuum aut contrarium, sed quia tale. Et neque quia graue aut lene agitatiuum superius uel inferius, sed quia tale. Dotatur enim omne duplici —ut aiunt philosophi— uirtute, scilicet elementari et celesti. Huic quidem communi huic uero propria. Etenim calefactiuum et frigiditatuuum calidum et frigidum omne; solutiuum autem non quia calidum nec quia frigidum, sed quia celesti uirtute dotatum sit, ipsius mixtionem regulante. Et ob hoc quidem solutiuum hoc, illud uero prouocatiuum, aliud uero aliter — et aliter hoc quia celesti uirtute tale supra complexionem fertur.

Inquit PLATO: «Dotauit res quidem natura proprietatibus. Omnino enim quodlibet quod secundum meretur a specie sua agit quod proprium est. Utique enim nullius rei est actio propria nisi quam species regulat. Hoc autem certificare non est medici, sed eius qui se altius agit».

Even if it may reflect a genuine Islamicate tradition, MESUE's testimony is of more import for the history of medicine in Christianate Europe, as the text was the object of several commentaries that did not fail to notice the contrast between this particular explanation and GALEN's analysis in *Simpl. med.*²

A third answer to the unaccounted phenomenon of the specific properties of things is the theistic solution: such powers were placed by god for the good of humankind. This might be perhaps expected to be an explanation given by religious authorities but it is also the one appended with some regularity by IBN ZUHR (d. 1162) to his *ḥawāṣṣ* passages:³

¹ There are a few echoes of a monograph on the specific properties (*Kitābu ḡāmi'i ḥawāṣṣ*) ascribed to PLATO in the Islamicate tradition, cf. ULLMANN 1974b: 76 n. 9, with references to a quote in IBN ALMUBĀRAK's *Munqid*, another one in a Hermetic text, and also a Persian book of stones (*ḡavāhir-nāme*) ascribed to PLATO in Tibilis.

² Cf. for instance the remarks added to his own new edition of the Latin text by DUBOIS [= SYLVIVS] 1561: 3r–3v.

³ I could locate neither of these excerpts in ZUHR's *Ḥawāṣṣ* (but perhaps new manuscripts might transmit them), which begs the question whether IBN ZUHR himself may have compiled his

IBN ZUHR C IBN ALBAYṬĀR, *Ġāmiʿ* 163-حام (B II 349-12)

خواص ابن زهر: «إذا سكن المخدور بمقربة منها، أو كانت في غرفة وسكن المخدور تحتها، أو كانت في بيت سكن فوقها: برأ. ومجاورتها أمنٌ من الحذر ومن الفالج والسكنة والخمود والسبات — وهذه خاصية بعدية جعله الله تعالى فيها».

IBN ZUHR C IBN ALBAYṬĀR, *Ġāmiʿ* 165-حمار وحشي (B II 361-3)

عبد الملك ابن زهر: النظر إلى عين حمار الوحش يُدِيم صِحَّة البصر، ويمنع من نزول الماء — وهي خاصية عجيبه جعلها الله فيه لدوام صِحَّة العين، لا شُبْهة فيها.

That such an explanation is not by any means peculiar to Muslim authors is proved by the parallel testimony of THOMAS OF CANTIMPRÉ (d. 1272), for instance, who documents an analogous Christianisation of the concept of *virtus*. It is worth noting that this resort to (quite literally) a *deus ex machina* is necessitated in his case by the fact that no physiological (ie humoral) origin could be suggested for the specific properties of stones, which are neither hot nor cold and their effects cannot therefore be accounted for by any combination of these primary qualities. The cause for their wondrous effects (*miracula, mirabilia*) is god's will:

De natura rerum XIII.I.22-36 (B 355-356)

Sed et questio magna est, unde et quomodo virtus inest lapidibus, quippe magna virtus eorum videtur et efficacia sanitatum. Unde autem hoc habeant nisi a deo, homini incompertum est. Et quidem hoc certum est, quod omnis virtus a deo est, sicut dicit Aristoteles in libro Metheororum. Sed inest herbis aut fructibus mediante operatione nature, utpote res que naturaliter calide sunt aut frigide et competunt medicine. Horum nullum in lapidibus est, ut excessus caloris aut frigoris in ullo lapidum denotetur. Constat ergo, quia sine ullo medio lapidibus indidit virtutem omnipotens et in eis virtutis potentiam tribuit pro ratione nature. Excepta autem gratia sanitatum miracula multa et magna experiuntur in gemmis, sicut de magnete et adamante, qui in attractione ferri videntur inimicari, de adamante qui stellam maris demonstrat et de ostolano qui hominem invisibilem reddit, de carbunculo qui sine

own collection following his father's lead. The survey of the former's book for the commentary on *Nat* III has shown that most quotes from "Ibn Zuhr's *Ḥawāṣṣ*" in the *Ġāmiʿ* have a correspondence to ZUHR'S book, but then IBN ALBAYṬĀR was far closer than us in time and space to his source and he mentions quite consistently the son rather than the father.

ignis amminiculo tenebras noctis fugat; de multis quoque aliis, ut presens testatur liber. Horum igitur miraculorum ratio est omnipotentis dei voluntas, qui in rebus humanis mirabilis predicatur.

All in all, how satisfactory these approximations are to be considered depends entirely from the context in which they were originally proposed. In the eyes of those who do not favour a theistic explanation of natural phenomena, invoking a deity as their ultimate cause might certainly be a token of irrationalism, but neither (IBN) ZUHR nor THOMAS OF CANTIMPRÉ are typical representatives of the irrational mind. On the other hand, at first glance substituting “nature” for “god” may not be thought of as a great improvement with regard to the validity of the argument, but a closer look reveals that the underlying idea can be paraphrased in admittedly anachronistic terms as “this works thus according to physical laws that we are not able to comprehend yet with the instruments available to us”—an admission that is, by the way, very much the essence of science.

2.2.4 The locus of the properties

The above excerpt from *De natura rerum* touches upon a question that had at some point evidently vexed those who applied their mind to the study of the specific properties: where do such properties actually lie. In the case of plants and animals, while behavioural traits (ἰδιᾶ) as well as sympathies and antipathies are predicated of the whole being, their concrete properties (δυνάμεις) are regularly associated to a particular organ or secretion.¹ This applies to any properties whatsoever and the identification of the exact active element is as fundamental to ḥawāṣṣ knowledge as it is to pharmacognosy in general, which would eventually come to be differentiated only by their focus and by their permeability to non-medical traditions.

In the end, most of the quotations transmitted by *Ḥawāṣṣ* transmit the results of the systematisation introduced by a few authors with regard to the mass of data garnered by so-called folk healers and now-anonymous ῥιζοτόμοι and labourers:

¹ In fact, when a property is attributed to a whole plant or animal one may suspect that originally a principle of sympathy and antipathy may have been involved, whereas in the case of organs and secretions different principles such as analogy (either *similia similibus* or *contraria contrariis*) are prevalent.

THEOPHRASTUS, *Hist. plant.* IX.8.1 (A 20₃₋₁₀)

Τῶν [δὲ] ῥιζῶν πλείους μὲν εἰσιν αἱ δυνάμεις καὶ πρὸς πλείω. ζητοῦνται δὲ μάλιστα αἱ φαρμακῶδεις ὡς χρησιμώταται διαφέρουσαι τῷ τε μὴ πρὸς ταῦτα καὶ τῷ μὴ ἐν τοῖς αὐτοῖς ἔχειν τὴν δύναμιν. ὡς δ' οὖν ἐπίπαν αἱ πλείσται μὲν ἐν αὐταῖς ἔχουσι καὶ τοῖς καρποῖς καὶ τοῖς ὄποις, ἔνιαι δὲ καὶ ἐπὶ τοῖς φύλλοις· τὰς δὲ φυλλῶδεις δυνάμεις τὰς πολλὰς σχεδὸν πάσας καλοῦσιν οἱ ῥιζοτόμοι.

Whether the property attributed to such and such organ ought to be explained as the outcome of its inscrutable temperament (ie a combination of its primary qualities to a degree that cannot be quantified with any accuracy) or by resorting to the “through its whole substance” principle or to any other device is a question that relates directly to the intellectual approach of each author. Some of them may not have given much thought to this matter, as they appear to have been interested mostly (if not exclusively) in the actual contents of this lore rather than in any theorising. Others may have assumed, without further explicit elaboration, some variation of the concept of intrinsicity.

A specific property is simply naturally imprinted (*sigillata* ≡ *maṭbūṣah*) in its carrier, be it hellebore or electrum:

Canones universales I.I.2 (L 11r 36 – 11v 3)

Et illud ideo quoniam medicina laxatiua perueniens ad stomachum non adiit humorem quem euacuare debet penetrando ad ipsum, sed uirtute attractionis sigillata in ipsa attrahit eligens quod ex humoribus est ei proprium attrahere. Et est comparatio operationis eius ad materias comparatio magnetis ad ferrum, charabe ad fustem et ad alia.

Canones universales I.I.2 (L 14r 26–27)

Verum quelibet medicinarum sigillatam habet proprietatem ut hoc membrum magis quam illud respiciat.

Or the power by which the perceptible effects obtain is simply inherent (*jarīzī* ≡ ἔμφυτος, just like the inner heat of the heart) to the element and the specific property is a natural one (*ṭabīṣiyah* ≡ φυσική). This is the explanation that that Islamicate authors inherit from the pseudo-Aristotelian *Ahḡār* for the power of diamond to break any body with which it enters in contact (see the quote from IBN ALĠAZZĀR, *Istimād* IV.13 reproduced above).

2.2.5 Modes of causation

The original compilers of ḥawāṣṣic materials may have deemed the principles at work in the operation of the specific properties all too evident for their readers (who were, as they would be for many centuries, most likely an initiated elite) or perhaps they elaborated on them either in their prologues or in some theory-centred texts. It must be stressed that even before becoming an autonomous epistemic genre the knowledge of the specific properties was part and parcel of natural philosophy and that the attractive power of the magnet stone was as much an illustration of the doctrine of cosmic sympathy as the purging property of scammony was an example of the medical or drug-like (φαρμακώδης) power of some plants. In any case, as far as later (and most especially Islamicate) texts are concerned, an explicit elucidation of the principle through which a specific property works is only exceptionally provided. As a matter of fact, stating that producing such and such effect is the *ḥāṣṣīyah* of the drug is usually considered a sufficient explanation.

Furthermore, one must bear in mind that with perhaps the only exception of the groundbreaking pioneers of the protogenre, most authors are mere transmitters (and only sporadically commenters) of fragments of this lore. The ultimate connections and associations (which are certainly older than the extant written corpus) were borrowed by one author from another and then transferred from one tradition into another with little or no change at all. The primitive Greek conceptualisation of epilepsy, the sacred malady, could not be “translated” into the Islamicate tradition (actually, the pre-Hippocratic beliefs originally associated to it may have been likewise obscure to Roman and Byzantine physicians) and yet the underlying motivation for some of the remedies transmitted in *Ḥawāṣṣ* texts against this disease may go back to that context.

The clearest example of non-transparent motivation is certainly that of etymological association, which is by definition language-bound (see below). Probably nowhere is the bookish nature of most ḥawāṣṣic remedies more evident than in such cases.

There is ample room for speculation regarding the possible motivation for some ḥawāṣṣic associations. Further research and more detailed analysis are required in order to propose a valid typology of these materials. The following compressed remarks do certainly not constitute a taxonomy, as some of the aspects dealt with below might be subsumed into others (for instance the specific like-cures-like principle within a more general taxon of sympathy).

Sympathy and antipathy

As seen in the survey of *Nat* II.1, the belief in a duality of the universe or of the creation was a basic tenet shared large and by across centuries and cultural boundaries. The essential dichotomies expounded in that *Weltanschauung* were spiritual and corporeal, agreement and sympathy, disagreement and antipathy.¹ Moreover, the doctrine of a universal relationship of sympathy and antipathy between created beings was by no means a mystic doctrine cherished by learned philosophers. It was a pivotal conception possessing great explanatory power that could be activated at any moment in order to provide an interpretation of phenomena that did not lend themselves to be analysed through other logical or would-be rational instruments.

Thus, when the unfaltering inquisitiveness of ABULḤASAN AṬṬABARĪ made him question his teacher ABŪ ḤIMRĀN about the cause (*ʿillah*) why mice are sought for (as a remedy) for those who have been bitten by a tiger, the latter's educated guess (for he had found nothing on this in any book) involved a reference to the hostility and antipathy assumed to exist between those two animals. In addition to a few more examples of such antipathies ABŪ ḤIMRĀN includes in his explanation a reference to the effect obtaining «*biṭarīqi lḥawāṣṣ*»:²

Buqrāṭiyyah VII.38 (B 231r 21–25 | L 374v 22 – 375r 3)

وقد سألتُ أبا عمران علةَ الفأر وطلبته لمن عضّه النمر، فقال لي: «لم نسمع فيه شيئاً وما قرأت في كتاب؛ وأظنّه ضرباً ما بين الحيونات من شدة العداوة وشدة المنافرة، كما بين الثعبان والتعالب، والفأر والستور، والدلفين ومالك الحزين؛ فيكون بين الفأر والنمر معاداة ومخالفة في المزاجين وأحدهما سُمٌّ للآخر».

Mark once again the conventionality of the scene, which depicts a disciple wondering about the cause of a certain phenomenon for which he cannot find any explanation (the first step in a rational inquiry) and a teacher who far from dismissing the question as irrelevant improvises an elaborate answer in strictly rational terms.

¹ For the latter pair, cf. «*almumātālatu walmuqābālah*» in ĠABIR B. ḤAYYĀN, *Iḥrāġ* 778.

² This ABŪ ḤIMRĀN must be the same one mentioned in ARRĀZĪ's *Alḥāwī* and which RICHTER-BERNBURG identifies with ABŪ MĀHIR B. SAYYĀR, teacher of ALMAĠŪSĪ and ABULḤASAN AṬṬABARĪ and author of some annotations to IBN SARĀBIYŪN's *Kumāš* (cf. RICHTER-BERNBURG 1983: 69–70 n. 41a).

Similia similibus

My concern here (as below with the analogous *contraria contrariis*) is not with the pre-Socratic philosophical manifestations of the τὸ ὅμοιον ὡς (also πρὸς) τὸ ὅμοιον idea, let alone with the modern appropriation and resignification of this concept in homoeopathic (and accordingly allopathic) medicine. It is worth noting, nevertheless, that the integration of this natural philosophical principle into medicine is already attested in a number of different forms in the Hippocratic collection, all of which can be subsumed into a general category of “like cures like”.¹ In Hippocratic texts this principle is implicitly but yet quite unmistakably applied to purgative drugs (καθαρτικά), which are affirmed to produce their effect on a given humour on the basis of a similarity in constitution. A drug with a phlegm-like (φλεγματούδης) nature, for instance, shall purge phlegm but not either bile.

A slightly less conspicuous association inspired by sense-perceptible resemblance is chromatic correspondence (*Farbenkorrespondenz*), as when *black* hellebore is prescribed against diseases caused by black bile, red elements such as flowers or fruits against those related to blood, or the *yellow* honey-based μελίκρητον (Attic μελίκρατον) against jaundice.² With regard to the later genre of *Hawāṣṣ* the case of the χαραδριός bird is, without any doubt, the most interesting, as already in Greek texts its flesh is commended as a remedy for jaundice in an apparently strictly medico-dietetic context but a mythic association of this bird with jaundice can be traced back to the 6th c. b. CE.³

¹ Cf. the excellent monograph by MÜLLER 1965, which despite its pervasive positivism remains the best survey of the subject to date. The different reflections of the *similia similibus* idea in the Hippocratic collection are located and commented separately in MÜLLER 1965: 112–150. The typology outlined there in a lengthy and most elaborate footnote that runs across three pages has been quite helpful for my own sketch here and it ought to be further developed in the future (cf. MÜLLER 1965: 148–150 n. 142).

² Cf. MÜLLER 1965: 146–147, 148 n. 142, where a quite sensible (but rarely admitted) inference is drawn from the prescription of the milk from a *black* cow against blood-related ailments, which “läßt sich wohl nur dadurch erklären, daß die Farbbeziehung zum Blute eine Rolle spielt” (MÜLLER 1965: 148 n. 142). Such specific indications were transmitted for centuries even after having been entirely decontextualised and it is possible that the enigmatic reference in Islamic text to “the milk of a black woman that suckles a child” might have a similar origin, perhaps even as a reinterpretations of the original passages.

³ Cf. HIPPOCRATES, *Affect. int.* [37] (L V VII 260₄₋₆); cf. also MÜLLER 1965: 149 n. 142, who classes the pre-Hippocratic account on looking at the χαραδριός as a means to get rid of jaundice as an example of Type 3 *Gleiches befreit von Gleichem*. Cf. further GAILLARD-SEUX 2021, which offers an exhaustive overview of the association between jaundice and yellow things (especially birds) in the Graeco-Roman tradition.

The best-documented manifestation of this principle, however, is the medical use of a certain animal organ to heal an ailment affecting the same organ in a human.¹ Although at an earlier phase a combination with some other principle may be postulated as the origin of more specific indications (namely mentioning the organ of a particular animal, not of any animal whatsoever) analogical pressure seems to have resulted in the extension of the organ-heals-organ to a wider range of animals. Some examples of this type of analogy include the use of an onager's or a wild horse's spleen against splenetic ailments:

GALEN, *Sec. loc.* IX.2 (K XIII 242₈₋₉)

ὄναγρου ἢ ἵππου ἄγριου σπλήνα ξηράνας κόψε ἀπόθου καὶ δίδου κοχλιάρια β'.
μετ' οἴνου κεκραμένου κυάθων τριῶν.

The same principle emerges in connection to with the motif of “nature as a teacher” in the zoographic report about eagles eating other animals' liver when afflicted by hepatic pains. This story must have entered the Islamicate written tradition through some pseudepigraphic *Ḥayawān*, for IBN QUTAYBAH ascribes it to “the author of the *Logic*” (ie ARISTOTLE):²

Ḥuyūn IV (B II 478₁₇₋₁₉ | Q II 93₁₁₋₁₂)

قال صاحب المنطق: «العقاب، إذا اشتكت كبدها من رفعها الثعلب والأرانب في الهواء وحظها لذلك وأشباهه، تعالجت بأكل الأكباد حتى تبرأ».

An echo of this story is further found ascribed to GUGIR (probably ĞURĜĪS)³ in the *Liber de proprietatibus sexaginta animalium* ascribed to ARRĀZĪ.

¹ These correspond to Type 1 *Gleiches hilf Gleichem* in according to the classification propounded in MÜLLER 1965: 148 n. 142, which includes also resemblance in form or colour in the case of plants or minerals.

² I have not been more fortunate than BROCKELMANN in identifying the origin of the passage (cf. his source apparatus *ad loc.*). Judging from the context in which the quotation appears it would seem to stem from some pseudepigraphic text akin to *Nafī*. The account may have been mediated by ALĠĀHĪD's *Ḥayawān*, in which much zoographic material is drawn from “the author of the *Logic*”. A curious apomorphic misreading of the same passage is attested by IBN ʿABDIRABBIH, *Ḥiqd* VII 272₃₋₄, where the snake (*ḥayyah*) has substituted for the eagle and truffles (*kamʿah*) for livers.

³ This might be ĞURĜĪS B. ĠIBRĪL B. BUḤTĪŠŪʿ (d. ca 768), director of the hospital of Gondēšāpūr, translator of Greek medical texts into Arabic and author of a *kunnāš* originally written in Syriac, cf. ULLMANN 1970: 108, who adds, as usually, an exhaustive list of quotations ascribed to ĞURĜĪS in ARRĀZĪ's *Alḥāwī*.

ARRĀZĪ, *Sexaginta XVIII De lupo* (A 68ra 3–10 | V 110r 56–61)

GA.: «Epar lupi tritum valde desiccatum, si ex eo bibatur coclear unum cum vino dulci, valet dolori epatis antiqui cuiuscunque malicie complexionis, quia in ipso est proprietas conueniens epati infirmo».

Et dixit GUGITH quod confert omnibus animalibus dolentibus epar. Probatio huius est quoniam vultur dolet in epate, si venetur aues magnas et comederit ex epate earum, curabitur.

tritum valde desiccatum] desiccatum et tritum nimis V | antiqui] – V | Gugith] Gugir V | malicie] fuerit male V | conueniens epati] *complexionis epatis* A | quod ... epar] Epar confert omnibus animalibus dolentibus epar si comedatur V | huius] eius V | venetur] *in venit* A | curabitur] curatur V.

One could hardly find a better illustration of this principle than the entry on bears in the *Kyranides*, which looks very much like a compact version of the type of treatise represented by *De vulture*, focusing in this case on the medical uses of virtually every single organ of this plantigrade:

Kyranides II.1 Περί ἄρκτου 6–11, 13–16

K 112–113

ὠφελεῖ οὖν εἰς θεραπείαν.

Τῆς γὰρ κεφαλῆς τὰ ὀστᾶ περιᾶπτε πρὸς κεφαλαλγίαν πάσαν. ὁ δὲ ἐγκέφαλος αὐτοῦ βρωθεὶς ἐπιληψίαν ἰάται. οἱ ὀφθαλμοὶ δὲ φορούμενοι παντοῖον πάθος ὀφθαλμῶν ἀποστρέφουσιν. τῶν δὲ ὠτῶν αὐτοῦ ὁ ῥύπος σὺν ῥοδίνῳ πάσαν ὠταλγίαν ἰάται. οἱ δὲ ὀδόντες ὀδονταλγίαν καὶ περιαφθέντες παιδίοις ἀνωδύνως ὀδοντοφυοῦσιν. [...].

τὸ δὲ ἦπαρ ξηρόν, λείον ἐπιπρασθέν, ἥπατικούς ἰάται. νεῦρα δὲ χειρῶν καὶ ποδῶν φορούμενα ποδαγρῶς καὶ χειραγρῶς βοηθεῖ.

Cyranides II.40 *De urso*

D 137^s–138⁴

Ununquodque membrum huius facit ad unumquodque membrum ominis medicinam.

Ossa igitur capitis illius suspende ad omnem cephalalgiam. Cerebrum autem eius comestum epilepsiam sanat. Oculi quoque omnimodam optalmiam curant. Aurium vero eius cerumen cum oleo roseo omnem dolorem aurium sanat. Dentes autem dolorem dentium; suspensi etiam pueris sine dolore dentes educunt. [...].

Epar autem siccum et solutum ac superspersum epaticos sanat. Nervi autem pedum et manuum habiti podagricos et chiragricos adiuuant.

To conclude this brief survey on an anecdotal note, this like-cures-like principle can be exceptionally inverted and some beasts were credited with the innate knowledge on how to heal themselves by resorting to human organs. Within the traditional catalogue of examples of self-healing as shown by non-human animals, *ATTAWḤĪDĪ* includes a remarkable reference to Egyptian vultures (*raḥamah*, *Neophron percnopterus* L.) restoring their weakened sight by slitting or laying open a human gallbladder:

Alʿimtāʿ 10–12 (A–Z I 172₄)

الرخمة، إذا ضعف بصرها، بقرت مرارة إنسان.

Immaterial analogy

Within this provisional category one can classify a series of analogical associations that are not based on identity or external resemblance (either of shape or colour) but rather on a particular physiological or behavioural characteristic attributed to the animal (less often the plant or the mineral) from which the active element is derived. Detecting this particular kind of analogy is relatively easy through comparison to the ethological accounts transmitted in polytheistic (ie not strictly therapeutic) *Ḥayawān* texts, but in some cases the results of this comparison may be admittedly less convincing than those in which an obvious morphological analogy is implied.

Plausible examples of this principle are abundant in *Nat* III. Thus, the ophthalmological prescription of a preparation based on a snake slough might seem a totally unmotivated example of so-called irrational medicine, but an analogical motivation can be found in the traditional story according to which snakes, when they wax old, their eyesight dims, and their skin becomes flaccid, get rid of their slough and plunge into a spring, from which they emerge rejuvenated.¹

Then, if the attribution of an aphrodisiac property to the plant known in Greek as ὄρχις is evidently morphology-induced, the mention of bulls and sparrows must be interpreted as a reflection of the outstanding libido with which they were universally credited.² In the case of bulls the specification of their penis (organ-for-organ) resulted actually in a double analogy, whereas the impossibility of this enhancement with regard to sparrows was somewhat compensated by extending this power to virtually every organ of the bird (their brains, flesh, and eggs).

¹ Cf. *ATTAWḤĪDĪ*, *Alʿimtāʿ* 10–12 (A–Z I 119_{8–11}).

² For bulls, cf. *ATTAWḤĪDĪ*, *Alʿimtāʿ* 10–12 (A–Z I 185_{10–11}).

The same explanation may be adduced for the use of multiple organs of a mule both as the main ingredient or as a necessary complement for contraceptive devices, mules being, in the Hellenic-Islamic tradition as well as elsewhere, the barren animal κατ' ἐξοχήν.¹

Contraria contrariis

Enantiotherapeutics or healing through contraries is one of the fundamental strategies prescribed by Hippocratic medicine and it was encapsulated in the aphoristic maxim «ἀ ἐναντία τῶν ἐναντίων ἐστὶν ἰήματα».² This practice must be understood within the wider context of cosmic ἐναντιώσις (actually the *tadādud* alluded to in *Nat* II.1) and it is probably no coincidence that one of the most explicit explanations of this principle in the Islamic tradition can be found not in a medical treatise but in a mainly philosophical (and more precisely propaedeutic) text such as the IḤWĀN's encyclopaedia. Their combination of the medical treatment through contraries and the doctrine of the specific properties could not be more relevant to our discussion:

Rasāʾil XIX.10 (B 307₃₋₁₀)

وعلم، يا أخي، بأن مثل أفعال هذه الأشجار يكون مثل تأثير الدواء في العضو العليل. وذلك أن من خاصية كل عضو عليل اشتياقه إلى طبيعة الدواء المضادة لطبيعة العلة التي به؛ فإذا حصل الدواء بالقرب من العضو العليل وحس به، جذبته القوة الجاذبة إلى ذلك العضو، وأمسكته القوة المدبزة بطبيعة الدواء على دفع طبيعة العلة المؤلمة. وقويت عليها وغلبتها ودفعها عن العضو العليل.

Etymological association

Names (and all active elements must be necessarily named for them to be recognised)³ have the power to prompt connections that have nothing to do with pharmacognostic theories or natural philosophical doctrines of universal analogy. When fixed and divulged, such associations become an additional source for ḥawāṣṣic materials that in the end may be contextually impossible to distinguish from any other remedies. It is only with the help of translanguistic comparison and not without a dose of etymological speculation, that some onomastic

¹ Cf. ATTAWḤĪDĪ, *Alʿimṭāf* 10–12 (A–Z I 186₂).

² Cf. HIPPOCRATES, *Flat.* [1] (H 92 8 | L VI 92₁₀₋₁₁). After having risked a new coinage myself I gladly found it already in circulation, which certainly gives it more credibility: “the enantiotherapeutic principle” is used, in reference to Hippocratic medicine, by BOULAY 2015: 274.

³ The only exception would be, once again, some charms and writings, which are rather described than named.

links can be detected. The exact nature of the connection is not always clear, however, and associative etymology must have acted in more than one way.

Thus, plastering a mixture of meal and the plant known in Greek as αἰγίλωψ (traditionally identified either as the ovate goatgrass, *Aegilops geniculata* Roth, formerly *Aegilops ovata* L., or the wild oat or haver grass, *Avena fatua* L., both within the Poaceae or Gramineae) was recommended for the homonymous eye ailment αἰγίλωψ (also αἰγίλωπια, a lacrymal fistula, translated by IŞTIFAN and by ḤUNAYN as *ġarab* but reflected exceptionally in *Natāʾiġ* as *rīṣah*).¹ Although the two Greek homonyms may be etymologically as unrelated as their respective Arabic equivalents, the self-evident analogy implied in the prescription of αἰγίλωψ for αἰγίλωψ was impossible to preserve in translation.²

Connections are not, however, always so manifest, and sometimes one can only try to garner evidence to support an intuition. The powerful eyesight with which gazelles were credited, for instance, may well have been inspired by an association with the lexeme δορκ–:

ATTAWḤĪDĪ, *Alʾimtāʿ* 10–12 (A–Z I 1858–9)

الغزال — ويقال: ليس في الحيوان أبصر من الأطباء؛ ويقال لها باليونانية ”النظارة“ و”المبصرة“.

On the other hand, a different tendency obtained quite early (certainly prior to the first written documentation) to name some plants after the ailments which they were thought to heal. Typical examples of this nomenclature in the Greek tradition are βουβώνιον (after βουβών ‘groin’ and also ‘swollen gland,

¹ Cf. DIOSCORIDES, *Materia medica* 4:137 αἰγίλωψ (W II 2833–4) ≡ *Ḥaṣāʾiṣ* 4:132 وهو الدوسر، وهو الغيليص، (B 225r 11–12 | L 153v 19–21 | O 143r 13–16 | P 97r 21–22) also PLINY, *NH* XXV.13.[93] (J–M IV 1643–7), and ARCHIGENES, *Per gen.* I c GALEN, *Sec. loc.* V.2 (K XII 8218–12) ≡ *Qāṭāġānas* V.2 (E 55v 2–6) [→ ALKAŠKARĪ, *Kunnāš* LXIII (S 472_{11–14})]; then GALEN, *Simpl. med.* VI.1.9 Περὶ αἰγίλωπος (K XI 815_{14–17}) ≡ *Mufradah* VI.9 ذكر الدوسر (E 96r 14–16); AETIUS OF AMIDA, *Iatrica* I.9 (O I 3312–13); PAUL OF AEGINA, *Pragmateia* VII.3 A–13 (H II 188_{15–16}) ≡ ARRĀZĪ, *Alḥāwī* [335] دوسر (B 307_{11–12}). The commentary on Chapter III.1 *On the eyes* of *Nat* III ḤAWĀṢṢ, which includes the analysis of the Dioscoridean quote on αἰγίλωψ (= *Nat* III.1.1), has not been included in the sample selected for this dissertation.

² An entirely different strategy was implemented (probably for the lack of a better option) by the Latin translator of *Diosc*¹ 4:132 *egilops*: «*Cum farina mixtus, omnes tumores et egilopas curat*» (S 61₉). For several suggestions as to the obscure origin of the Greek phytonym αἰγίλωψ, cf. VAN VEEK, *EDG* 32; whereas the nosonym is thought to be related to ἄγγιλωψ, the origin of which is itself disputed (cf. cf. VAN VEEK, *EDG* 17). Arabic *dawsar*, in turn, appears to be a borrowing from Syriac ܕܘܫܪܐ (also ܕܘܫܪܐ), cf. BAR BAHLŪL, *Lexicon* 550_{3–6}; PAYNE-SMITH, *Thesaurus* 860–861 s.vv., ultimately going back to Akkadian *dišarru* (cf. DIETRICH 1988: 641), which is documented only as a lexicographic item and it refers to a wild-growing cereal for which an identification as ‘wild oats’ has been suggested on etymological grounds (cf. *CAD* III 160).

bubo') as a synonym for ἀστὴρ Ἀττικὸς, or the transformation of ἄσπληνον into σπλήνιον (after σπλήν 'spleen'). Given the genetical unrelatedness of Greek and Arabic (also Syriac) there was no chance for etymological connections to survive the process of cultural transfer, but it is worth noting that an intelligent translation allowed in some cases for the retention of the original association. That would be the case of βουβώνιον, which was known in the Arabo-Islamic tradition as *ḥālibī* (from *ḥālib* 'groin').

On a tangential note, so far I have come across one single probable instance of autochthonous (ie Arabic) etymological motivation for a specific property. The dreadful effects attributed to the onyx stone (*ḡazī*) appear to derive from a semantic association with one of the realisations of the lexeme $\sqrt{\text{gz}}$, namely *ḡaziṣa* 'to be or become affected with grief' (and its verbal noun *ḡazī*, identical to the name of the stone). The native source of this tradition could be confirmed by the fact that in the original account in PSEUDO-ARISTOTLE'S *Alḡār* the stone is said to be found exclusively in two places in Yemen and then an explicit reference is made to the local kings in relation to the properties of the onyx stone.

Lost connections

All interpretative efforts notwithstanding, the motivation for most specific properties remains obscure. Why should, for instance, the skin of a hedgehog, of all animals, be attributed a property against alopecia? Was it because of its being thick with spines and thus seemingly the opposite of hairless (*contraria contrariis*)? Or was it perhaps a derivation from the power with which this small mammal was credited to defeat the fox (ἀλώπηξ) in battle?¹

In this respect contemporary readers are in no better position, despite all the instruments at their disposal, to understand the nature and the causes of the described phenomena than ancient and mediaeval transmitters. One can only hope, with them, that more insightful minds shall come that shed some light on these obscurities of the tradition.

¹ For the traditional anti-alopecic remedy made of burnt hedgehog skin and tar or honey (which is attested already by DIOSCORIDES), see *Nat* III ΗΑΩΑΨΣ II.VII.5. For the observation that foxes cannot overpower the hedgehog's spines cf. TIMOTHEUS OF GAZA, *De animalibus* 6 Περὶ ἐχίνου χερσαίου: «ὅτι ὁ ἐχίνος νικᾷ τὴν ἀλώπεκα τῇ μάχῃ, μὴ δυναμένην αὐτοῦ βιάσασθαι τὰς ἀκάνθας» (H 726-27).

2.3 The ḥawāṣṣic continuum: some notes on typology

The critical reader must have noticed that no mention has been made so far of charms, spells, and other “overtly magical” elements. Even a suspicion may have arisen that I have been cherry-picking my quotes and references only to support my own construct of the knowledge of the specific properties of things as an essentially non-irrational epistemic tradition—in obstinate opposition to the prevalent opinion on this matter. However, the fact is that neither I had to make any conscious effort to invisibilise the contribution of so-called magic to ḥawāṣṣic lore, nor is the widely accepted mischaracterisation of this knowledge based mainly (or even largely) on such magical elements, but rather on an anachronistic assessment, all too often in the form of a judgement, of the rationality of the above analysed remedies.

It is not for his resort to a few charms (which must be left unexplored here) that AṬṬABARĪ is repeatedly reproached, very much like ALEXANDER OF TRALLES, but only for being a quite enthusiastic transmitter of a knowledge that he considered not only medically useful (and he is above all a medical author) but also worth recording and handing over to future generations. That he devotes a chapter to the explicit refutation (a token of rational debate if there ever was one) of those that deny the existence of any specific properties ought to inspire some caution before jumping to hurried conclusions based on some decontextualised instances of non-conventional remedies.

Moreover, it is not that ARRĀZĪ wrote the earliest extant systematic anthology of ḥawāṣṣic quotes *despite* his being a true representative of the “scientific mind”, as a concession to irrationality or urged by his voracious curiosity, but rather *because* he deemed this branch of knowledge worthy of being approached from a rational perspective. Were he the only author to have ever applied his mind to this lore I could be charged with projecting the scholar’s reputation onto his work. Now, the fact that representatives of learned and institutionalised medicine from IBN MĀSAWAYH to IBN ALBAYṬĀR did not only integrate ḥawāṣṣic elements into their own medical doctrines but actually penned at least one monographic treatise on the subject may suggest that it is the other way round. The preconception about the nature and the rôle of the specific properties in the Islamicate tradition remains unassailed and impervious to evidence, while unelaborate remarks ranging from positivist criticism to redeeming excusation are improvised as a justification for the presence of these elements in such and such text.

All the above considerations notwithstanding, there may be some profit in attempting to outline a sort of “ḥawāṣṣic continuum”, to be imagined preferably as an horizontal one, in order to grasp a better understanding of the diversity

of forms in which the specific properties of things manifest themselves in the corpus.

On the one hand, such a continuum is a much better reflection of the wide range of phenomena covered by the passages transmitted by the authors of traditional *Ḥawāṣṣ* compilations, who by no means limited themselves to medical matters. On the other hand it does not introduce any artificial boundaries where the original texts show none. Just like in the case of linguistic continua, a noticeable (and even striking) difference obtains only when items at the two extremes of the continuum are compared to each other, whereas a transectional observer would perceive rather slight differences from item to item and probably also a few transitional hybrids.

As with any taxonomy, several criteria can be applied to the corpus of properties that result in as many non-mutually excluding classifications. In what follows and as a preparation for future work I shall implement two different criteria and explore the resulting classifications with especial attention to the question of rationality. Once again, references to Graeco-Byzantine precedents have been often (but not systematically) introduced in order to highlight the continuity of the tradition across temporal and cultural boundaries. The analysis, however, is evidently centred in the Islamicate corpus and more particularly in the materials transmitted in *Nat* III (and by extension also in ^a*Ḥawāṣṣ*), a more exhaustive examination being impracticable here and now.

2.3.1 Material classification

A first and almost trivial criterion for the classification of ḥawāṣṣic reports is the nature of the item to which the specific property is attributed. These items or active elements can be simple elements of plant, animal, and mineral origin, complex elements, and human operations (mostly in the form of words, either uttered or written, but speechless operations are also attested). There is a quantitatively marginal remnant that is hard to classify in any of these categories and which shall be dealt with at the end of this epigraph.

Simple elements from the three realms require little comment since they are abundantly illustrated in the passages quoted so far and they make up also the vast majority of passages analysed in Chapter 4. There are nevertheless two considerations to be introduced here which may require further scrutiny in the future. First, the representation of the three realms in the corpus is far from proportionate. In the *Ḥawāṣṣ* genre minerals are remarkably underrepresented. Even if there is some statistical basis for such a disproportion (since DIOSCORIDES' *Materia medica* there were far more reports available on plants than on minerals and neither GALEN nor later authors changed this in a signifi-

cant way), ḥawāṣṣic remedies involving mineral substances are still noticeable rarer than those prescribing elements of animal origin despite there being no shortage of materials in the corpus. In this regard it is also worth noting that while zootherapeutics became quite early (at any rate in pre-Galenic times) an autonomous epistemic genre, a proper branch of iatrolithogonomy does not appear to have ever developed.¹ To a certain extent this is a logical consequence of the materiality of the elements involved. Just like neither plants nor animal parts lend themselves to engraving, so are minerals far more difficult than plants to use in everyday medicine.

Plants

There is no need to emphasise the centrality of plants in the Helleno-Islamicate medical tradition—so much so that pharmacognosy itself is often identified more or less explicitly as pharmacobotanics or botanics applied to medicine. More than three quarters of the species described in *Materia medica* are plants and the new additions to the Roman store introduced in the Islamicate period came almost totally from the same realm.

An observation must be made here in this regard that is not without consequence for the matter under discussion and which will serve, moreover, as an illustration of a quite characteristic use of the specific properties attributed to a plant (in this case to its seeds).² An early modern identification of some species as typical innovations of post-Byzantine age lingers on particularly in the quarters of historians of Islamicate science but in some instances this chronology can be proved to be wrong. Even the idea that the simple mention of clove (καρυόφυλλον) or myrobalans (μυροβάλανος), to put just two emblematic examples, in an allegedly Roman text makes either the passage or the text itself automatically suspect (as an interpolation or a pseudepigraph respectively) has been challenged more recently with compelling arguments.

In the case of *Nat* III there is a passage that involves one of these species (namely the clove-tree) and, at least originally, a Roman authority. In *Nat* VI.III

¹ The picture is actually more complex than this oversimplification would imply, for one should also bear in mind that the development of astrolithogonomy and talismanics has no counterpart regarding either plants or animals. This may be due, at least partially, to the particular conceptualisation of the specific properties of stones as purely immaterial or spiritual (*rūḥāniyyah*), which put them in a perfect position to be associated with the spiritual (also *rūḥāniyyah*) forces attributed to the celestial bodies.

² This observation is admittedly a digressive one but it is not entirely unwarranted given that the commentary on the section on the ailments of the genitals in *Nat* III is not included in this dissertation. Some of the conclusions reached there may be of some interest for the reader, however, and it is in this hope that I offer here at least one extract from that commentary.

On things that prevent conception anonymous instructions are provided for a woman who does not wish to become pregnant: let her simply swallow a grain of male clove every month. The original source of this quote in ^α*Hawāṣṣ* can be retrieved with the help of the *Hārūniyyah*:

Nat VI.III.3

Hārūniyyah I.XII.6 (G 233₁₇₋₁₈)

وقالت ابلاوطرة الحكيمية: «إذا ازدردت المرأة
كل شهر حبة قرنفل ذكر، لم تلد أبدًا». تأخذ كل شهر حبة قرنفل ذكر فتزودها: فإتيها
لا تحمل.» وقال: «إذا أرادت المرأة (أن) لا تحمل،
لا تحمل.»

Now, this quotation from CLEOPATRA (for thus is how the name of the sage should be reconstructed) is extremely interesting on two accounts. First, it does not derive from ARRĀZĪ's *Hawāṣṣ* (her name does not feature in that anthology) but is one of the many additions made from alternative sources by the anonymous compiler. Second, the exact same passage can be located in late-ninth-century Qayrawān and, more importantly, its does not stem from GALEN's excerpts from her *Cosmetics*.¹

The earliest attestation is a quote from IBN ḤIMRĀN in which the remedy is anonymously reported but the ascription was available to IBN ALĠAZZĀR, who includes it in the same form and with the same ascription in the entry on cloves in the pharmacognostic *Istimād*:²

¹ All of which cluster in the first book on the composition of drugs according to the places, cf. *Sec. loc.* I.2 (K XII 403₅₋₄₀₅₁₇), I.2 (K XII 432₁₂₋₄₃₄₂), and I.8 (K XII 492₅₋₄₉₃₁₂). It is unclear whether GALEN quotes directly from the original text or rather at second-hand from CRITO's own excerpts. Let it be noted that these cosmetic recipes were received in the Islamicate medical tradition with an explicit ascription to "Cleopatra's *Book of cosmetics*", cf. AZZAHRĀWĪ, *Taṣrīf* XIX.II.2,3|7 (S II 66₂₀₋₂₃, 66₃₁₋₆₇₂), where the author is mentioned as «ابلاوطرة», which suggests that this form ought to be considered a genuine apomorphy at least in western texts. A better preserved form of the Egyptian queen's name is transmitted by ALMASŪDĪ, who ascribes to her books on medicine and charms (*ruqyah*) that were well-known amongst physicians, cf. *Murūġ* XXVI (M-C I 229₁₅₋₂₃₁₇), where the text reads once «كيبواترا» but no less than six times «قلبطة».

² For *Istimād*, cf. also the Latin translation *Fiducia* II.15 *gariofli uel karomfal*: «*Dixit Eliobatra: "Si uis quod mulier non concipiat, transglutiat quolibet mense granum unum gariofilis masculinum"*» (B 103vb 16-18). In the Arabic *Istimād* the name of CLEOPATRA is found as «ابلاوطر» in this locus in the facsimiled manuscript (= Ayasofya MS 3564, fols. 1-91, copied in 1144) but the Judaeo-Arabic copy preserved a slightly better reading «ايلابتر» There it is transmitted as «ابلاوطر» | «ايلابتر» in a previous entry on frankincense at M 22v 18 | S 48₂₀, then as «ابلاوطر» | «ايلابتر» at M 29r 11 | S 65₆ on tragacanth (both drawing from a different text on *Abdāl* or drug substitutes). Such forms (which are rendered as *ylobatra* / *ylobratra* in the manuscripts of the Latin translation) reflect an adaptation by addition of a prosthetic vowel (probably *i-*) and a later mistransmission of *-f-* (unpointed ڤ) as *-y-* (unpointed ڤ).

IBN ʿIMRĀN C IBN SAMAGŪN

Ġāmiʿ قرنفل 3-ق (S IV 10₂₀₋₂₁)

وإن أردت ألا تحبل المرأة، فتأخذ في كل
شهر حبة قرنفل ذكر فتزدردها.

القول في القرنفل *Istinād* II.15M 22V 22–23 " S 49₂₋₃

وقالت إيلابطرة: «إذا أردت ألا تحبل
المرأة، فتأخذ في كل شهر حبة قرنفل ذكر
فتزدردها».

إيلابطرة [אילאובטרה M، الاوبطر S | ألا] ان

S لا | فتأخذ [S | ذكر] ככר M، - S.

A typological parallel for this passage is found in IBN ALĠAZZĀR's epistle on the specific properties, in which four different excerpts from CLEOPATRA's book are one of the rare but highly significant additions by the author to his copy-text (ie ARRĀZĪ's *Hawāṣṣ*). In view of the subjects upon which these quotes touch, they might well stem from an early prototype of the later *Secreta mulierum*.¹

Hawāṣṣ [10] (K 40)

وفي كتاب اقلابطرة: «إذا أخذت المرأة كل شهر بول بغلة وزن ثلاثين درهما فشربته،
فاتها لا تحبل».

اقلابطرة [ايلابطو A.

Hawāṣṣ [77] (K 54)

وفي كتاب اقلابطرة: «تأ عمل للمرأة التي لا ترضى زوجها: يؤخذ مع رجل الضبع اليسرى
فيسعطها منه، فاتها ترضى به ولا تطلب غيره».

اقلابطرة [ايلابطو A.

Hawāṣṣ [101] (K 58)

وفي كتاب اقلابطرة: «إذا أردت أن لا تزني المرأة، فخذ خصية ذئب ومرارة ثور أسود،
فادهن خصية الذئب بالمرارة، ثم امسح قبئها، وهي لا تشعر».

اقلابطرة [ايلابطو A.

¹ A look at this genre shows that the collocation of cosmetic, aphrodisiac, erotic, and reproduction-related materials is far from unprecedented and that there may be no need to postulate a plurality of books to account for this thematic diversity. This does not preclude, of course, the probable circulation of more than one title under the name of CLEOPATRA as reported by ALMASŪDĪ (some echoes in the alchemical tradition may also point in this direction), but it is perhaps more plausible to assume that at least IBN ALĠAZZĀR's quotes derive all (directly or indirectly) from one single polythematic compilation.

Later western echoes of this quote include a reinterpretation of the author's name as PLATO by ALʿIDRĪSĪ and an anonymous reproduction of the same passage in the *ʿumdah*.¹ Incidentally, the inclusion of this passage in ^α*Ḥawāṣṣ* seems to provide additional evidence for the hypothesis of its particular connection to the Qayrawānī-Andalusī tradition.² As for the ultimate source of these passages, a link has been signalled to a quote from a book by CLEOPATRA «*quem fecerat de feminarum informanda speciositate*» in *De phisicis ligaturis*, the Latin translation of an original Arabic ascribed to QUSṬĀ B. LŪQĀ and the origin and authorship of which are still disputed.³

Regardless of all diachronical and intertextual considerations, the above passage shows quite clearly that it is impossible to draw an imaginary line separating so-called rational and irrational uses of remedies of plant origin. One cannot help wondering whether the same impression would be made were these words ascribed to DIOSCORIDES or to GALEN and some sort of theoretical explanation appended attributing this effect to the particular temperament of the drug. There are, indeed, a number of ἀτόκια (as well as εὐτόκια and other related drugs) attested since the earliest documentation and many of them have never prompted any criticism from modern scholarship.

¹ Cf. ALʿIDRĪSĪ, *Ġāmiʿ*^ḥ ق 3 ق 3 ق 3 (S III 430₁₋₃); and *ʿumdah* [4234] ق 3 ق 3 (B–C–T 484₉₋₁₀).

² Mark that IBN ALĠAZZĀR, *Ḥawāṣṣ* [101] (K 58) is a perfect typological and even phraseological match for *Nat* VI.XII.6 ≡ *Saġullōt* VI.XI.8 (L–M 318₁₅₋₁₆), both of which are ascribed to ARRĀZĪ but were not included in his *Ḥawāṣṣ*. The cognate quote in *Hārūniyyah* I.VII.4 (G 173₇₋₈) is explicitly ascribed to IBN YŪḤANNĀ (probably IBN MĀSAWAYḤ). Precedents in the *Ḥayawān* genre can be located in IBN ʿALĪ, *Ḥayawān* [15.40] (R 152); IBN BUḤTĪŠŪʿ, *Ḥayawān* II.3 (G 50₄₋₆ | Q 14r 2–3) ≡ ALMAWṢILĪ, *Manāfiʿ* E 10v 3–5 ≡ *Nafʿ* II.3 (L 126r 9 – 127v 2); ALMARWĀZĪ, *Ḥayawān* II.4 (C 86r 10–11 | D 76r 13–14 | L 23v 2–3); also in the ARRĀZĪ-ascribed *Sexaginta* III *De tauro* (A 66rb 26–28 | V 108vb 1–2) ≡ *Saġullōt* s.v. פ (P 32r 17–19).

³ Cf. *De phisicis ligaturis* 60–64 (C 106); for ease of reference I follow the prevalent spelling of the title as *phisicis* (even if the manuscript tradition of the text seems to favour rather *phisicis*). This quote is interpreted by ULLMANN 1970: 127–128 as deriving from “das Buch der Kleopatra über Aphrodisiaca” and an explicit connection between IBN ALĠAZZĀR’s quotes and that locus is made by KĀS 2012: 5 n. 13, who assumes that all passages must stem from the same source. With regard to the authorship of the Latin translation (which is traditionally ascribed to CONSTANTINE THE AFRICAN), an important update on the question is offered by LONG 2022 [n.v.], who points out that evidence is inconclusive. On the other hand, the possibility that the IḤWĀN’s *Epistle* 52b *On magic* might be “if not the Arabic original itself, an early testimony in the tradition of the *De Phisicis Ligaturis*” has been recently suggested by DE CALLATAY and MOUREAU in an as yet unpublished contribution to the conference *Power, Religion and Wisdom: Orthodoxy and Heterodoxy in al-Andalus and Beyond* held in Princeton from 29 Mar 2022 to 1 Apr 2022 (the abstract is available at <http://hdl.handle.net/2078.1/259900> [last accessed 25 Sept 2023]).

In any case, the diversity of remedies of plant origin in the ḥawāṣṣic corpus relates not only to their substance (specific properties are attributed to leaves, blossoms, seeds, roots, barks, juices), but also to their modes of operation (for which see below) and to the nature of their effects.

Animals

A large diversity of animals are present in the corpus as sources of ḥawāṣṣic remedies: molluscs, arthropods, fishes, amphibians, reptiles, birds, and, of course, mammals, including the human being. Humans occupy in fact a prominent space in the *Ḥayawān* genre and they are also relatively well represented in medicine-centred *Ḥawāṣṣ*. The relative proportion of animal remedies with respect to those of plant origin does not correlate with the absolute number of known species from each of these two realms, especially if DIOSCORIDES' *Materia medica* or GALEN'S *Simpl. med.* are taken as a reference. Except for a few species unknown to (or at least unmentioned by) Graeco-Byzantine sources, Islamicate additions to this animal stock are only marginal and certainly insignificant when compared to the contribution made in the field of botanics. The main cause for the inflation of this particular kind of remedies must be probably sought in the plurality of organs and secretions available for most species. With the only partial exception of some small arthropods (such as woodlice, cockroaches, or locusts)¹ the repertoire includes heads, legs, feet and paws, wings, hearts, lungs, livers, brains, eyes, tongues, bones, teeth, claws, sinews, skin, hair, as well as milk, blood, fat, gall, urine, excrements, sweat, saliva, semen, and even a spider web.

Probably the most distinctive feature of animal-related specific properties is that here the like-heals-like principle finds a full-blown application in the analogical use of organs for the treatment of ailments of the corresponding human organ. Moreover, the fact that most non-human animals (even invertebrates) are perceived as entirely different from plants in a scale of animacy has, of course, some repercussion on their use in a ḥawāṣṣic context. On the one hand, their essential physiological resemblance to humans facilitates (to a much greater extent than in the case of plants) the application of strategies of transference, animals being by far the most usual victims of such practices (although transference to plants is also attested). On the other hand, there is a remarkable number of instances of non-lethal and even non-harmful utilisation of animals or animal organs that might perhaps be interpreted, at least in some cases, as a

¹ But a remedy against fevers requires specifically the leg of a spider, and a mention is made in the corpus of the heads of flies.

reflection of an ethical attitude (ie avoiding an unnecessary loss of life). A more realistic reading, however, would probably imply that letting the animal go alive after taking from it whatever organ was required was rather a necessary condition for the remedy to be efficient, even as a part of a less evident strategy of transference.

Regardless of the interpretation of these instructions (which, as far as I know is never made explicit), their presence in the corpus is documented in a remarkably stable form since at least Roman times. An amulet against ophthalmia described by AELIAN (d. ca 235) requires plucking off one of the eyes of a sea eel (μῦρος) but the users must make sure that they let the fish go alive, otherwise the eye shall be of no avail to them:

Nat. anim. XIV.15 (S III 158₁₂₋₁₇)

ὄφθαλμὸς δὲ ἄρα ὁ τούτου ὀπότερος οὖν ἐξαίρεθεις καὶ περιὰπτον γενόμενος ἀπαλλάττει ξηρὰς ἀνθρωπων ὀφθαλμίας· τῷ δὲ ἄρα μύρω τῷδε ἀναφύεται φασιν ὄφθαλμὸς ἕτερος. δεῖ δὲ αὐτὸν ἀπολύσαι τὸν ἰχθὺν ζῶντα, ἢ μάτην τὸν ὄφθαλμὸν ἔχων φυλάττεις.

Minerals

Insentient stones may be the elements most intimately connected to specific properties as it is exclusively through their *hawāṣṣ* that they can work their effects. Their specific properties are, moreover, most often conceived as immaterial forces. Like ĠĀBIR B. ḤAYYĀN (or whoever is to be credited with the composition of *Raḥmah*), the Andalusī author of the *Rutbah* describes the only powers that can be attributed to minerals as spiritual (*rūḥāniyyah*), impossible to perceive by the senses:

MASLAMAH B. QĀSIM ALQURṬUBĪ, *Rutbah* II (B 11r 8–9)

فإذا عرفت هذا، فستتقف على أنّ المعادن كلها ليست لها قوى إلا بالقوى الروحانية التي لا تُدرك بالحواس.

This is not without consequences with regard to the contemporary interpretation of such specific properties. The assimilation of therapeutic applications of herbs and even some animal secretions to conventional (otherwise rational) medicine is more or less automatic but such an automatism does not usually extend to the medical use of stones precisely because of the unavailability of a would-be rational physiological explanation.

The fact that most stones were used, in accordance to the immaterial nature of their properties, as amulets or as talismans does not contribute to the overall

impression made by such practices, but again it is not by the modern reader's dogmas and prejudices that the rationality of allochronic and allocultural phenomena ought to be measured.

Complex elements

Within this category I provisionally classify two very different kinds of remedies. On the one hand, *genuine mixtures* in which all the main ingredients can be shown to be attributed with a specific property that can be considered the cause of the intended effect. The combination of two or more such ingredients is to be understood as a logical strategy of enhancement.¹ Thus, given that both naphtha and castoreum are described as emmenagogues by pharmacognostic sources, the alleged property of their mixture in *Nat* VI.vi.2 must have been thought to be an even more drastic device to draw the menses.

On the other hand, there are some actually *complex items* for which it is hard to identify one single active element. The most typical example in the textual family of ^α*Hawāṣṣ* is probably the signet against kidney stones that the compiler borrowed from ARRĀZĪ but chose to ascribe to its Byzantine author:²

Hārūniyyah I.xiii.1

G 237¹⁰⁻¹³

قال الإسكندر: «من عمل خاتمًا من نحاس أحمر ولم يتكلم حتى يفرغ من عمله ونقش صورة أسد وصورة هلال، ونقش في جانب الهلال صورة كوكب ولون الخاتم بالذهب وتحم به — لم تمسه حصى إن شاء الله. وإن حُتم بالخاتم على أقراص من لبان إذا بات القمر بالثرثرة — فمن شرب منه قرصة، سقطت عنه الحصاة في المكان».

نحاس 2- ARRĀZĪ, *Hawāṣṣ*

I 84r 18 – 84v 3 | Q 20²¹⁻²¹⁵ | T 107v 6–10

قال الإسكندر: «يُتخذ خاتم من نحاس قبرصي ولا يُكلم الصانع أحدًا حتى يفرغ منه، ويُجعل له فض ويُنقش عليه أسد ويكتب فوقه اسمه وهلال ويُنقش في جانب الهلال كوكب، ويكون الخاتم بذهب ويُجعل في الخنصر — فإياه لا يُصيب من لبسه الحصى في الكلى ولا وجع الخواصر والقولنج — وقد جرّبه وزعم أنه امتحنه مرّات كثيرة».

قبرصي [قرسى T، فارسي IH | ويُنقش] ويصور Q | ويُجعل] ويلي T | وقد ... امتحنه] وزعم انه مجرب وامحن ذلك T.

¹ From this subcategory one ought to exclude those mixtures in which there is only one demonstrably active ingredient, any other substances being simply a medium or a necessary implement. This is most evident when water, milk, or wine are prescribed for the preparation of potions.

² For obvious reasons I provide only a minimal apparatus for the major variant readings of *Hawāṣṣ*. The passage is quoted from ARRĀZĪ also by ALBALADĪ, *Habālā* III.41 (M 297³⁻⁶), who, as shown in the overview to *Nat* I.3.2, inherits the apomorphic reading «فارسي».

Mark that the *Hārūniyyah* appends an operation to be conducted with this signet that is nowhere to be found either in ARRĀZĪ's text nor in the cited source.

The origin of this quote is an extremely interesting passage in ALEXANDER OF TRALLES' book on the kidneys in which he makes an emphatic vindication of the validity of the specific properties (δυνάμεις) in the context of medical therapeutics:

Therapeutica XI.1 (P II 475¹⁸⁻²³)

πολλά μὲν οὖν εἰσὶ καὶ ἄλλα, οὐδὲν δὲ οὕτως ὁ ἐκ τοῦ Κυπρίου χαλκοῦ δακτύλιος· ἔχει δὲ οὕτω·

Φυσικά

Λαβὼν χαλκὸν Νικαῖον ἢ Κύπρινον πυρὶ τὸ σύνολον μὴ συνομιλήσαντα τὸν ἐν τῷ μετάλλῳ τοῦ χαλκοῦ εὐρισκόμενον ποίησον γενέσθαι ὡς ψιφίδα, ὥστε φανῆται ἐν δακτυλίῳ, καὶ γλύψας ἐπ' αὐτῆς λεόντα καὶ σελήνην καὶ ἀστέρα κύκλῳ τούτο γράψον τὸ ὄνομα τοῦ θηρίου καὶ ἐγγλείσας χρυσῷ δακτυλιδίῳ φέρει παρὰ τῷ μικρῷ ἢ ἰατρικῷ δακτύλῳ.

From a synchronical perspective it is impossible to analyse this item into its essential components: neither copper (Cyprian or otherwise) nor the specific figures of a lion and a crescent moon can be associated with calculi; nor does there seem to be any etymological connection between the name of the lion (λέων) and this ailment. Even in its original formulation by ALEXANDER OF TRALLES one must surmise that the litholytic property was attributed to the signet as a whole and that for its power to be efficient each and every one of the instructions must be followed.

Utterances and writings

Probably following a preexisting trend, even the earliest Islamicate ḥawāṣṣic corpus include already a number of passages in which the active element or, in other words, the cause of the described effect, cannot be other than spoken words or written characters. The specific property must have been attributed, therefore, to the utterance (λόγος) or to the graphic signs (χαρακτήρα) themselves. The typological diversity of these elements must be left untackled in this dissertation, but the few examples included in *Nat* III and in its cognate texts can be showcased here as a preview.

A remarkable quantity of pertinent charms (used here in its widest meaning inclusive of spells, invocations, *historiolae*, etc) was available for incorporation into medicine-centred *Ḥawāṣṣ* texts, yet their presence in ^α*Ḥawāṣṣ* is only marginal, and the same applies to writings (be they graphic spells or invocations, scriptural passages, or *budūh*). In fact, in contrast to the frequency with

which such devices were resorted to in other contexts especially for the treatment of fevers, in the subgenre under examination all the representatives of this category cluster significantly in one single chapter: *Nat* VI.IX *On easing child-delivery*. From a genetic perspective this is simply a reflection of the particular selection applied previously by AṬṬABARĪ (and then by ARRĀZĪ) but it is still worth noting that the work of elaboration and enrichment conducted by the anonymous compiler did not extend to some sources that could have provided a number of additional remedies of this kind.

In *Nat* VI.IX.3 an exceptional example of textualised charm is found that involves a summoning of the angels. A typologically quite different example of ḥawāṣṣic utterance is offered by *Nat* VI.IX.5, according to which a young maiden should shout a noticeably formulaic sentence at a woman that cannot deliver her child. Finally, thanks to *Saḡullōt* VI.IX.8 we know that the parent text included also a *budūh* or ḥawāṣṣic square borrowed from ARRĀZĪ, who in turn had inherited it from AṬṬABARĪ.¹

Celestial beings

As announced above, this general scheme does not quite cover the whole range of manifestations of the specific properties. A major element not included in the above classification are supralunar beings beyond the world of generation and decay, such as the planets and the angels. In *Nat* III there is an isolate instance of angel summoning (in the form of an ἐξορκισμός ≡ *ruqyah*).

The planets, or more generally the celestial bodies, however, play a crucial rôle in talismanics and are also directly involved in the ḥawāṣṣic use of some herbs and stones. In this capacity they would deserve an individual chapter (and probably also their own category) in a systematic survey of the corpus, and the interface between the science of the specific properties and that of talismans ought to be given particular attention too. Given that no true talismans are contained in *Nat* III, however, no such scrutiny has been conducted for this research, but there is one single passage there in which a star is mentioned.

In *Nat* VIII.IX.9 ARRĀZĪ is quoted on a remedy to get rid of warts, the instructions being to look upon a dropping star and to rub the warts with one's hand.²

¹ Let it be noted that in order to avoid prejudice-laden terminology I eschew the label “magic squares” for the particular squares known in the Arabo-Islamicate tradition as *budūh*. Regardless of the hermeneutic utility of such a term in the field of so-called magic (otherwise occult or esoteric sciences), its application to a medical context results in an absurdly circular reasoning.

² ≡ *Saḡullōt* VIII.IX.5 (L–M 322_{23–26}), which cites likewise ARRĀZĪ (ר״א) ≡ *Hārūnīyyah* I.XI.3 (G 225₁₃), anonymous as usually. Mark that the text of *Saḡullōt* reads a plural «כִּיכְבִּיִּם» that must be only accidentally identical to the original reading in *Firdaws* (the source for ARRĀZĪ's passage).

This could easily be classed within the category of human operations, but AR-RĀZĪ enters this passage under the lemma ‘star’ (*kawkab*), which also suggests an astrological connection, as if it were the *rūhāniyyah* of the star that produced this effect. This impression is strengthened by the original wording by AṬṬABARĪ, who instructs rather to direct the hand towards the stars (in the plural):¹

Hawāṣṣ كوكب 6-ك (I, 83v 6-7 | Q 1817-18 | Ṭ 107r 11-12 | V 7r 7-8)

قال: «إن نظر إنسان حين ينقض الكوكب إليه فيمسح يده على التأليل، تذهب البتة».

حين ... إليه [إليه] | إلى كوكب حين ينقض Ṭ | ينقض [ينقض] | V | إليه [إليه] | V - [فيمسح] | فمسح QT | يمسح
V | يده [يده] - Ṭ | التأليل [التأليل] | Q, التألول | T | تذهب [ذهبت] QT.

Firdaws VII.11.2 (§ 525₂₄-526₂)

وإن نظر من كان برجله أو بيده التأليل إلى الكواكب التي تنقض وأمر يده إليها تلك الساعة، انقلعت.

The same vaguely astrological context is seen in the earliest extant attestation of this property by PLINY, who records it within an excerpt from the Magi («*Magorum haec commenta sunt*») and specifies the nature of the excrescences as corns (*clauus* ‘nail’, mirroring Greek ἦλος ≡ *taʿālilu mismāriyyah*). Let it be noted that the immediately preceding remedy against warts (*uerrucae*) provides an accurate astrological indication “when the moon is twenty days old at least”:²

Naturalis historia XXVIII.4.[12] (J-M IV 292₁₆₋₂₀)

Verrucas abolent a vicensima luna in limitibus supini ipsam intuentes
ultra caput manibus porrectis et, quicquid adprehendere, eo fricantes.
Clavum corporis, cum cadit stella, si quis destringat, vel cito sanari aiunt.

¹ The passage is borrowed from *Hawāṣṣ* also by ALQALĀNISĪ, *Aqrabādīn* XLIX s.v. كوكب (B 304₁).

² A version remarkably closer to the one inherited by the Islamicate tradition and apparently independent from PLINY is noted down by MARCELLUS in *De medicamentis* XXXIV.100 «*Verrucas minores congestas, quas Graeci myrmicidas uocant, ut abstergeas, hoc facito: Nocte cum uideris stellam quasi praecipitem se ad aliam partem transferentem, eodem momento locum, in quo uerrucae erunt, quacumque re uolueris deterge; protinus omnes excident. Quod si manu tua nuda id feceris, continuo ad eam transibunt*» (N-L 584₂₄₋₂₉); cf. further PSEUDO-THEODORUS, *Additamenta* XLVIII (R 299₆₋₉).

Except for this passage, *Nat* III, its Vorlage ^α*Ḥawāṣṣ* and probably all medicine-centred ḥawāṣṣic texts in general are large and by un-astrological, which certainly contrasts with parallel traditions such as the ones reflected by the *Kyranides* and by pseudepigraphic (particularly pseudo-Hermetic) treatises on the astrological botanics and lithogony.

2.3.2 Morphological classification

Another possible criterion to classify the mass of ḥawāṣṣic materials handed down in the written tradition is to consider *how* the item is made to produce its particular effect. Such a systematisation was in fact already introduced by ĞĀBIR B. ḤAYYĀN (or by the author of *Iḥrāğ*, which was ascribed to him), who specified the exact ways (*ṣurūṭ* ‘conditions’ in his own terminology) in which properties work. Their effect can obtain through ingestion, through hanging, or through closeness (*muğāwarah*, of will and operation). It is worth noting the distinction made between the categories of periapts and talisman-like items, since the latter do not necessarily require physical contact to be effective:

Iḥrāğ 74¹¹⁻¹⁴

وللأشياء الخواص شروط: منها ما يعمل بالشرب، ومنها ما يعمل بالتعلق، ومنها ما يعمل بالمجاورة لا على سبيل التعلق ولكن على سبيل مجاورة الإرادة والعمل (ولا سبيلًا في باب الطلسمات، وإن هذا النوع من الخواص داخل فيه).

In what follows I offer a cursory overview of the different morphological categories attested in the Islamicate tradition. The extent to which each category is examined depends primarily on whether it is present or not in *Nat* III but there is not, however, a direct proportion between the frequency of this presence and the attention given to it here. Specific properties effectualised by simple ingestion are overwhelmingly prevalent throughout ḤAWĀṢṢ, yet their mostly self-explaining nature makes any length of detail superfluous.

Finally, the temptation should be resisted to read into the typological classification that I propose here any valuational scale that would go from purely “rational medicine” *down* to “magic”. While the readers are, of course, free to interpret the data gathered here as they consider most fit, my expressed aim here is not to establish a vertical scale of rationality but simply to sketch a taxonomy that may be of some assistance in the study of ḥawāṣṣic traditions.

Conventional administration

ĜĀBIR's category of remedies to be taken in a potion can be extended to include not only all modes of ingestion (drinking and sipping, also chewing, swallowing, eating) but actually all the ways of administration that are usual in conventional dietetics and therapeutics, especially liniments, plasters, and bandages.

The main utility of such an otherwise trivial category is that it allows to compare ḥawāṣṣic and non-ḥawāṣṣic remedies that differ exclusively in the explanation provided for their efficiency. While there are very few hangings or amulets for which a strictly humoral rationale was ever invoked, most drinkable remedies and plasters are entirely unrelated (at least in an explicit way) to the specific properties of their ingredients. That makes this kind of items particularly interesting, as the suspicion associated to the way of use is removed and there only remains the would-be rational justification for the alleged benefit.

Remarkable items within this category are, for instance, DIOSCORIDES' report on a hare's rennet as a means to either help with conception when used as a pessary or to prevent it when taken in a drink.¹ Also the Galenic prescription of animal (both human and non-human) faeces as a drinkable remedy against quinsy.² A poultice made of raw snails contrasts only on the aetiological level with any other poultice made of herbs, fat, or powdered minerals.³

Two sets of simple drugs stand out within this category: cathartics and poisons. Purgatives and emetics such as scammony and spurge were probably the first items attributed with a specific property *avant la lettre* to be incorporated into Greek learned medicine. They are abundantly attested and extensively prescribed in the Hippocratic collection, a reference to their δύναμις was already a commonplace in THEOPHRASTUS' time, and they are certainly the most often-mentioned examples of ḥawāṣṣ in a medical context in the Islamicate tradition. There is no need to address the iological tradition here but let it be noted that it is essentially through a specific property (not through their primary or secondary qualities) that poisons are capable of altering the human body.

¹ Cf. *Materia medica* 2:75 πιτύα λαγωῶν (W I 150₁₂₋₁₄) ≡ *Ḥašāʾiṣ* 2:66 إفحة الأرنب (P 36v 9-10 | T 156₉₋₁₁). In our text, cf. *Nat* VI.11.4 and *Hārūniyyah* I.XII.5 (G 233₁₁₋₁₂).

² Cf. *Simpl. med.* X.11.20 Περι ἀνθρωπείας κόπρου (K XII 293₁₋₂₉₅) ≡ *Mufradah* X.11 ذكر الزبل (E 166v 2-10) and *Simpl. med.* X.11.19 Περι κυνείας κόπρου (K XII 291₁₀₋₂₉₂) ≡ *Mufradah* X.11 في علاج الحلق واللهاة (E 165v 21 - 166r 11). Both remedies were collocated by AṬṬABARĪ in *Firdaws* IV.V.3 اللهاة والحلق (Ş 201₂₃₋₂₀₂₆) and the are selected by IBN ALHAYTAM, *Sağ* IV.II.2|3 (L-M 307₁₆₋₂₁), where the passage on dog excrements is ascribed to DIOSCORIDES.

³ For the specific property of snails when used in this way, cf. *Nat* V.VI.1 ≡ *Sağ* V.VI.2, allegedly from *Materia medica* 2:19 κοχλίας (W I 125₁₋₄) ≡ *Ḥašāʾiṣ* 2:10 قوحلياس (P 31r 19-20 | T 131₅₋₇) but actually closer to GALEN, *Simpl. med.* XLI.33 Περι κοχλιῶν (K XII 355₁₇₋₃₅₆) ≡ *Mufradah* XI.25 (E 177v 19-21).

Contact and other modalities of adjacency

A limit case that some might not be willing to classify as conventional are crowns (στεφάνη ≡ *iklil*), some examples of which are nonetheless included quite unreluctantly by GALEN amongst his choice remedies against a headache. No such crown is to be found in our text but BALĪNĀS' instructions in *Nat* II.IV.2 to put a leaf from a laurel tree behind one's ear in order to prevent headaches and inebriation obeys essentially to the same principle. Judging from the explanation appended to similar ways of administration, there is little doubt that GALEN (like his predecessors from whom he inherits these remedies) must have considered physical contact between the active element and the afflicted organ (in this case the head) an unremarkable and entirely rational medical application, no different, in this regard, from liniments, salves, poultices, etc. In the particular case of the laurel tree, moreover, an anticephalgic property was attributed to its leaves when taken in a drink, which makes BALĪNĀS' remedy all the less unusual. This is just one additional illustration of the inadequacy of the categories of 'rational' and 'irrational' for much of the material transmitted in the ḥawāṣṣic corpus.¹

It is just a small step that separates plasters from crowns, and if producing an effect through immediate physical contact is an admitted way of operation, the step is not much larger that separates a crown made of twigs or leaves from a remedy hung from the temples or over the mouth of the stomach. Very much the same thing can be said of the difference (if there is any as far as the way of application is concerned) between a poultice and putting a skin over an aching spot. Then, if some drugs are attributed an attractive property through which they can not only purge when ingested but also bring forth superfluities (and even arrowheads and thorns, according to GALEN himself) when simply applied over the skin, there would not be much reason to doubt that holding a magnet stone (the true paragon of attractive power in nature) in the hand might help with contractions and spasms and even bring a child out of the womb.

As I have repeatedly stated throughout this chapter, it is mostly the nature of the items involved and, above all, the unavailability to the contemporary reader of an immediate and self-evident rationale that may inspire a sense of strangeness, irrationality, and even magicity. When looked at contextually and without prejudice, however, no chasms are perceptible, but only a rather seamless continuum in which virtually every passage, no matter how shocking

¹ The analysis of APOLLONIUS' quote is to be found below in Chapter 4, and some additional remarks on therapeutic crowns are also included in the introduction to the commentary of that *Nat* II.IV there.

and apparently absurd (for a similar impression of strangeness must have obtained in all periods), is paralleled and supported by a number of quotes from the undisputed ancient authorities in medical matters.

Let me illustrate this heterogeneous category with some examples from *Nat* III and its textual family. A ring made of a fresh twig of myrtle is to be worn on the little finger against boils in the groin according to *Nat* VIII.viii.3. A benefit for hot boils on the testicles («διδύμων τε φλεγμοναίς») had been already recorded by DIOSCORIDES, who also mentions how myrtle leaves were put under the armpits and on the thighs.¹

The healing effect of holding a magnet stone in the hand is reported twice in *Nat* VII.iii.1 and VIII.ii.1, where it is endorsed by ALEXANDER.² Its power to ease child delivery when used in the same way is echoed in *Nat* VI.ix.4. The analogy implied in the passage is evident but the exact origin of this tradition cannot be easily pinpointed.³

The use of a ram skin to heal the consequences of flogging in *Nat* VIII.iv.1 echoes a Galenic recommendation and analogous remedies circulated in the Islamicate tradition that required rather a the skin of a goat or a donkey.⁴

¹ ≡ *Sāg* VIII.viii.4 (L–M 322_{11–13}). The passage might be either quoted directly from AṬṬABARĪ, *Firdaws* IV.x.3 (§ 289_{1–3}) or mediated by ARRĀZĪ, *Ḥawāṣṣ* 1–12 (I 79v 15–16), the latter being the source for the same property for IBN ALĠAZZĀR, ALĠĀFIQĪ, IBN ALBAYṬĀR, and ALQALĀNISĪ. For DIOSCORIDES, cf. *Mat. med.* 1:112 μύρσινη ἢ ἡμέρος (W I 106_{2–7}) ≡ *Ḥaṣṣāʾiṣ* 1:116 الآس البستاني (P 27r 2–4 | T 110_{1–5}).

² ≡ *Iktifāʾ*? c IBN ALBAYṬĀR, *Almuḡnī* I.31 في الكزاز (M 31v 15–16); also *Sāg* VIII.ii.1 (L–M 320_{24–26}) ≡ *Nisyōnōt* VIII.ii.1 (L–M 266_{10–11}). For the origin of this remedy, cf. ALEXANDER OF TRALLES, *Therapeutica* XII (P II 58_{126–27}); and previously AETIUS OF AMIDA, *Iatrica* II.25 (O I 164_{30–1653}). The two Byzantine physicians were quoted for this property by SALMAWAYH as recorded in *Arrāzī*, *Ḥawāṣṣ* 3–1 مغناطيس (I 83v 16–18). An exceptional quote from IBN ALĠAZZĀR's now-lost *Aḥḡār* is preserved by BAYLAK ALQIBĠĀQĪ, *Kanz* XVIII.v (P 68r 4–7), according to which the Qayrawānī physician would have transmitted the same quote from SALMAWAYH. This property is widely reported in anonymous form in virtually all genres, from pharmacognosy to encyclopaedias.

³ ≡ *Sāg* VI.ix.7 (L–M 316_{14–16}) ≡ *Nis* VI.ix.4 (L–M 240_{2–4}), who both ascribe the passage explicitly to AṬṬABARĪ. The text, however does not exactly coincide with *Firdaws* VI.ii.3 (§ 410_{11–14}) but is closer to ARRĀZĪ, *Ḥawāṣṣ* 3–1 مغناطيس (I 83v 19 – 84r 1), whence also IBN ALĠAZZĀR, *Ḥawāṣṣ* [99] (K 56_{15–581}); ALBALADĪ, *Ḥabālā* I.52 (M 170_{18–19}); ALQALĀNISĪ, *Aqrabādīn* XLIX s.u. مغناطيس (B 304_{8–9}); and ALQAZWĪNĪ, *Ṣaḡāʾib* II KĀʾINĀT I.2.136 مغناطيس (W 240_{3–5}). There is a parallel tradition that ascribes this remedy to ARISTOTLE, cf. *Aḥḡār*^β [12] (W 42v 16–17) and ATTĪFĀŠĪ, *Azhār* 155_{5–6}). The reference to the woman's chest in BAYLAK ALQIBĠĀQĪ, *Kanz* XVIII.v (P 68r 7–8) seems to reflect an apomorphic reading يدھا for نديھا that is also shared by some manuscripts of ALQAZWĪNĪ, *Ṣaḡāʾib* (it is in fact the reading chosen by its modern editor). The identity of the source of ARRĀZĪ's quote remains to be examined, as the majority reading “Sulaymān” stands at variance with “Iṣlīmūn” in his own *Aḥḡāwī* and “Salmawayh” in indirect transmission.

⁴ ≡ *Sāg* VIII.iv.1 (L–M 321_{8–11}) ≡ *Nisy* VIII.iv.1 (L–M 270_{9–11}). The passage can be traced back to GALEN, *Simpl. med.* XI.1.20 Περι δέρματος προβάτου (K XII 342_{11–15}); thence also AETIUS, *Iatrica*

Another instance of healing through contact is found in *Nat* VIII.IX.2, according to which one can get rid of nail-like and ant-like warts by taking one black chick-pea for each wart and placing it over the wart at the beginning of the month. Then the chick-pea must be removed, put into a cloth, and thrown away.¹ The principle of analogy at work here is quite peculiar and remarkably different from the ones implied in the remedies seen so far. For lack of a better word I would describe this symbolical analogy as *metaphoric*, as if by throwing the chick-peas away one could somehow throw away also the warts. In any case, this remedy is handed down by DIOSCORIDES and it is under his authority that it enters the Islamicate tradition.²

Almost encroaching on proper hangings, ALEXANDER OF TRALLES prescribes in *Nat* VIII.VIII.4 fastening an oak gall to the band of one's underclothing for the treatment of growing boils.³

Hangings, periapts, amulets

From the perspective of the morphological continuum that I am trying to draw hanging a medicalised item from the neck or from the arm is no different from placing a crown of herbs on the head or a ring on the finger. Many remedies that must be hung to be effective share, moreover, the *temporary* nature of poultices and bandages: they are to remain in place only as long as the ailment lasts or as long as its effect is wished to last.

¹ II.172 (O I 211₂₀₋₂₃); but its origin is pre-Galenic, cf. PLINY, *NH* XXX.13.[39] (J–M IV 463₁₆₋₁₈). It was admitted into both zootherapeutic literature and conventional medicine, cf. IBN BUḤTĪŠŪṢ, *Ḥayawān* II.2 (G 25₄₋₅ | P 5r 3–4); ALMARWAZĪ, *Ḥayawān* II.6 (C 91r 11–12 | D 80v 21 – 81r 1 | L 28v 14–15); IBN SĪNĀ, *Qānūn* III.XXII.2,21 (B II 624₂₋₄) and *Qānūn* IV.IV.2,7 (B III 159₂₁₋₂₄). The parallel circulation of the same property attributed alternatively to a goat skin needs further scrutiny in order to ascertain whether it is an intra-Islamicate apomorphy; the two animals are mentioned as equally valid in *Kyranides* II.38 Περὶ τράγου 11–13 (K 172). For an identical use of the skin of a bay donkey, cf. ALQAZWĪNĪ, *Ṣağāʾib* II KĀʾINĀT II.III.3,3 (W 377₂₅₋₂₈).

² ≡ *Sağ* VIII.IX.2 (L–M 322₁₆₋₁₉)

³ Cf. *Mat. med.* 2:104 ἐρέβινθος ὁ ἡμερος (WI 178₉₋₁₃) ≡ *Ḥašāʾiṣ* 2:98 حَمَصٌ بَسْتَانِي (P 43r 2–3 | T 183₁₋₅). The fortunes of this passage are quite impressive, cf. IBN SULAYMĀN, *Ağdiyah* II.I.23 (S II 109₁₁₋₁₃ | Ş 242₁₋₃); IBN ALĠAZZĀR, *Zād* VII.16 (T 652₇₋₉); IBN SAMAGŪN, *Ġāmiʿ* 2–20 (S I 167₁₁₋₁₅); IBN WĀFID, *Mufradah* [78] (A 141₂₃₋₁₄₂) ≡ *Liber Serapionis* [80] (A 76₈₋₁₂ | P 47va 36 – 47vb 4) ≡ *Muḫradāt* 7r 19–21; ALĠĀFIQĪ, *Mufradah* 2–8 (M 185r 20–23 | T 331₉₋₃₃₂) ≡ *Simplicia* C–23 (V 31ra 32–36); IBN ALBAYṬĀR, *Ġāmiʿ* 2–150 (B II 316–10) and *Almuğni* XVII.19 (M 312r 19–22). An early parallel attestation is provided by PLINY, *NH* XXII.25.[72] (I–M III 487₄₋₈); also PSEUDO-DIOSCORIDES, *Simpl. med.* (= *Euporista*) I.167 (W 215₃₋₆).

³ Missing from *Sağullōt* or *Nisyōnōt* but exceptionally ascribed to IBN ALHAYṬĀM's *Iktifāʾ* in ALʾIDRĪSĪ, *Ġāmiʿ*^f 2–5 عنص (S III 363₂₃). The passage is borrowed from ARRĀZĪ, *Ḥawāṣṣ* 2–2 عنص (I 84v 19 – 85r 1) and, as previously shown, it does not stem from the genuine Θεραπειτικά, nor from any other Greek text known to me.

Now, the very word ‘amulet’ by which such hung remedies are usually known is so loaded with preconceptions that its mere mention evokes quite automatically an idea of magic and irrationality. In order to avoid these unwanted connotations I have deliberately chosen a less transparent synonym ‘periapt’, in alternation with ‘hanging’, as the less marked (and linguistically also the most faithful) equivalent of περίαπτον (something that is) ‘hung around’, ‘appended’, or ‘fastened’. On the other hand, a distinction between *casual* and *permanent* periapts may be of some utility here, as most hangings in the medico-ḥawāṣṣic corpus are of the former kind. This has to do, of course, with the temporary nature of most of the ailments for which such hangings are recommended.¹

Examples of typically apotropaic periapts are *Nat* VIII.I.1 from PSEUDO-ARISTOTLE on wearing a red ruby stone either on a necklet or on a ring against pestilence.² Then, an illustrative test could be implemented with regard to *Nat* VIII.VI.1, a genuine (albeit manipulated) quote from DIOSCORIDES in which the Arabian stone, which is described as similar to ivory, is attributed a blood staunching property. The text offers two alternative ways of use of this remedy: the stone can be hung or it can be reduced to powder and poulticed over the bleeding spot. Now, neither the original Greek text nor IŞTIFAN’S translation mention the possibility to periapt the stone.³

The immediately following passage *Nat* VIII.VI.2, in turn, cites ARISTOTLE as having affirmed that the carnelian stone has very much the same property when worn on a ring or a necklet, see *Natāʔiğ* VI.VII.1.⁴ Were it possible to identify the stone referred to by DIOSCORIDES, I could imagine a test (a new one) being conducted to assess the “scientific validity” of this prescription, but I am quite sure that the hanging would be excluded from the experiment.

¹ It is only rarely that periapts are recommended for chronic diseases (an example of this category might be hanging raven’s droppings/foot against inveterate cough) and the most typical amulets to be borne all the time are therefore remarkably absent from the ḥawāṣṣic corpus.

² ≡ *Səğ* VIII.I.1 (L–M 320_{18–21}) ≡ *Nisy* VIII.I.1 (L–M 264_{4–7}) ≡ *Hār* I.XIV.11 (G 267_{12–13}). The source is PSEUDO-ARISTOTLE, *Aḥğār*^p [3] یا قوت (R 99_{17–100}) ≡ *Aḥğār*^t [4] (I 106_{2–4}) ≡ *De lapidibus*^l 354_{18–20} ≡ *De lapidibus*^m [3] (R 386_{23–25}). For the indirect transmission of the passage outside the ḥawāṣṣic genre, cf. particularly the early attestations in pharmacognosy in IBN ALĞAZZĀR, *Istimād* I.55 (S 31_{23–32} | M 15_{r13–15}) ≡ *Fiducia* I.51 (B 100_{rb} 28–30 | V 201_{ra} 41–44); IBN SAMĀĞŪN, *Ğāmi*^f 5–3 (S II 10_{5–7}). As a matter of fact, there is hardly one single author in the Islamicate written tradition who mentions the ruby stone but does not include this property.

³ ≡ *Səğ* VIII.VI.1 (L–M 321_{22–24}), where «אֶל־עֵרֶךְ» is an obvious misreading and «אֶרֶךְ» must reflect some Romance word of the *ivori/vori* type. For the original passage, cf. DIOSCORIDES, *Mat. med.* 5:131 Ἀραβικὸς λίθος (W III 97_{4–6}) ≡ *Hašāʔiğ* 5:55* ارايقوس ليشس (P 129_v 2–3 | T 435_{1–3}). The ascription to GALEN of the exact same passage in *Natāʔiğ* III.III.1 has been analysed with the instances of confusion and hybridisation of Dioscoridean and Galenic quotes in Chapter 1.

⁴ ≡ *Səğ* VIII.VI.2 (L–M 321_{24–27}) ≡ *Nisy* VIII.VI.1 (L–M 272_{11–274}).



As stated in the introduction to this chapter, I had to exclude from the discussion charms, spells, *historiolae*, and a few similar representatives of a loose category of specific properties attributed to words (of which *Nat* III includes just two examples amongst almost three hundred passages). A further elaboration on classifying criteria could not be included here either, but I should point out that a *functional* classification (medical/non-medical and positive/negative, for instance) results quite informative and may be worth exploring.

The several different interfaces at which the knowledge of the specific properties is involved are, once again, extremely interesting and it is only to my own regret that I leave them aside for a while with the hope that I may have an opportunity to revisit them in the future.

A glimpse into the corpus

The history of early Islamicate *Hawāṣṣ* that I envisioned, so many years ago, at the beginning of this research shall have to wait. In the meantime, an abridged overview of a few of the sources explicitly mentioned in *Nat* III is offered here. When one is torn between the naive wish to say all about everything and the sensible common practice of telling a bit about most things, the risk is high that one may eventually explain too little about too few things. Nowhere are the shortcomings of a sample more evident than in this chapter and in the next one, and while including only a selection of epigraphs may be frowned upon, I still hope that making a portion of my ongoing research available may be of some use to others.

On a more practical note, this chapter should also prepare the reader for the kind of analysis that shall be conducted afterwards in Chapter 4. Even if the exposition is punctuated by allusions to the authors' approach to the subject of the specific properties, the focus here is mainly philological. The reception (actually translation) and transmission of the source texts is at the centre of the discussion, and the particular accidents of this transmission as reflected in *Nat* III and in its textual family are dealt with in more detail than the actual contents. On the other hand, given that the knowledge involved here is one deeply anchored in reality, textual criticism must be combined with other disciplines, especially with regard to the identification of the beings (plants, animals, minerals) and concepts (most often diseases) to which the words under scrutiny are related.

The sample finally selected for this dissertation includes three Greek authors (THEOPHRASTUS, DIOSCORIDES, and GALEN), an enigmatic figure whose output is known only through excerpts (*?ṬHWRSEFS/AṬHÜRUSFUS), and a highly in-

fluent pseudepigraphic text ascribed to ARISTOTLE (the pseudo-Aristotelian *Aḥḡār*). Laying emphasis on the Greek roots of the knowledge of the specific properties over the Islamicate representatives of the genre obeys to the principle introduced in Chapter 1. The intellectual continuity of this epistemic tradition is very much the leitmotif of Part III of this thesis and it is only natural that that red thread should show also in the analysis of the corpus.

Besides, when compared to the overall stable transmission of AṬṬABARĪ's *Firdaws* or with the somewhat more fluid by still quite straightforward tradition of ARRĀZĪ's *Ḥawāṣṣ*, the circulation of the passages ascribed to the authors selected here poses a much greater challenge and provides better grounds for textual criticism.

3.1 Greek precedents

It may be attributed to the irony of cultural history that the Islamicate ḥawāṣṣic tradition should be, both in concept and in materiality, an essentially Greek legacy and that it drew not only its inspiration but also almost all its materials from written Graeco-Byzantine sources.¹ A few additions were made at an early stage from alternative sources and also from local and apparently non-written traditions,² but the bulk of passages reporting on the specific properties of things was overall, in the east as well as in the west, in the 9th c. and also in the 14th c., mostly Greek in origin. This indebtedness is even greater in the case of *Nat* III and its textual family as they further add to the inherited stock an extensive selection of quotes from the Arabic translation of DIOSCORIDES and not a few new ones from the Galenic (and pseudo-Galenic) corpus.

It must be emphasised, moreover, that while Islamicate *Ḥawāṣṣ* shows a limited permeability to other non-Arabic (mostly Iranian) influences, it appears to have been particularly hermetic to Ġāhili Arabian traditions, whether they were or not legitimised (that is Islamicised) by association to MUḤAMMAD's sunnah. This is worth noting on two accounts. First, because despite the relative paucity of genuine pre-Islamic Arabian materials, even traditionistic literature (let alone *Adab* works and lexicography) transmits a sizeable amount of information some of which should have drawn, *prima facie*, the attention of *Ḥawāṣṣ* authors. This presumption would seem all the more reasonable in view of the acceptance that some of those reported practices found in the genre of *Nabawī* medicine. Second, *Ḥawāṣṣ* and *Nabawī* medicine are in fact often collocated (and sometimes even carelessly conflated) by some modern scholars as representatives of irrational and mostly magical medicine. Now, the impact of Islami-

¹ The irony can be read from both sides: for the Philhellene, all those adventitious superstitions that had spoiled the pristine rationality of that nation of philosophers came back to their original eastern homeland clad in Greek garments; for the traditional Muslim theologian, the belief in powers for the most part independent from the will of the one god was only one of the many pernicious elements inherited from the previous masters of the Near East. A common trait can be perceived in both attitudes in their branding the Other as the source and origin of all negative influences.

² Incorporation of folkloric materials is already noticeable in AṬṬABARĪ's *Firdaws*, in which the author reports local knowledge about stones and trees, cf. particularly ***ref/from/-NatIII.2*** (***). Regardless of their ultimate origin (which is, of course, itself worth exploring) if any of such non-authored passages enters the ḥawāṣṣic corpus, it does so invested with the authority of AṬṬABARĪ (or more indirectly of ARRĀZĪ). Incidentally, this epistemic validation of originally anonymous and collective knowledge through its ascription to the author that first reported it (one might call this process *deanonymisation*) is quite at variance with the parallel tendency to omit the sources of the quotes (*anonymisation*).

cised Ġāhili traditions on these two genres could not be more different. Not one single ḥadīṭic passage is included by ARRĀZĪ in *Ḥawāṣṣ*, nor is any to be found in ALḤILBĪRĪ's *Natāʾiḡ* III.¹ This disregard is indeed remarkable and betokens an epistemic approach that ought to be further explored.² Suffice it to put here two simple examples of the conspicuous un-Islamicness of standard *Ḥawāṣṣ*—and also, incidentally, of the non-intersecting nature of these two genres in the Islamicate tradition.

On the one hand, there are many items in ARRĀZĪ's treatise that are also included as lemmata in the typical pharmacognostic/trophognostic section of books on *Nabawī* medicine. One of these shared lemmata are truffles (*kamʾah*) and while Islamic medicine duly transmits a saying from MUḤAMMAD on their benefit for the eyes (see above Part I, Chapter 7), ARRĀZĪ only records that truffles proliferate in thunderous years.³ Far more tellingly, ARRĀZĪ appends a chapter on “the wonders found in the countries and on the charms, *sihr*, etc [transmitted] by Galen” at the end of *Ḥawāṣṣ*. Several epigraphs are devoted within that chapter to charms or spells (*ruqā*) and there he quotes two passages from ALEXANDER (who in turn refers in one of them to GALEN) and a third one is drawn from ALYAHŪDĪ (therefore a Jewish source) and “others”. The charm or spell (*ruqyah*) is probably the main apotropaic device in the pre-Islamic tradition and certainly one of the most universally transmitted by Islamic sources, yet ARRĀZĪ shows no interest at all in citing any of those alternative charms available to him in the Sunnah, despite an evident thematic overlapping in the case of scorpion stings.⁴

The above observation ought to be considered as additional evidence for an as yet underexplored compartmentalisation of knowledge in an Islamicate context. As for the question of the genesis and development of *Ḥawāṣṣ*, it further shows how un-Arabic the genre is (except, of course, for its linguistic vehicle). This picture does not change in any significant way when later authors elabo-

¹ But at least two explicit traditions ascribed to MUḤAMMAD are included, in turn, in *Nat* IV (see Part I, Chapter 7, on truffles and on figs), which shows quite clearly the importance of taking into account the conventions of each particular genre when analysing a multi-genre text such as ours. Needless to say, a chronological argument cannot be adduced as an explanation for this lack of traditionistic materials, as such passages were already in circulation long before the compilation of the first known *Ḥawāṣṣ* treatises.

² In the case of derivative texts, of course, the absence of Islamic materials is not so much a reflection of the author's own attitude as an inherited feature.

³ Cf. ARRĀZĪ, *Ḥawāṣṣ* ٩-٨ (I 83v 12), apparently from *Fārisīyyah*.

⁴ For the charms and the *budūh* square recorded by ARRĀZĪ, cf. *Ḥawāṣṣ* في الرقى (I 90r 6 – 90v 5). Early reports of Islamicised *ruqyah* against evil eye, ulcers, scorpion stings, nosebleed, toothache, and sciatica, are transmitted in IBN ḤABĪB, *Ṭibb* 117–128.

rate in the inherited model. In the complex intellectual context of 12th c. Andalus ZUHR opens the corpus, quite unprecedentedly, to incorporate a whole new range of authorities, but he is as reluctant as ARRĀZĪ to let any Islamic materials into his compilation and it does not certainly cross his mind to resort to local “superstitions” or “magic” in order to enrich his collection. Any insinuation to the contrary is based in a misunderstanding of the flow of information in Andalus—it is terminal and decontextualised folkloric traditions that echo earlier written knowledge and not the other way round.

Incidentally, a comparison with the indirectly related tradition of Anglo-Saxon medicine may be illustrative here. Whatever traces of autochthonous traditional remedies are found in the Anglo-Saxon corpus, they are “embedded in a Graeco-Roman medical tradition” and the dependence on exogenous sources is even greater with regard to “magical practices”, the literary manifestations of which reveal “a sophisticated and learned interest fed from foreign sources”.¹ This parallelism is remarkable in that it does not only involve medicine (for which the combination of cultural prestige and apparent practical superiority of the Graeco-Roman written tradition is usually invoked as an major factor of assimilation in both contexts) but is likewise extensive to what is usually labelled as magic.

A word ought to be said on what we *do not* know (and perhaps shall never know) before attempting to describe a little of what is known. That “great eraser” that is Time² has let survive only a fraction of what once was available. In what concerns our subject, a few tracts preserved only indirectly in Latin or Arabic translation and a considerable number of mentions and even quotations testify to the existence of a fairly rich literature on the specific properties in Roman times. Some of those texts dealt with the properties and benefits of one single plant (eg JUBA’s *De euphorbia herba* or the pseudo-Galenic *De virtute centaureae*) or of one animal (as for instance the *Epistula de vulture* or *De taxone*),³ but the existence of more complex compilations recording the uses of the or-

¹ Cf. CRAWFORD 1963: 101 and 109, respectively.

² The phrase is borrowed from NUTTON 2013a: 18, a paper that bears precisely the title “Byzantine medicine, genres, and the ravages of time”.

³ For echoes of JUBA’s text in PLINY and in DIOSCORIDES, who may both depend from SEXTIUS NIGER for this information, cf. WELLMANN 1889: 534, 536–537. The monograph on the *centaurea* (for the an Andalusī reflection of this phytonym see Part I, Chapter 9) is edited in NUTTON 2015; the work is supposed to have been written ca 180 CE by a physician who arrived in Rome from Asia Minor (cf. NUTTON 2010, 2015). An analogous treatise on peony is edited and commented by FERRACES-RODRÍGUEZ 2009 [n.v.]. The edition and a monographic study of the *Epistula de vulture* is provided in MÖHLER 1990 [n.v.]; a synoptical edition of the brief *De taxone* can be find in *CML IV* 229–232 (ed. HOWALD and SIGERIST).

gans and bodily products of a series of animals is also confirmed for as early an author as XENOCRATES OF APHRODISIAS (*fl.* ca mid-1st c. CE).

Furthermore, several paths of transmission of Graeco-Hellenistic knowledge were open as late as the 10th c. (and perhaps even later) that have received little attention from modern scholarship. Although the focus is most often put, for reasons easy to understand, on ḤUNAYN B. ISḤĀQ's circle and on those translators directly associated to some major text, there is still room for surprises in the history of Graeco-Arabica. Thus ABULḤASAN AṬṬABARĪ (*fl.* ca mid-10th c.) mentions a translation, apparently into Arabic, of one of ARCHIGENES' texts by a certain ṢAFWĀN B. ALQAYS, and he appears to have accessed this information in a Ḥarrānī context:

Buqrāṭiyyah VIII.13 في تَقْلُصِ الْحِجَابِ إِلَى فَوْقِ (B 260v 3-4)

هذه العلة غريبة لم يذكرها أحد من الأطباء غير أمرخيجانس. فإني رأيت مقالة بعض الحزازيين في آلات التنفس وأعالال الحجاب المستبطن للأضلاع والصدر يُذكر في ترجمتها أتمها لأرخيجانس نقلها صفوان ابن القيس.

Now, this may be of some import also for the history of early *Ḥawāṣṣ* given that ARCHIGENES features in the catalogue of authorities quoted by ARRĀZĪ and it remains to be examined whether his *Kitābu lʿadwāʾi lmuẓminah* (≠ Περὶ χρονίων παθῶν) is cited directly from an Arabic translation or rather indirectly through GALEN.¹ At any rate, it is a friendly reminder of how cautious one should be in one's statements about the availability or unavailability of any given text, or about the exact source through which a datum may have come to an author's knowledge.

In the following epigraphs some attention is given to three representatives of the Greek medical tradition that are cited in *Nat* III as sources of ḥawāṣṣic materials. First there is THEOPHRASTUS, whose contribution is quantitatively marginal but the occasion is seized to complement the notes on rationality and irrationality sketched in Chapter 2. Then, DIOSCORIDES. The complex Arabic transmission of his *Materia medica* and its special repercussion in the Andalusī pharmacognostic tradition make him an extremely interesting object of study from a philological perspective. As far as the medical applications of the specific properties of drugs are concerned, he is certainly less explicit than GALEN and

¹ Cf. ARRĀZĪ, *Ḥawāṣṣ* 1-3 أرنب (I 79r 4-6), which is actually transmitted, with no reference to ARCHIGENES, in *Nat* V.IV.5; also بنج 1-ب (I 79v 19 - 80r 2). On the biography and literary output of ARCHIGENES OF APAMEA (*fl.* ca 100 CE), cf. the monograph by MAVROUDIS 2000 [n.v.]; also LEWIS 2018. For the Islamicate fortunes of his oeuvre, cf. ULLMANN 1970: 69-70, with a full list of quotes in *Alḥawāṣṣ*.

the interpretation of his attitude is therefore more challenging. A rather telegraphic subsection is devoted to GALEN. The reader shall at least find there some useful information on the Galenic materials transmitted in *Nat III*, but the discussion of his ambiguous stance with regard to the specific properties and to non-conventional remedies had to be excluded from this draft.¹

Needless to say, modern literature on these three authors is vast and covers virtually all aspects of their intellectual output. I have limited my remarks to a few observations from a very specific point of view and in a more favourable context these notes ought to be elaborated in more detail and checked against the specialised literature on the subject.

¹ The notes for that discussion shall lie for a while in the company of the sketches for the sections on ALEXANDER OF TRALLES, BALĪNĀS, AṬṬABARĪ, ARRĀZĪ...

3.1.1 Theophrastus

Nat VI.IV.1 — *Theophrastus* said: «*If qahrubā is hung from a pregnant woman, it shall protect the foetus with God's permission*».

Of the several works in which THEOPHRASTUS (born TYRTAMUS) of Eresus (ca 371 – ca 287) registered his observations on the natural world only one is directly relevant for the study of the Islamicate ḥawāṣṣic tradition: Περὶ λίθων (*On stones*, henceforward *De lapidibus*).¹ Other texts authored by him, especially those devoted to the study of plants (*Historia plantarum* and *De causis plantarum*) are of some consequence regarding the pharmacognostic tradition,² but as far as Ḥawāṣṣ literature is concerned no plant-related quotation from THEOPHRASTUS seems to have ever been included in the corpus.

Only one passage is explicitly ascribed to THEOPHRASTUS in *Nat* III, namely Ḥawāṣṣ VI.VI.1 on electrum (*qahrubā*). A previous passage on the property of electrum (spelled now *kahrubā*) to avail against jaundice is transmitted without attribution in Ḥawāṣṣ V.VI.3 but THEOPHRASTUS is mentioned by name in the cognate locus in *Sağullōt*. In both cases it is from ARRĀZĪ's Ḥawāṣṣ that the passages were drawn.³

In his Ḥawāṣṣ ARRĀZĪ had gathered four different quotes from THEOPHRASTUS' *De lapidibus* (to which he refers as «*fi kitābihī fi lḥiğārah*»). The minerals mentioned in those passages are rock crystal (*billawr*), amethyst (*ğamast*), electrum (*kahrubā*), and diamond (*almās*). In all four cases the whole lemma seems to be derived from THEOPHRASTUS' treatise. Moreover, these four passages appear to be the only lithognomical Theophrastean material in the whole Islamicate tradition, with a possible (but not even probable) exception that shall be commented below.

¹ As with any other Classical author, literature on THEOPHRASTUS is too vast to be covered here and the reader is referred for further bibliographical details to the latest editions of his scientific oeuvre (especially AMIGUES 2003–2006 for the nine books of the *Historia plantarum* and AMIGUES 2018 for *De lapidibus*), as well as to the impressive team work represented by FORTENBAUGH, HUBY, SHARPLES, and GUTAS 1993. With regard to the specifically Islamicate Theophrastian tradition, cf. ULLMANN 1972: 73–74, 111–112.

² Indirect echoes of THEOPHRASTUS work entered the Islamicate tradition through GALEN, cf. *Qāṭāğānas* V.15.1 «*ناورسطس*» (P 35v 12) ≡ *Per gen.* V.14.1 (K XIII 846₅), where the Arabic translation reveals a parablepsis in KÜHN's text; and also a remark from ḤUNAYN on «*فلوس محرق*» (≡ *φελῶν κακαυμένων*) at *Qāṭāğānas* V.16.11 (P 40v 5) ≡ *Per gen.* V.15.11 (K XIII 858_{13–14}), which reads thus: «*قال حنين: "زعم نافرستس أن "فلوس" قشرة شجرة تكون في طور سنا يجر ثمرا يشبه البلوط"*» (P 40v 7–8).

³ For the two parallel loci in the Hebrew translation of IBN ALHAYTAM's *Iktifāʾ*, cf. the benefit against jaundice in *Sağ* V.VI.3 (L–M 311_{4–6}) ≡ *Nisy* V.VI.1 (L–M 213_{3–4}), also *Hārūniyyah* I.XIII.3 (G 239₁₀). Then the apotropaic property in *Sağ* VI.IV.1 (L–M 313_{20–21}) ≡ *Nisy* VI.IV.1 (L–M 230_{1–2}), also *Hārūniyyah* I.XII.6 (G 231₅). The mediating quotes in ARRĀZĪ are reproduced below.

When the two quotes included in ^a*Hawāṣṣ* are compared to ARRĀZĪ's original lemma the main difference in focus between these two texts becomes evident. The latter has clear aim at comprehensiveness, whereas the non-medical properties attributed to electrum are of no use to the anonymous compiler:¹

Hawāṣṣ كهربا 10-ك (I 83v 12-16 | Q 194-8 | T 107r 14-16 | V 7r 13-16)

قال ثاوفرستس في كتاب الأحجار إته، إن عُلق الكهربا على الحامل، حفظ الجنين.
وإن عُلق على صاحب اليرقان، نفعه جدًا.
وإن سُحق وُلطخ به حرق النار، نفع جدًا.
والكهربا، إن أُنعم سحقه وُفخ نحو السراج بمنافخ، اشتعلت منه نار عظيمة لا تُحرق شيئًا مما
تمر به .

ثاوفرستس [اوفرستس I، سلوفرستس Q، ثاوفرستس V | في ... أحجار - V | كتاب [كتابه في Q | إته]
QV - [الكهرباء - V | وإن ... جدًا] - T | نفعه [نفع V | وإن سُحق] ... جدًا - T | والكهربا [فوان
كاربا I | وُفخ ... بمنافخ] وقرب نحو السراج ونفخ بمنفاخ Q | اشتعلت [اشتعلت V | نار [نار Q | لا] ولا
Q | تُحرق] يحرق IV.

The text of the other three lemmata is reproduced here for the sake of comparison:

Hawāṣṣ بلور 12-ب (I 80v 7-9 | Q 106-7 | T 105v 3-4 | V 4v 3-4 | K 122r 13)

قال ثاوفرستس في كتابه في الحجارة إته يذوب كالزجاج ويُقبل الصبغ كقبوله الألوان.
ومن علقه في رأسه، لم ير في منامه سوءٌ ولم يفزع.

قال ... الألوان - T | الحجارة [الأحجار Q | كقبوله [كقبوله V | الألوان - QV | ومن ... رأسه] ان
علق في راس انسان T | في منامه - IT.

¹ The critical apparatus appended to each quote is a minimal one: only substantial variant readings are recorded. The siglum *K* refers to the Cairene manuscript used by KĀS 2010 (namely Cairo, Dār alkitub almiṣriyyah ms Ṭibb 141, fols. 119v-136v). Incidentally, the benefit against burns could have also been of some interest, for sure, but fire burns are nowhere mentioned either in *Nat* III or in *Saḡullōt*/*Nisyōnōt*, and then it is not even sure that the passage in question was included in the compiler's Vorlage, since it is missing by homoeoteleuton from at least one of the manuscripts consulted.

Ḥawāṣṣ ج 4-** (I 80v 18 – 81r 2 | Q 112-5 | V 4v 14–16 | K 122v 1 | T —)

قال ثاوفرسطس في كتابه في الحجارة: «إِنَّ مَنْ شَرِبَ الخمر في إناء منه، لم يسكر —
وينبغي أن يُجرب بأن يُطرح منه قطع كثيرة في كأس». وقال: «وينفع من التفتُّع إذا لبس؛ وإن وُضع تحت الرأس، رأى رؤيا حسنة عجيبة».

منه - [V | يُجرب] يجذب Q | قطع كثيرة العدد [عداد قطع I، قطاع كثيرة عدة Q.

Ḥawāṣṣ م 7- (I 84r 10–12 | Q 209-10 | V 8r 13–14 | K 125v 16)

من كتاب ثاوفرسطس في الحجارة، قال: «حجر الماس ينفع من المغص الشديد، إذا عُلق
على البطن، ومن فساد المعدة».

حجر - [V | إذا] ان V | البطن [بطنه Q.

Although the question of the authenticity of these (and other) THEOPHRASTUS-ascribed passages cannot be tackled here, I shall add a double digressive remark on positivistic prejudice as a hindrance to scholarly research.

That any of the passages allegedly quoted from THEOPHRASTUS in the Islamicate tradition might actually stem from his *Περὶ λίθων*, the remains of which would show such a “streng empirische Charakter”, is emphatically denied by ULLMANN. He rather postulates a late Hellenistic *falsification* which would therefore be an early parallel to the pseudo-Aristotelian *Aḥḡār*. Of this supposed PSEUDO-THEOPHRASTUS nothing remains, however.¹

Probably sharing ULLMANN’s assumption but yet adducing some evidence from the actual pharmacognostic tradition, KĀS has also postulated the existence of a BOLOS-ascribed treatise that would have already contained some pseudo-Theophrastean passages and which would then explain the “mysterious” irregularities in the correspondence between ARRĀZĪ’s lemma on *billawr* and the apparently related entry on *mahā* in authors that depend on him.² Now, regardless of how plausible pseudepigraphy may be (and in this case it is very plausible indeed, especially in KĀS’ version of the hypothesis), some of the basic elements of ULLMANN’s argument are methodologically flawed.

¹ Cf. ULLMANN 1972: 112.

² Cf. KĀS 2010: 36, 431, and 1059–1060. Let it be noted, however, that in ATTAMĪMĪ and ALĠĀFIQĪ (which KĀS considers to be totally independent from each other) the name of the authority is nowhere near to the usual transcription ثاوفرسطس and that it further includes a *nisbah* «الجوهري» that is otherwise never attributed to THEOPHRASTUS.

To put it in few words: it is not because the passages inherited by ARRĀZĪ are intrinsically incompatible with the “character” of *De lapidibus* that they “can not” stem from it, but rather because there is not enough positive evidence to suppose that they were ever included in it and because there are typological and contentual parallels that may suggest an alternative explanation for their origin. As a matter of fact, it is not commendable practice to define the “character” of a whole *lost* book by a few extant notes, dismissing without further comment whatever piece of evidence does not fit in the picture.¹ Moreover, suggesting that the only explanation for the circulation of passages ascribed to THEOPHRASTUS but not found in the extant text of *De lapidibus* must be to accept the existence of a falsified treatise may be pressing the evidence too far. In this regard KĀS is not only more cautious but he also backs his hypothesis with parallel evidence drawn from ARRĀZĪ’s *Alhāwī*.

Furthermore and regardless of what the PSEUDO-THEOPHRASTUS that lies at the origin of the passages inherited by the Islamicate tradition might be, something can be said about the nature of the attitude of the authentic THEOPHRASTUS towards the subject of the specific properties. At the very opening of what remains of *De lapidibus* the following summary exposition of the disparate characteristics of stones is found:

De lapidibus I.4–5 (A 36–23)

Ἰδιότης δὲ πλείους εἰσὶν ἐν τοῖς λίθοις [...]. Τοῖς δὲ λίθοις αὐταὶ τε καὶ πρὸς ταύταις αἰ κατὰ τὰς δυνάμεις τοῦ τε ποιεῖν ἢ πάσχειν ἢ τοῦ μὴ πάσχειν. Οἱ μὲν γὰρ τηκτοί, οἱ δ’ ἀτηκτοὶ καὶ καυστοὶ, οἱ δ’ ἄκαυστοὶ, καὶ ἄλλα τούτοις ὅμοια· καὶ ἐν αὐτῇ τῇ καύσει καὶ πυρώσει πλείους ἔχοντες διαφοράς. Ἐνιοὶ δὲ τοῖς χρώμασιν ἐξομοιοῦν λέγονται δυνάμενοι τὸ ὕδωρ, ὥσπερ ἡ σμάραγδος, οἱ δ’ ὄλως ἀπολιθοῦν τὰ τιθέμενα εἰς ἑαυτούς· ἕτεροι δὲ ὄλκην τινα ποιεῖν, οἱ δὲ βασανίζουσιν τὸν χρυσὸν καὶ τὸν ἄργυρον, ὥσπερ ἢ τε καλουμένη λίθος Ἡρακλεία καὶ ἡ Λυδὴ. Θαυμασιωτάτη δὲ καὶ μέγιστη δύναμις, εἶπερ ἀληθές, ἡ τῶν τικτόντων· γνωριμωτέρα δὲ τούτων καὶ ἐν πλείοσιν ἢ κατὰ τὰς ἐργασίας· γλυπτοὶ γὰρ ἔνιοι καὶ τορνευτοὶ καὶ πριστοί· τῶν δὲ οὐδὲ ὄλως ἄπτεται σιδήριον· ἐνίων δὲ κακῶς καὶ μόλις.

The excerpt (which has been quoted in some length in order to avoid any legitimate suspicion of cherry picking from my side) illustrates quite clearly a number of aspects that may be of some relevance to the question of the origins of Helleno-Islamicate ḥawāṣṣic traditions.

¹ Thus, in ULLMANN’s compressed argumentation the fact that THEOPHRASTUS *decides* to include a report on the attracting power of the “fabulous” λυγγούριον has absolutely no bearing on the presumed strictly empirical nature of the treatise.

First, the power or specific property (δύναμις)¹ of some stones is discussed in the general context of the description of their particular features (ιδιότητες) and no explicit qualitative distinction (in the sense of a categorisation) is made between all these differences (διαφοραί). Some stones can be burnt, others can not; some can be used as touchstones, others are capable of having an effect on nearby things. Then, a scholarly rationalistic exposition is not incompatible with the appreciation of the wondrousness of nature («Θαυμασιωτάτη δὲ καὶ μέγιστη δύναμις») if the property in question can be verified.² Of course a sceptical attitude towards some reports («λέγονται», «εἶπερ ἀληθές») is to be expected from a learned member of the Lyceum, especially when writing a would-be scientific treatise. However, there is no criticism or scorn, let alone condemnation, but just a genuinely empirical (as opposed to dogmatic) approach to his subject: given that he has probably never seen the alleged virtue of the stone at work, he can only note it down from hearsay or from what other authors before him have written.³

As far as the ἤλεκτρον is concerned, the following passage ought to be added to the one borrowed from DIOCLES OF CARYSTUS and compared, perhaps, to the last passage in ARRĀZĪ's entry:

De lapidibus II.16–17 (A 6_{18–24})

Εἰσι δὲ περὶ τε τῆ Λιγυστικῆν, ὅπου καὶ τὸ ἤλεκτρον, καὶ ἐν τῇ Ἡλείᾳ βαδίζοντων Ὀλυμπίαζε τῆν δι' ὄρους, οἷς καὶ οἱ χαλκεῖς χρῶνται. Εὐρέθη δὲ ποτε ἐν τοῖς Σκαπτῆς Ὑλῆς μετάλλοις λίθος, ὃς τῆ μὲν ὄψει παρόμοιος ὦν ξύλω σαπρῶ, ὅτε δ' ἐπιχέοιτό τις ἔλαιον, καίεται· καὶ ὅτ' ἐκκαυθείη, τότε παύεται καὶ αὐτός, ὥσπερ ἀπαθῆς ὦν.

¹ The concept of δύναμις in *De lapidibus* corresponds quite closely to the broad, etymological, sense of *ḥāṣṣiyyah* as discussed in Chapter 2. At times it is best understood as 'feature' or 'characteristic', but the specific meaning 'power' or 'capability' is unambiguous when dealing with the emerald in *De lap.* IV.23 (A 8_{17–20}) or with the λυγγοῦριον in *De lap.* V.28 (A 10_{1–6}). This differential translation is, of course, more reflective of modern conceptions than of what may have originally been a nuanced semantic continuum, cf. for instance the "moistness" (ὕγρότης) of plants being attributed with a δύναμις that refers actually to the *qualities* of taste and colour in THEOPHRASTUS, *Hist. plant.* IX.1.1 (A 2_{1–3}), where the word is translated by AMIGUES as "propriétés intrinsèques".

² The same adjective reappears, with no caveat, at *De lap.* VII.45 when describing the touchstone: «Θαυμαστὴ δὲ φύσις καὶ τῆς βασανίζουσης τὸν χρυσόν» (A 14_{13–14}).

³ The phrase does not warrant the presumption that THEOPHRASTUS "n'accordait guère de crédit [...] à ces histoires de matrone" (AMIGUES 2018: 31 n. 11). The apriorism of the remark turns into plain intellectual supremacism when "de telles croyances" are said to survive nowadays "dans des sociétés traditionnelles" with an explicit reference to Morocco—where the aetites (حجر النسرى) can hardly be seriously taken as a local tradition but represents rather a learned borrowing from... the Graeco-Hellenistic written corpus.

There was some factual basis, after all, for THEOPHRASTUS to enter the select corpus of Greek authorities of the ḥawāṣṣic tradition. Nevertheless, although nothing is preserved of his two-book *Περὶ μετάλλων* (beyond the fact, that is, that gold, silver, copper, and other minerals must have been dealt with in them) and despite the fact that the extant *Περὶ λίθων* is fragmentary, ULLMANN's argument is still compelling with regard to the non-correspondence between the Greek and the Islamicate THEOPHRASTUS. That medicine was completely absent from the original *De lapidibus* may not be true, however, since the passage *De lapidibus* I.5 quoted above does mention an alleged power related to child delivery and this is then nowhere to be found in the extant text.¹ In any case, even if it was originally included there, medicine-related contents are nonetheless anecdotal in the text.

All in all, it is perhaps not so much the contents as the actual wording of the Theophrastean quotations in ARRĀZĪ's *Ḥawāṣṣ* that seems to point to a pseudographic origin. The passages are too similar to the pseudo-Aristotelian *Aḥḡār* for this coincidence to be simply fortuitous.

¹ I follow the interpretation of «ἡ τῶν τικτόνων» in *De lap.* I.5 as referring to human parturition (cf. AMIGUES 2018: 30–31 n. 11.) rather than to stones begetting stones (which, however, is what PLINY understood the text to mean). It is uncertain, in turn, whether at *De lap.* IV.24 «πρὸς τὰ ἔμματα ἀγαθὴ» (A 8₂₁) said of emeralds (or rather whatever stone or stones it is that the author calls *σμάραγδος*) refers to a medical benefit. The emerald signets (*σφραγίδια*) that the author affirms that were worn so that the stone could be looked at might indeed be the same that a few lines before are mentioned as being made “just for the eyes” (“pour le seul plaisir des yeux”). Perhaps *ἀγαθὴ* here has nothing to do with ophthalmology and maybe a merely aesthetic use is implied.

3.1.2 Dioscorides

«[λάπαθον] καὶ ἐνδέσματι δὲ τινες χρώνται ταῖς ρίζαις πρὸς χοιράδας, περιάπτοντες τῷ τραχήλῳ.»

«[κοχλίας] καὶ σκόλοπας ἔλκουσιν ὁμοίως καταπλασθέντες.»

«[λίθος ἴασπις] δοκοῦσι δὲ πάντες εἶναι φυλακτῆρια περιάπτα καὶ ὠκυτόκια μηρῷ περιεπτόμενα.»

«ἐχίδνης σάρξ ἐφθείσα καὶ ἐσθιομένη ὀξυδερκεῖς ποιεῖ τὰς ὄψεις καὶ πρὸς τὰ νευρικά ἀρμόζει καὶ τὰς ἀξαναομένους χοιράδας ἴστησι. [...] φασὶ δὲ τοὺς προσφερομένους φθειρὰς γεννᾶν, ὅπερ ἐστὶ ψεύδος· προσιστοροῦσι δὲ ἔνιοι μὰ μακρογῆρωσ γίνεσθαι τοὺς ἐσθίοντας αὐτάς.»¹

Born in the Cilician city of Anazarbus, PEDANIUS DIOSCORIDES (d. ca 90 CE) is the author of a comprehensive five-book treatise Περὶ ὕλης ἰατρικῆς (*De materia medica*, henceforward simply *Materia medica*/*Mat. med.*), in which he “conveys medicinal, zoological, botanical, mineralogical and pharmaceutical information in precise Greek with no traces of the philosophical prejudices which then characterized medicine”.² The profound impact of this book on the pharmacognostic and also medical tradition from the Atlantic to the Indic and from Scandinavia to Ethiopia can hardly be overstated. The influence of his account on the medical properties and uses of hundreds of elements from all three realms is second to none and it is mainly through verbosity and rhetorical paraphernalia that GALEN overshadows him occasionally on matters related to simple drugs. On compound drugs or in dietetics and therapeutics, in turn, he contributed little; in physiology, aetiology, and medical theory, virtually nothing.

The original text of *Materia medica* can be accessed in a reliable (albeit not entirely unproblematic) critical edition and several translations into English are likewise available, as well as excellent studies of both the man and the work.³

¹ *Materia medica* 2:114 λάπαθον (W I 189₁₈₋₁₉) ↔ *Nat|Sag* IV.III.1, *MM* 2:9 κοχλίας (W I 125₄) ↔ *Nat|Sag* VIII.XII.1, *MM* 5:142 λίθος ἴασπις (W III 100₁₆₋₁₇) ↔ *Nat* V.1.3 ≡ *Sag* V.I.6, and *MM* 2:16 ἐχίδνης σάρξ (W I 126_{12-127₃}) ↔ *Nat* VIII.IX.1, respectively.

² RIDDLE 1980: 4. As many as a dozen other works are ascribed to DIOSCORIDES (cf. the list and references in RIDDLE 1980: 116–142). The pseudepigraphic nature of *Mat. med.* 6–7 (which are both usually transmitted alongside Books 1–5 also in the Arabic tradition but were generally rejected as spurious even by copyists, cf. ULLMANN 1970: 258 n. 3) is dealt with extensively in TOUWAIDE 1983 (his five-volume critical edition and French translation of the text remains, unfortunately, unpublished) and, in any case, *Nat* III does not include any toxigological contents. On the other hand, despite WELLMANN’s support for the authenticity of Περὶ ἀπλῶν φαρμάκων / Περὶ εὐποριστῶν (*De simplicibus/Euporista*), compelling evidence for the long-suspected misascription of that text has been recently put together by FITCH 2023.

³ In this dissertation the Greek text of *Mat. med.* is quoted from WELLMANN’s edition, although sporadically SPRENGEL’s earlier readings may be reproduced if additional or alternative evi-

My main concern here are the Arabic translations (for there are more than one) of *Materia medica* on the one hand, and DIOSCORIDES' stance with regard to the specific properties of his *materia medica*—or rather the probable perception by Islamicate authors of the DIOSCORIDES ARABUS' stance in that regard—on the other.

Dioscurides Arabus

«Allerdings haben die bibliographischen Nachrichten der Araber und die Edition von Dubler und Terés mehr Verwirrung gestiftet als Klarheit geschaffen.»¹

The by now not-so-recent publication of ULLMANN's impressive monographic on the Arabic transmission of *Materia medica* certainly set a whole new frame for Dioscoridean studies in an Islamicate context. Through painstaking *collatio* and in a show of philological *Akribie* he has shed definite light where there previously was much confusion and has also opened new avenues for further research. What little can be added to his contribution from the testimony of ^α*Hawāṣṣ* and its Andalusī offspring shall be noted here, and also in the sample of the commentary in Chapter 4, in the form of remarks or footnotes.

Leaving aside the Syriac transmission of the work and its Arabic offspring,² we are left with IṢṬIFĀN's translation *Fī hayūlā Ṣilāḡi ṭṭibb* (henceforth *Ḥaṣāʔiṣ*/*Ḥaṣ*) and with the *Vetus translatio* (from now on simply the *Vetus*).³

dence is required. The best English translation to date is BECK 2005, which I cite throughout with only minor modifications that are always duly noted; the German annotated translation of BERENDES 1907 is often consulted for the elucidation of obscure loci; the Arabic translations of *Mat. med.* are dealt with below. For a systematic analysis of the text, cf. most especially RIDDLÉ 1985, some of whose methodological flaws (including “some signs of residual positivist inclinations”) are respectfully pointed out in LLOYD 1987: 205.

¹ ULLMANN 2009: 9.

² On those, cf. ULLMANN 2009: 18–19. The Syriac translation of *Mat. med.* by ḤUNAYN is inconsequential to our study: it is highly implausible (in this case an euphemism not to say simply impossible) that the compiler of ^α*Hawāṣṣ* should have consulted it, and the two Arabic translations based on it (namely those by ALMALAṬĪ and by MIHRĀN) are chronologically too late (12th c.) to be considered here. On a side note, as many as fifty-two passages from what might be ḤUNAYN's original translation are preserved in his own Syriac trophognostic compilation (of which an Arabic version by himself is also extant), cf. HAWLEY 2008: 97. A dossier focussed on these passages was submitted by HAWLEY and CHRONIER to the *X Symposium Syriacum* (Granada, 2008), but the acts of that congress do not appear to have been ever published.

³ Authors in the Islamicate tradition allude to the text almost invariably as “Dioscorides' book” (which, for obvious reasons, cannot be a practical label here) and while the word *hayūlā* is never mentioned, *ḥaṣāʔiṣ* in turn is often associated to it (even if animals and minerals are also included in Books 2 and 5, respectively). That is the reason why I have favoured *Ḥaṣāʔiṣ* as the less ambiguous and more straightforward reference to this title. As for the *Vetus*, a more suited (preferably Arabic) name may be chosen for future research, but by the time being I adhere to

Being the one less likely to have been used by our anonymous compiler, the *Vetus* shall be dealt with first.

By close examination of Istanbul, Ayasofya MS 3704 ULLMANN has been able to show, against all previous affirmations to the contrary, that while Books 4–5 (and also the pseudepigraphic 6–7) in that manuscript transmit IŞTIFAN’s text, Books 1–3 and a few loci within Book 4, in turn, represent an entirely different translation. Evidence for the authorship of this older and rather primitive version is as yet inconclusive (ALBITRĪQ is a likely candidate but the question remains open) and despite the presence of a few raw Syriacisms its Vorlage was quite probably a Greek text rather than an intermediary Syriac version.¹

Then there is the version authored by IŞTIFAN B. BASĪL, who was charged with the direct translation of Greek texts into Arabic under caliph ALMUTAWAKKIL (r. 847–861).² It is worth mentioning that his translations are overall uninfluenced by ḤUNAYN’s style and terminology, and some unaltered Dioscoridean passages in our text reflect indeed this divergence with regard to botanical nomenclature, nosonymy, and the names of measures. In this respect it must be stressed that there is no support for the claim that ḤUNAYN corrected or even revised the text of *Ḥašāʾiṣ*, but there is on the contrary positive evidence that he *glossed* it. The inclusion of the name of the prestigious Syriac translator in the inscription of the book is best interpreted, with ULLMANN, as a clever marketing strategy—or at the very least as a validation device.³

ULLMANN’s nomenclature as it is both clear and precise. In order not to overburden the discussion with repeated references for each item, the reader is referred to ULLMANN 2009: 21–68 for the essential analysis on IŞTIFAN’s *Ḥašāʾiṣ*, and to ULLMANN 2009: 69–78 for the *Vetus*.

¹ Cf. particularly ULLMANN 2009: 79–118, where he provides no less than forty text samples arranged in synoptical columns reproducing the Greek original, the *Vetus*, *Ḥašāʾiṣ*, and also ALMALAṬĪ’s and MIHRĀN’s translations. The authorship and Vorlage are discussed compactly in ULLMANN 2009: 149–150.

² One of the many new pieces of information brought to the fore by ULLMANN is the fact that IŞTIFAN was also the translator of ORIBASĪUS’ *Euporista* (the text of which does not appear to coincide with *Ad Eunap.*). This had been in fact already registered by IBN ANNADĪM, but definite confirmation is found in ARRĀZĪ’s *Alḥāwī* (cf. ULLMANN 2009: 21–22). A further reference to IŞTIFAN as the translator of ORIBASĪUS’ *Collectiones* also in ARRĀZĪ’s *Alḥāwī* is analysed in BOS, KĀS, LÜBKE, and MENSCHING 2020: 77–78, 91–92.

³ A full catalogue of ḤUNAYN’s glosses to *Ḥašāʾiṣ* is provided in ULLMANN 2009: 50–58. There is a quite informative survey of the marginal glosses transmitted by the Paris manuscript of *Ḥašāʾiṣ* by BEN MRAD 2009, which much however be used with some caution. He is right in considering P a “texte original indispensable” but his overall interpretation is at times chronology-insensitive and he eventually misconstrues the widely different layers of marginal notes as a running commentary, as shown by his edition and by his claim that this copy ought to be reckoned “parmi les révisions « directes »” and even “l’un des « commentaires »” of *Materia medica* (BEN MRAD 2009: 586 and 599, respectively).

As for the text of IŞTIFAN's translation, the edition prepared under extremely difficult circumstances and published in DUBLER's five-volume study on the transmission of *Materia medica* is still, despite all well-deserved criticisms, the version most often accessed by modern scholars. This paradox is not only striking (a digital reproduction of the far better text of Paris, MS Arabe 2849 has been easily available online for some years now) but also most unfortunate, as DUBLER's and TERÉS' edition is rife with misreadings and misprints and it is, moreover, based on a manuscript that shows noticeable lacunae as well as some organic or textualised glosses of dubious origin.¹ Given that some DIOSCORIDES-ascribed quotes in *Natā'iğ* reveal a few remarkable divergences from the standard text of *Ḥašā'iğ* (such as cannot possibly be due to mere paraphrase), it soon became evident that as many witnesses as possible ought to be examined in order to reach sounder conclusions. The list of manuscripts consulted for this research can be found in the Bibliography and their contribution (at times meagre, other times substantial) to the analysis of the individual passages can be partially assessed from the sample in Chapter 4. Needless to say, including more witnesses would be highly desirable, but I do not think that doing so should alter substantially the provisional results of this inquiry.

The Qurṭubī revision

«a few of Ibn Janāḥ's quotations from Dioscorides are concerned with explanations of Greek terms which are missing from Işţifān's translation and which may, in principle, have belonged to the Córdoba redaction.»²

There is no need to reproduce here for the one-thousand-and-oneth time IBN ĞULĞUL's story (for he is, after all, the only source for this narrative) about the arrival in Andalus by the mid-10th c. of a beautifully illustrated Greek copy of Περὶ ὕλης ἰατρικῆς. The anecdote is too well-known and it can be found in virtually any account on Andalusī pharmacognosy and medicine in general. Something can be said, in turn, about the alleged *team* that would have conducted, according to the prevalent interpretation of that report, the revision of that fraction of the nomenclature that IŞTIFAN had left untranslated.³

¹ This edition was qualified as “wertlos” more than fifty years ago by ULLMANN 1970: 258 n. 1.

² BOS, KÄS, LÜBKE, and MENSCHING 2020: 68. They insist in the same formula a little later on page 69: “The very rare explanation may therefore have been borrowed from another translation of a Greek text and especially from the ‘Córdoba redaction’ of the *Materia medica*”, and they further point to IBN ĞULĞUL as a likely transmitter of this data. The extended version of this construct is then found on pages 122–123: “In 951, when the commission for the translation of the Greek manuscript of Dioscorides’ *Materia medica* was formed”.

³ A non-exhaustive choice of interpretations of this fragment includes: that the Greek monk

The truth is, in a nutshell, that there may have never been a team. Let the witness speak:¹

IBN ABĪ UṢAYBĪṢAH, *Ṭabaqāt* 494₁₃₋₂₇ [≡ *Tafsīr* (G 8₁₆₋₉₁₂)]

فبعث أمرمانيوس الملك إلى الناصر براهبٍ كان يُسقى نقولا، فوصل إلى قرطبة سنة أربعين وثلاثمائة. وكان يومئذ في قرطبة من الأطباء قومٌ لهم بحثٌ وتفنيشٌ وحرصٌ على استخراج ما يُجلى من أسماء عقاقير كتاب ديسقوريدس إلى العربية، وكان أجتهم وأحرصهم على ذلك من جهة التقرب إلى الملك عبد الرحمن الناصر: حسداى بن شروط الإسرائيلي، وكان نقولا الراهب عنده أحظى الناس وأخصهم به. وفسر من أسماء عقاقير كتاب ديسقوريدس ما كان مجهولاً، وهو أول من عمل بقرطبة تزيانق الفاروق على تصحيح الشجارية التي فيه. وكان في ذلك الوقت من الأطباء الباحثين عن تصحيح أسماء عقاقير الكتاب وتعيين أشخاصه محمد المعروف بالشجار، ورجلٌ كان يُعرف بالبسباسي، وأبو عثمان الجزار الملقب باليايسة، ومحمد بن سعيد الطيب، وعبد الرحمن بن إسحق بن هيثم وأبو عبد الله الصقلي (وكان يتكلم باليونانية ويعرف أشخاص الأدوية).

قال ابن جليل: وكان هؤلاء نفر كلهم في زمان واحد مع نقولا الراهب — أدركهم وأدركت نقولا الراهب في أيام المستنصر، وصحبته في أيام المستنصر الحكيم. في زمان سضر دولته مات نقولا الراهب، فصح بعث هؤلاء الباحثين عن أسماء عقاقير كتاب ديسقوريدس تصحيح الوقوف على أشخاص (بمدينة قرطبة خاصةً بناحية الأندلس) ما زال الشك فيها عن القلوب وأوجب المعرفة بها بالوقوف على أشخاصها، وتصحيح النطق بأسمائها بلا تصحيف، إلا القليل منها الذي لا بال له، ولا خطر لاه — وذلك يكون في مثل عشرة أدوية.

شروط [بشروط B | وأدركتهم] وأدركته B، *s. je les ai encore vus*.

“zusammen mit Ḥasday ibn Šaprūt, ‘Abd ar-Raḥmān ibn Ishāq ibn al-Haiṭam und einigen anderen Gelehrten an die Arbeit machte” (ULLMANN 1970: 260), the same idea insinuates itself still into his more recent paraphrase of the locus, for he renders *qawm* as ‘Kreis’ and collocates therein, again, ḤASDĀY and the other scholars mentioned by IBN ĠULĠUL (cf. ULLMANN 2009: 61–63). Also that NICHOLAUS would have set to the clarification of those unidentified items “mit einem sechsköpfigen Ärztkollegium” under the auspices of ḤASDĀY or “in Zusammenarbeit mit einer Ärztkommission” (DIETRICH 1988: 40, 440 n. 3). Even that the correction was done by “a committee of scientists directed by Ḥasday ibn Šaprūt” with the help of the monk (BOS, KĀS, LÜBKE, and MENSCHING 2020: 67–68); that “en esta labor se empleó también un grupo de médicos” (GARIJO 1992: 14). A far more cautious reading is made by SAMSÓ 2011: 113–116 (first published in 1992), who consistently alludes to a “revision” but presumes no committee and confers no official status to that collective task.

¹ The text of the Beirut edition is signalled as B in the critical apparatus, while S stands for the French translation in DE SACY 1810: 496–497, which is based on Leiden, MS Or. 76.

According to the words of the only extant witness to the events, therefore, when NIQŪLĀ arrived in Qurṭubah there were *some* physicians in the city that had a keen interest in ascertaining the identification (or, more literally, the Arabic equivalents) or such drugs as remained still unknown. Mark that while *qawm* may admittedly represent here a concrete company or a group (but quite certainly not a committee), the phrase can also be read as an specification: there were some physicians interested in this matter, whereas others may not have shared this particular concern—after all, not every physician doubled as an expert in pharmacognosy. Much more importantly, IBN ŠAPRŪṬ is singularised not only as the one to whom the Greek monk was closest and most intimate, but also as the *one* that explained the unknown names in DIOSCORIDES' book. That he (and not the monk) is intended as the agent of *fassara* is borne out by the mention of his having been the first person in Qurṭubah to prepare the *fāriq* theriac according to its genuine recipe—which does not seem a task that a foreign monk in a diplomatic mission would undertake.

Still in Qurṭubah at that time (mark the break in the discourse) there were other physicians, besides IBN ŠAPRŪṬ, who applied themselves to the verification of the names contained in the book and to the identification of its referents. Of those the witness provides some names: MUḤAMMAD “the Botanist”, a certain ALBISBĀSĪ (which, like the preceding nickname, seems to reflect his devotedness to herbal lore), ALYĀBISAḤ, MUḤAMMAD B. SAĪĪD, IBN (AL)HAYTAM, and last but not least AŠŠIQILLĪ (ie ‘the Sicilian’), who was knowledgeable in both Greek and botanics. Those individuals (again, *naḡar* may or may not refer to a group and it its maybe better interpreted as an indefinite numeral) were *contemporary* to monk NIQŪLĀ, the phrase «*fī zamānin wāḥid*» being best understood thus rather than as an unlikely way of saying that they all usually (or ever) met together for work.

Then IBN ĞULĠUL affirms to have personally made the acquaintance of both the monk and the other six men, and to have actually been with them (but not necessarily with all of them at a time). The fragment closes with the praise of the efforts of those thanks to whose research any doubts about the correct identification and even pronunciation of the names of the drugs in DIOSCORIDES' book (with an insignificant remnant of ten useless items) were dispelled particularly from the city Qurṭubah in all Andalus.

If some details of the above interpretation can be disputable, the grounds for the presumption of the constitution of a team (let alone a caliphal commission) working conjointly under the direction of IBN ŠAPRŪṬ seem to be non-existent. If IBN ĞULĠUL, the author of a comprehensive history of medicine from the earliest mythological period down to his own days, had wanted to describe a com-

mission he would have certainly found the words to do so. It is worth emphasising that there is not even an allusion to any meetings or sessions. All that he describes is the coincidence in time and space of a number of physicians who shared a common goal and who found in the providential arrival of NIQŪLĀ an instrumental means for their work.

Moreover, all available evidence confirms that there never was an actual task team working on *Materia medica* (either in Qurṭubah or anywhere else in Andalus). As a matter of fact, the same scholars propounding the existence of a coordinated project have also shown that all references in IBN ĞULĜUL'S OWN *Tafsīr* are to *separate* individuals, never to any group,¹ and that there is not one single vestige in the Andalusī corpus of the purported “dossier” that would have been produced by the team of reviewers. All in all, it looks very much as if the precedent myth of the Qurṭubī *translation of Materia medica* had been replaced (or rather joined, for it never died entirely) by a new misconception of the very same passage. Yet consulting the earliest European account of IBN ĞULĜUL'S fragment would have certainly helped in this regard, because DE SACY renders the words of the Andalusī physician so faithfully that no reader might have ever mistaken the synchronous work of seven individuals for an organised project.²

¹ Thus, in *Tafsīr* 2:3 (G 25₉₋₁₁ | D 39₁₃₋₁₄ ≡ *Mat. med.* 2:4 πορφύρα) an anecdote is reported about ALYĀBISAH. The identification of *Mat. med.* 4:33 σιδηρίτις with Romance *gallukrištah* in *Tafsīr* 2:3 (G 71₂₋₃ | D 127₁₂₋₁₄) and *MM* 2:180 χελιδόνιον as *šaġaratu lhaṭāṭif* in *Tafsīr* 2:160 (G 43₁₄₋₁₅ | D 69₂₃) are the sole known contributions of AŞŞIQLLĪ (for the Romance word as the name, however, of two quite different plants, cf. IBN ĞANĀH, *Talḥiṣ* [458] and [821], and especially the analysis in BOS, KĀS, LÜBKE, and MENSCHING 2020: 628–629). The author personally consulted NIQŪLĀ on the meaning and identification of some lemmata, cf. *Tafsīr* 3:84 (G 55₁₋₃ | D 98₁₆₋₁₇ ≡ *Mat. med.* 3:90 ἀπαρίνη), 3:85 (G 55₄₋₅ | D 98₂₀₋₂₁ ≡ *Mat. med.* 3:91 ἄλυσσον), 4:39 (G 73₂₋₃ | D 131₅ ≡ *Mat. med.* 4:45 Ῥοδία ῥίζα), and 4:170 (G 93₉₋₁₀ | D 174₆ ≡ *Mat. med.* 4:184 πτέρις). On a side note that cannot be pushed further here, mark that an additional interpretation from NIQŪLĀ is extant in IBN ALBAYṬĀR, *Ġāmīṣ* 1-140 الأسفقس (B I 54₁₋₂), where the Greek name ἐλελίσφακον (cf. *Mat. med.* 3:33) is glossed as *lisānu lʿayyil*, a translation that IBN ĞULĜUL does record in *Tafsīr* 3:32 (G 48₁₀ | D 82₂₁) but which in the extant manuscripts is unascribed. In fact, there are good reasons to suspect that all interpretations (mostly *taʿwīl* but also *ay*) of a Greek phytonym in *Tafsīr* must actually stem from either NIQŪLĀ or AŞŞIQLLĪ.

² Cf. DE SACY 1810: 495–498, the key loci being “un certain nom de médecins qui s’occupoient [...] Tous ces personages [...] étoient contemporains du moine Nicolas [...] Par les soins et les recherches que toutes ces personnes firent [...] on parvint spécialement à Cordoue, ville de l’Espagne, à reconnaître ces médicaments eux-mêmes”. According to DE SACY 1810: 500 n. 18, he favoured an interpretation of the agent of *fassara* as NICHOLAS, which as stated above I find difficult to believe.

Dioscorides in Natāʾiğ and the Vorlage of ^aHawāṣṣ

Over fifty passages are included in *Natāʾiğ* that are attributed to DIOSCORIDES either explicitly or implicitly, with a few accidents in the transmission, a number of ghost-quotes, and a few cruces that remain unsolved despite all efforts to find an explanation for them.¹ A full register and concordance of these quotes can be found in Tables 3.1–2 but an abridged reference to the original lemmata involved may serve here as an illustration:²

<i>Mat. med.</i>	1	8 17 19 73 76 79 87 110
	2	9 ⁵ 17 ² 20 ² 27 34 35 ³ 36 39 ² 42 49 ² 51 56 63 67 79 104 115 124 126 136 154 ² 164 ² 173 174
	3	11 14 34 45 58
	4	75 137 158
	5	131

The main factor for disproportion in the representation of the different sections of *Materia medica* is certainly the inclusion of animals in Book 2 (entries on animals make up almost half the total amount of Dioscoridean quotes in *Natāʾiğ* and some of them are also the most repeatedly cited ones) and a more detailed scrutiny may reveal certain patterns in the selection of the passages.³ However, as far as the prehistory of *Natāʾiğ* is concerned, it is important to point out that the ultimate author of the head-to-toe compilation seems to have had access to a full copy of an Arabic translation of *Materia medica* and the he was

¹ To be clear, passages ultimately stemming from *Materia medica* but mediated by AṬṬABARĪ are excluded from this analysis. I am on the other hand reluctant to incorporate the testimony of *Sağullōt* into any statistical considerations. However useful it can be (and it is extremely useful indeed) for the philological analysis of *Nat* III and for the reconstruction of ^a*Hawāṣṣ*, the transmission of IBN ALHAYṬAM's *Iktifāʾ* is a complex one and statistical data from these two cognate texts are better kept apart at least until the Arabic copy of *Iktifāʾ* can be consulted.

² A superindexed number represents how many times different segments of the same entry have been quoted.

³ Some hints to a differential authorial “attitude” with regard to the initial stock of quotes become quite evident when *Nat* III and *Sağullōt* are compared (this can be intuited even in Tables 3.1–2). Thus, IBN ALHAYṬAM appears to have been more liberal (perhaps more confident) regarding the inclusion of passages involving exotic and even unidentified plants (cf. for instance transliterations of κραταιόγονον from *Mat. med.* 3:124 in *Sağ* VI.II.1 and of ὑπερικόν from *MM* 3:154 in *Sağ* IX.II.2), which tallies with his reputation as an expert in pharmacognosy. With regard to animals, in turn, he (or is it perhaps the Hebrew translator?) is far less inclusive than ALʿILBĪRĪ. The sample in Chapter 4 includes some examples of this differential approach and some remarks on the subject are to be found in the analysis of the chapter on fevers.

quite thorough in excerpting his source.¹ In the alternative scenario in which the author of ^α*Hawāṣṣ* would have been drawing from a pre-existing collection of quotes, once again the above consideration would apply to the compiler of that anthology.

In general terms the translation quoted from is IŞTIFAN's and there is not positive evidence that might point to a use of the *Vetus* as transmitted in the Ayasofya manuscript. A number of passages reproduced from *Hašāʾiṣ* either word by word or with minimal alteration leave little doubt in this regard. Significant divergences in wording or in terminology, moreover, never align with the *Vetus*. The prehistory of the DIOSCORIDES-ascribed passages in *Natāʾiğ*, however, is far from straightforward and several different processes appear to have been involved, most particularly glossing and rewording, perhaps also hybridisation (traditionally labelled as contamination) with Galenic materials. A few outstanding examples of this divergence from IŞTIFAN's translation are provided and briefly annotated hereunder. Note that the proposed epigraphs are not categories in a strict sense, for some of them actually overlap with each other: "identification" can be partially coterminous with "different terminology", and they both can take the form of a "rewording or paraphrase". The labels below ought to be read rather as a provisional device of convenience.

On the other hand, only external evidence can help to ascertain the *relative* chronology of these interventions in the text. If a feature is shared with *Səğul-lōt*, one can safely date it back at least to ^α*Hawāṣṣ*; if it is further attested in Qayrawān or elsewhere, the possibility of a link presents itself as fairly plausible. Negative evidence (ie lack of parallels), on the contrary, is rarely probative and caution should be exercised before jumping to the conclusion of an original intervention by ALʾILBĪRĪ, especially as long as the instrumental testimony of IBN ALHAYṬAM's *Iktifāʾ* is consulted exclusively through its Hebrew translation and a few quotes in IBN ALBAYṬĀR's *Almuğnī*.²

¹ The apparent decrease in the number of quotes extracted from the later books might be reflective of declining focus and fatigue on the part of the compiler, as Books 3–5 are neither shorter nor less rich in passages of medical interest than the preceding ones. But it might also be a mirage introduced by ALʾILBĪRĪ's selection. Judging from the testimony of *Iktifāʾ*, the original compilation must have include a few more stones from DIOSCORIDES' Book 5, eg λίθος ὀφίτης from *Mat. med.* 5:143 in *Səğ* II.IV.1, κούραλιον from *MM* 5:121 in *Səğ* IV.I.3, or λίθος ἀλαβαστρίτης from *MM* 5:135 in *Səğ* V.VII.1.

² The survey here cannot possibly be exhaustive, as that would necessitate fully reproducing all the relevant fragments of the commentary—which is precisely what had to be avoided in this final version of the dissertation. A more detailed analysis of some Dioscoridean quotes is included in the sample in Chapter 4. In the following discussion the primary reference for all passages is to *Hašāʾiṣ* (the numeration of the entries follows that of manuscript P), for it is with

Diverging terminology

In *Nat* III.I.1 the benefit of goatgrass (*dawsar* ≡ αἰγίλωψ)¹ against lachrymal fistulae (αἰγίλωπια) is quoted from *Mat. med.* 4:137 and the name of the ailment is called *rīṣatun munfağirah* in our text against the standard nosonym *ğarabun munfağir* featuring in the corresponding locus in IŞTIFAN'S translation. This one is probably the most striking cases of geolectal terminology in the whole section, as it differs not only from IŞTIFAN'S but also from HUNAYN'S usage,² and this alternative name appears to be attested only in the western tradition.³ There is no help to be gained from *Sağullōt* or *Nisyōnōt* (they do not transmit this quote, but the Arabic copy of *Iktifāʔ* might) and it is impossible to ascertain who ought to be credited for this local synonymy.

A similar instance of terminological divergence that may nevertheless necessitate a different interpretation is provided by *Nat* IV.I.1, where drinking the dried lung of a fox is affirmed by DIOSCORIDES to avail from *dāʔ rriʔah*. The quote is a genuine and quite literal (albeit abridged) one, yet IŞTIFAN translates

the Arabic text that all the quotes ought to be compared. Additional concordances with the original Greek as well as with the indirect transmission of *Haṣāʔiṣ* are, of course, also provided.

¹ Greek αἰγίλωψ is traditionally identified as the ovate goatgrass (*Aegilops geniculata* Roth, formerly *Aegilops ovata* L.) or the wild oat or haver grass (*Avena fatua* L.), both within the Poaceae or Gramineae.

² Cf. *Haṣ* 4:132 وهو الدوسر ، و هو الغيليص ، (B 225r 11–12 | L 153v 19–21 | O 143r 13–16 | P 97r 21–22) ≡ *Mat. med.* 4:137 αἰγίλωψ (W II 283₃₋₄). Let it be noted that IŞTIFAN'S translation is far from consistent. He renders the exact same word αἰγίλωπια by the periphrases «*nawāṣīru lʕayn*» in *Haṣ* 2:119 لسان بقعارس (P 46r 17; and also in other loci), «*annāṣīru llaḍī yakūnu biqurbi lʕayn*» in *Haṣ* 3:42 خندرس (P 63v 17), and most accurately «*annawāṣīru lʕāriḍatu fi lmaʔāqī*» in *Haṣ* 2:90 خندرس (P 42r 11). He still resorts to a description-cum-transliteration «*nawāṣīru lʕayni llatī* [الدى P] *yuqālu lahā ʔağilubs*» in *Haṣ* 1:133 جوز (P 28v 21). The passage is transmitted with no alteration already in ARRĀZĪ, *Alḥāwī* II.vi (H II 25₁₇₋₁₉) and XX [335] دوسر (H XX 452 | B 307₁₉₋₁₀); then by all Andalusī pharmacognostics. As for HUNAYN, suffice it to mention here «*walğarabu (wahuwa nnāṣīru lkāʔnu fi maʔāqī lʕayn)*» in *Mufradah* VII.12 ذكّر الجوز (E 113r 8 ≡ GALEN K XII 14₉) and the whole chapter devoted to this ailment beginning at *Qāṭāğānas V Alkalāmu fi nnāṣīri llaḍī fi maʔāqī lʕayn* (P 8v 20) ≡ GALEN *Per gen.* V.2 Περὶ αἰγίλωπος (K XII 82₀₅). Nor does the Arabic translation of ORIBASĪUS (probably by IŞTIFAN himself) differ in this point, cf. ARRĀZĪ, *Alḥāwī* II.vi (H II 248₁, 25₁₂₋₁₃). The same term was apparently used also by IBN MĀSAWAYH, cf. ARRĀZĪ, *Alḥāwī* II.3 (H II 128₁₅₋₁₇); and it is the only one known to AṬṬABARĪ too, cf. *Firdaws* IV.III.2|4 (§ 163₂₋₅, 168₃, 169₉).

³ Cf. the recipe of a salve for this ailment in *Hārūniyyah* II.1.8 (G 319₁₋₁₉), in a section that might stem from MASĪH'S original core. Once again GIGANDET. A reference to Escurial, BRME MS Ārabe 828 (an ophthalmological fragment formerly ascribed to IBN WĀFĪD) fol. 19r is provided by DOZY, *SDA* I 575a s.r. ريش √ (the standard definition as *annāṣīru fi ʔāmāq* is found there) and he also records IBN ALḤAṬṬĪB'S remark on the basilectal status of the word («*alğarab [...]* *tadʕūhu lʕāmmatu ʔrīṣah*»). Cf. also CORRIENTE, *DAA* 22a *{RYŠ} II, where SIMONET'S identification of the word with Castilian *rixa* is admitted.

«ἀσθματικούς ὀνίγησι» as «*nafaḡat mina rrabw*» in *Ḥašāʔiṣ*. In this case, however, there is some evidence to suspect that the substitution might have to be ascribed to ALʔILBĪRĪ rather than to his source, because *Saḡullōt* (and quite probably IBN ALHAYTAM's original text) preserves, in the form of an inverted gloss, the standard nosonym: «הגניחה (הוא אל-רב)». ¹ The synonym featured in *Natāʔiḡ* is actually rare in this context and cannot be located in any of the Islamicate reflections of *Mat. med.* 2:39, nor in those mediated by GALEN, whose Arabic translation renders this ailment also as *rabw*. ²

A few more examples of more or less idiosyncratic terminology can be found in our text, as for instance the complex case of oblivion (*nisyān*) substituting for *litargus* (ie λήθαργος) in IṢṬIFAN's translation, which is in fact widely attested east and west and is analysed in some detail in Chapter 4. Besides, one of the most compelling pieces of evidence for drastic authorial intervention could be also classed within this category. In two Dioscoridean quotes craftily extracted and reshaped out of *Materia medica* 2:126 ἀρνόγλωσσον 'plantain' (*Plantago sp.* L.), IṢṬIFAN's metrical equivalence "four and a half ounces" has apparently been reverted to the original "three ladlefuls" (κύαθοι τρεῖς) with a clear purpose: to preserve the arithmetic analogy. As shall be shown there, a careful reader of the whole text of *Ḥašāʔiṣ* could have retrieved the necessary information for such a change from comparison to other loci in which the same measure is mentioned and also from marginal notes that may have been included also in his Vorlage. Otherwise a different direct translation from the Greek must be assumed as the ultimate origin for this double passage (see the analysis of the chapter on tertian fevers in Chapter 4).

Identification

Providing an Arabic equivalent for a name left untranslated by IṢṬIFAN could be considered in a certain way a kind of difference in terminology, but distinguishing these two categories of authorial intervention is justified by the fact that substituting a new name for a pre-existing *functional* one is best classed as genuine synonymy (reflecting either local usage or authorial preference), whereas identification consists in *supplying* a practical equivalence (either correct or incorrect) for an otherwise *useless* item. In simpler words, to identify an item is

¹ Cf. DIOSCORIDES, *Ḥaš* 2:39 والذبّ والخروف والحزير (B 67v 2–3 | P 33r 15) ≡ *Mat. med.* 2:39 ἀλώπεκος πνεύμων (W I 133_{38–134}); *Saḡullōt* IV.1.1 (L–M 306_{24–26}).

² Cf. GALEN, *Mufradah* XI.7 ذكر الرئة (E 173v 18) ≡ *Simpl. med.* XI.1.9 Περι πνεύμονος (K XII 335_{10–11}). Unascribed and therefore stemming from either of the two, the same benefit against *rabw* and *bahar* is echoed by IBN MĀSAWAYH *apud* ARRĀZĪ, *Alḥāwī* IV.1 (H IV 24_{7–11}); also by IBN BUḤTĪŠŪṢ, *Ḥayawān* IV.7 ثعلب (P 21v 9–10 | Q 47r 9–13).

to associate a thing (a plant, an animal, an ailment) to a name that heretofore conveyed no meaning at all for a given readership.

Any such innovation with regard to *Ḥašāʾiṣ* that could be found in our text would be especially interesting in view of the intense and largely cumulative task conducted in this regard in Andalus. Moreover, such identifications can be extremely significant given the chronology of the witnesses involved: leaving the achronous *Natāʾiḡ* aside, IBN ALHAYTAM was one of the main protagonists of the Qurṭubī revision of *Ḥašāʾiṣ* (in the sense described above for this phrase) and the compiler of ^α*Ḥawāṣṣ* was necessarily either his coeval or slightly older than him (if, of course, *Iktifāʾ* is not considered to be the parent compilation). If some of the identifications are furthermore not shared by other well-attested traditions (particularly by Qayrawānī pharmacognosy), their presence in this textual family becomes highly consequential. But, are there any identifications in *Natāʾiḡ* for items left untranslated by IṢṬIFAN? The straightforward answer is: yes, there is a handful of them. Now, the diachronical interpretation of these identifications is, once again, complex and in some cases the evidence (or the lack thereof) contributed by the parallel transmission of ^α*Ḥawāṣṣ* does not allow for definitive conclusions.

If I must highlight one or two remarkable cases here, the mention of a “water duck” (*baṭṭu lmāʾ?*) in *Nat* V.VIII.² certainly qualifies as a noteworthy example. According to the instructions provided in this quote explicitly ascribed to DIOSCORIDES, the liver of a water duck breaks bladder stones if it is salted, dried, and drunk with water and honey.¹ No parallel passage is included in *Saḡullōt*, but an indisputable cognate is transmitted in *Hārūniyyah*, in which the animal is alluded to as «*albatṭu (wahuwa ddaḡāḡu lbarri)*»,² and the transmission of this particular passage in IBN ALBAYṬĀR’s *Almuḡnī* has already been discussed in Chapter 1.

¹ Mark that IṢṬIFAN’s *aššarābu lmusammā idrūmālī* (ie ὕδρόμελι) is further substituted for by an Arabic phrase «*bimāʾin waṣasal*» in this quote.

² Cf. *Hārūniyyah* I.XIII.1 (G 237³⁻⁴). The gloss “wild hen” is quite probably a latter addition (the question of the glosses in *Hārūniyyah* would require its own monographic study) and it is certainly surprising, as one might have expected a duck being described rather as a “water hen”, cf. English *waterhen* as a synonym of *moorhen*, also Catalan *polla d’aigua*, both for *Gallinula chloropus* L. (which is admittedly not even close in taxonomical terms to a duck). A “water hen” (*daḡāḡu lmāʾ?*) is indeed mentioned by ALMAQRĪZĪ together with ducks (*albatṭ*) and in opposition to the Ethiopian hen (*daḡāḡu alḡabaš*) as being found in Hadayyah in the country of Azzaylaṣ, cf. *Durar* [316] (Ġ I 388⁴⁻⁶). The words دى and مای are, however, not so close to each other, thence my reluctance to alter the received reading.

The specific mention of the liver of the animal shows that the original entry must be *Materia medica* 2:55 on the αἰθουία (probably the shearwater, as shown before). Yet, not only does the corresponding translation in *Ḥašāʾiṣ* leave the name of the bird untranslated (he identifies it as a bird, however) but it also happens not to mention any litholytic benefit, mirroring the same absence from the original Greek:

<p><i>Materia medica</i> 2:55 αἰθουία WI 138₃₋₄ αἰθουίας ἥπαρ σκελετευθὲν καὶ ποθὲν μεθ' ὑδρομέλιτος κοχλιαρίων πλήθος δυσεῖν ἐκβάλλει δεύτερα.</p>	<p><i>Ḥašāʾiṣ</i> 2:46 اثوا B 69r 13 – 69v 1 P 34r 3-4 T 144₁₅₋₁₆ اثوا — وهو صنف من الطير. كبدها، إذا ملح وجفف وشرب منه قخليارين بالشراب المستى «أذرمالي»، أخرج المشيمة. ————— كبدها إذا ملح] اذا ملح كبدها T قخليارين قخليارتين P، فوحليارس T، محلدارس B أذرمالي** ذرومالي** T، درومالي P.</p>
<p>————— δευτέρα] ὕστερα E.</p>	

The compiler of *Ḥawāṣṣ* may not, however, have contaminated his source with alien materials. On a “correction” (unambiguously marked as «صح») on the now partially trimmed right margin of manuscript P of *Ḥašāʾiṣ* one can still read: «(..)ت حصة | (ا)لمثانه». This extended version of DIOSCORIDES’ passage is, moreover, the one inherited by ALĠAFIQĪ and also by IBN ALBAYṬĀR.¹ Let it be noted that this is external evidence for the inclusion of this particular benefit in some early version/copy of *Ḥašāʾiṣ*, as the pharmacognostic transmission of the passage is *parallel* to (ie independent from) the tradition reflected in *Nat* III and in the *Hārūniyyah*. This is most clearly seen in the fact that IBN ALBAYṬĀR records both accounts of the same original quote from two different sources within the exact same chapter of the same treatise. In *Almuġnī* X.5, indeed, he includes not only the aforementioned passage but also the one inherited ultimately from *Ḥawāṣṣ*.²

There is more yet for, despite all appearances to the contrary, this is not the case of an Islamicate innovation. The sixth-century Latin translation of *Materia medica* labelled as C but more usually known as the *Dioscorides Longobardus*

¹ Cf. «wafattata ḥaṣāta lmaṭānah» in ALĠAFIQĪ, *Mufradah* كـ50 (M 270v 1-3 | T 515₄₋₅); and «wafattata ḥaṣāta llati fi lmaṭānah» in IBN ALBAYṬĀR, *Ġāmiʿ* 18-1 (B I 13₉₋₁₁) and also *Almuġnī* X.5. المتانة الكلى والمتانة X.5 (M 144v 20-21 | P***2 286v 12-14).

² Cf. *Almuġnī* X.5. المتانة الكلى والمتانة X.5 (M 186r 20-21 | P² 289r 9-10). The presence of this quote in *Almuġnī* despite its absence from *Saġullōt* begs the obvious question about the source of IBN ALBAYṬĀR (on this, see Chapter 1).

features bladder stones («*cauculos bessice*») instead of the afterbirth (δεύτερα) found in the manuscripts used by WELLMANN for his critical edition.¹ All this evidence seems to point to a Greek subtradition in which the remedy was not affirmed to extract the afterbirth (mark, moreover, WELLMANN's manuscript E reads «ύστερα» here) but rather to break bladder stones.²

Back to the question of the identification of the αἴθουα, the equation reflected (or rather established?) by the author of ^α*Hawāṣṣ* is virtually unparalleled in the pharmacognostic tradition. All borrowings from *Ḥašāʾiṣ* reproduce some variation of IŞTIFAN's transliteration alongside his gloss «*huwa şinfun mina tṭayr*»,³ and in his *Tafsīr* IBN ĞULĠUL laconically gives Arabic *nuġarah* as the equivalent of αἴθουα.⁴ However, in an entry originally contained in the no longer extant sections of his *Ġāmiʿ* IBN SAMAGŪN apparently affirmed that some people identified *baṭṭu lmāʾ* as *iwazz*, of which there were many species and genera. A further reference was made there (if the quote has not ended before) to aquatic birds from the land of the Nabataeans, “where they were called *murġ-i ābī*, which is Persian for ‘water hen’ [*daġāġatu lmāʾ?*]”.⁵ Still in Andalus this identification is echoed on the marginal glosses on the left margin of manuscript P of *Ḥašāʾiṣ*. The source of the last segment might be either IBN ĞULĠUL himself in some treatise other than *Tafsīr* or someone drawing from a close tradition, as the passage features both the qualificative *black* (mentioned only once by IBN ALBAYṬĀR) and an identification with *nuġarah* (as in IBN ĞULĠUL). Mark that it is precisely this subtradition that includes a synonym *baṭṭatu lmāʾ* and that the accumu-

¹ Cf. *Diosc*^L 2:34 *De mergulo* «*Epar eius siccus in potione datus cum ydromelli coclearia duo cauculos bessice excludit*» (S 193₁₇₋₁₈).

² I cannot develop this argument here, but there is an intriguing parallelism with the transmission of the adjacent entry *Mat. med.* 2:53 φήνη (W I 137₁₆₋₁₇), where the standard Greek text reports a diuretic property («ἐξουρείσθαι ποιεῖν ἰστορεῖται») for a similar potion made of the insides (κοιλία) of this bird which Romans called ὀσσίφραγος (ie *ossifragus*). Its is rather a calculi-breaking benefit that is mentioned both by the Latin translation, cf. *Diosc*^L 2:**** *De ossifrago* «*Uenter eius bibitus cauculos uessice frangit*» (S 193₁₃₋₁₄), and by IŞTIFAN's Arabic version, cf. «*fatata ḥašāh*» in *Ḥašāʾiṣ* 2:54 فيني (B 69r **** – | P 34r 1 | T 144₈₋₁₀).

³ IBN ALBAYṬĀR actually adds “black” (*aswad*) in his aforementioned quote in *Almuġni* X.5, but not in the parallel quote in *Ġāmiʿ*.

⁴ Cf. *Tafsīr* 2:43 انو (G 30₇ | D 44₁₅₋₁₆). As this entry is missing from manuscript T 127₁₆, the text reproduced by GARIJO is actually DIETRICH's. A further witness is IBN ALBAYṬĀR, *Ġāmiʿ* I 13₁₁, according to which IBN ĞULĠUL would have marked *nuġayr* (the Būlāq edition has an evident misreading «البعير») as specifically Andalusī. In his note to this entry DIETRICH suggests some species of the genus *Anas* (perhaps *Netta rufina* Pallas) and points that this identification with *nuġarah* might be credited to “das Konto der cordovesischen Ärztekommision” (cf. DIETRICH 1988: II 224). Mark that the plural of this ornithonym (namely *nuġar*) is found in *Nat* IV REGIMEN, where it has been commented upon in a footnote.

⁵ Cf. ALĠIDRĪSĪ, *Ġāmiʿ*^F 33 (S II 65₁₋₃).

lation of partially shared traits (none of which is to be found in the alternative gloss in the text below) is strongly suggestive of localism:

اثوا — هو طائر يصفر كثيراً ويُحزك ذنبه دائماً، ويظهر في الشتاء، وعلى ذنبه نُقَط، وهو مائل إلى الصفرة وإلى الغبرة. هي البصايص، خفي مذهب.
هذا لي: بل هي العتق.
اثوا — طائر أسود يُصاد به السمك، وهي النغرة، وقيل هي بطة الماء.

In sum, there is something to learn about early Andalusī pharmacognosy from the textual family of *Nat* III but there is also much work to do to reconstruct this epistemic tradition.

Rewording, paraphrase, hybridisation

Besides glossing their texts (in the form of identification of obscure items or of lexical substitution), authors can also intervene in a much more drastic way by substantially altering the original wording of the passages. There are a number of different factors (pragmatism, personal style, genre conventions) involved in the tendency towards paraphrasing, and rewording presents itself in a wide spectrum ranging from slight changes (such as, for example, linguistic update) to radical reformulation. In what concerns the *Hawāṣṣ* genre an additional major factor must be considered, namely the necessity to adapt the original texts to the highly formulaic format of *ḥawāṣṣ* passages. This point has been previously dealt with in Chapter 2, and more concrete examples are to be found in the sample of the commentary in Chapter 4. Here I would like to sketch the question of apparently *unmotivated* alterations and to show how difficult it is to draw any clear lines between the various shapes of spontaneous authorial rewording on the one hand and hybridisation or contamination with extraneous data on the other. As the reader will soon notice, the provisional conclusions of the analysis of these quotes leads to a new hypothesis about the remote precedents of our text.

The abridged correspondences provided above and also Table 3.1 show that *Materia medica* 2:35 on woodlice (övoι) is quoted for different benefits in *Nat* V.VI.2 and V.VIII.1 (implicitly also in *Nat* IX.I.2, but that quote does not actually stem from DIOSCORIDES' text). One of the passages involving this insect is analysed in some detail in the commentary on the chapter on tertian fevers *Nat* IX.I and therefore only the most essential information shall be provided here. The key segment of the impressionistic description of this little bug reads “that curls itself when touched [*alladi idā mussa stadāra*]” in our text, which is linguistically slightly different from IŞTIFAN's translation «*tastadīru šindamā tulmasu bilyad*» (≡ «σφαίροµενα κατὰ τὰς ἐπαφὰς τῶν χειρῶν»). As a rewording, it is

rather unmotivated, for the passage conforms to the standard formulaic pattern regardless of the wording in which this phrase may be formulated. The exact same description features, moreover, in *Nat* IV.II.4 in a quote from GALEN. This would immediately suggest a possible contamination, but the wording does not coincide with ḤUNAYN's translation either. It is precisely in the origin of the third, and spurious, Dioscoridean passage that a clue can be found to solve this puzzle. The antipyretic property of woodlice echoed in *Nat* IX.I.2 stems actually from ARRĀZĪ, in whose *Ḥawāṣṣ* it is reported from AṬHŪRUSFUS. Now, the lemma in *Ḥawāṣṣ* refers to this bug as *ḥimāru lbayt* and adds a new variation of its familiar description: «*hiya dduwaybbatu llatī lahā arḡulun kaṭīrah, tastadīru idā mussat*».¹ Although a different explanation is, of course, possible for this feature, it looks very much as if this particular wording had spread from here to the other passages mentioning the same insect. If this interpretation is not wrong, it would be a forcible argument for assuming at least partial authorial homogenisation of the materials.²

A much clearer example of hybridisation is provided by *Nat* VIII.x.1, where an Arabic transliteration of the Greek phytonym σκόλυμος is glossed as *ḥarṣuf*, an identification that was not available in IṢṬIFAN's translation (only سقولوموس is to be found there).³ Now, this is to be considered a minor divergence with regard to *Ḥašāʾiṣ* in comparison to the fact that in this allegedly Dioscoridean passage the effect of the potion is described as the “specific property” (*ḥāṣṣiyyah*) of the plant, with a terminology that is unknown to the Arabic DIOSCORIDES. Moreover, it includes an indication of the plant being hot in the second degree that is likewise an addition to the original passage in *Materia medica* 3:14 (the Galenic system of degrees of intensity was alien to DIOSCORIDES). All three elements (ie the identification of the plant, the key word *ḥāṣṣiyyah*, and the indication of the

¹ Cf. *Ḥawāṣṣ* 5- حار البيت (I 81v 5-7).

² Tangentially, it must also be noted that, with the intriguing exception of *qaranbā* in *Nat* III.II.4, none of these passages included any of the standard synonyms for woodlice attested in both in the east and in Andalus since the 10th c. (namely *ḥinār qubbān*, *ḥimāru lbayt*, or *had(a)bah*). For the early Andalusī identification of ὄνος as *qaranbā*, cf. IBN ĠULĠUL, *Tafsīr* 2:33 (G 291₆₋₈ | D 431₉₋₁₁); also the equation «*جمر الأرض هو القرنباء عن دياسقوريدوس*» in IBN ĠANĀḤ, *Talḥiṣ* [304], with a genuine apomorphic reading of the original *همر* as pointed out in BOS, KĀS, LÜBKE, and MENSCHING 2020: 392. I cannot tackle this particular question here but the synonym *qaranbā* in the DUBLER–TERÉS edition might be a textualised gloss, and its collocation with *had(a)bah* (which is explicitly ascribed to the *ṣammah*) and *ḥumuru lʿarḍ* is rather suspicious. No synonym at all is transmitted in the Paris copy of *Ḥašāʾiṣ* (cf. P 33r 9) and despite IBN ĠANĀḤ's reference, IBN ĠULĠUL's wording seems to imply that no Arabic name was previously available (none is mentioned in Qayrawān). For a different interpretation of the evidence, see DIETRICH 1988: II 218; and also BOS, KĀS, LÜBKE, and MENSCHING 2020: 392.

³ Cf. *Ḥašāʾiṣ* 3:14 سقولوموس (L 12v 7 – 13r 2 | O 11v 4–6 | P 58v 7–8 | T 245₂₁₋₂₂).

degree) were quite certainly already included in ^a*Hawāṣṣ*, for they are all transmitted also in *Saḡullōt* and in the *Hārūniyyah*.¹ The passage could be seen as a quote from GALEN's entry on the root of *σκόλυμος* in *Simpl. med.*, were it not that ḤUNAYN does *not* include a transliteration of the Greek name of the plant in his translation.²

Were I pressed (as I am here and now) to draw a provisional conclusion from the ongoing analysis of *Nat III* with regard its Dioscoridean (and also Galenic) contents, I might well say that while the use of the standard translations available already in tenth-century Andalus seems to be borne out by overall agreement with the received texts, authorial intervention is nonetheless clearly noticeable. Some of the reflections of this task are minor modifications of the source text and may be ascribed to ALʿILBĪRĪ himself (but only if the positive testimony of a cognate text does not contradict this assumption) or, more often, to the compiler of ^a*Hawāṣṣ*, who may have been quite active in this regard. There is, moreover, a fraction of the total Dioscoridean “subcorpus” (ie the sum of all the passages ascribed to DIOSCORIDES in our text) that differs so widely and so significantly from IṢṬIFAN's translation that an alternative mediation may be presumed. Even if the quote on *σκόλυμος* were the only evidence available in *Nat III* (and it is not), such features as an identification in the form of transliteration-cum-equivalent, the reformulation of the effect of the remedy in terms of a *ḥāṣṣiyyah*, and the addition (drawing from GALEN's parallel entry) of a degree of intensity—all of this reveals efficient reworking and is strongly reminiscent of the Dioscoridean passages transmitted by such early authors as IBN MĀSAWAYH, IBN MĀSSAH, or MASĪḤ and it comes close also to some conspicuous hybrid additions transmitted in the *Vetus*.

¹ The Hebrew translation of IBN ALHAYTAM's *Iktifāʾ* mentions this item as “the plant called סוקולורי (that is קרדון המעמיד החלב הרשהף)”; cf. *Saḡ VIII.x.1* (L–M 323_{1–5}). In the *Hārūniyyah* the quote is explicitly ascribed (which in that text is quite exceptional) to DIOSCORIDES “the Herbalist [*Alḥaṣāʾiṣi*]” and the same combination of a raw transliteration and the gloss *ḥarṣuf* is found, as well as the indication of the degree, cf. *Hārūniyyah I.xi.3* (G 225_{15–16}).

² For the Galenic elements incorporated into this passage, cf. GALEN, *Mufradah VII.103* ذكر الحرف (E 133r 21–24) ≡ *Simpl. med. VIII.xviii.24* Περι σκόλυμος ῥίζης (K XII 125_{9–16}), where the identification (which must have originally been Classical Arabic *ḥurṣuf* but could easily be reinterpreted as dialectal *ḥarṣuf*) features already in the rubric of the Arabic translation, the action of the remedy is said to obtain «*biḡumlati ḡawharihī*» (≡ «*καθ' ἑλγν [...]* τῆν οὐσάτην»), and it is described as hot in the second degree. It is worth mentioning that IBN SULAYMAN's own paraphrase of this entry goes a little step farther and states that «*wahādā lfiṣlu minhu yaqaḡu biḡumlati ḡawharihī biḥāṣṣatihī, lā bikayfiyyatihī*», cf. *Aḡdīyah III.iii.19* في الكندر (S III 146_{7–13} | § 444_{4–8}), reproduced verbatim twice by IBN SAMAGŪN in *Ġāmiʿ* حَرْشَف 22 (S I 172_{15–173₁}) and also in كَنْكَر 45 (S II 159_{15–20}).

The Dioscorides Arabus before Iṣṭifan

Let me conclude this preview of philological analysis of the Dioscoridean passages transmitted in *Nat* III with a few telegraphic notes for future research. First, a direct use of the *Vetus* as a source for non-Iṣṭifanī readings in *Natāʾiġ* can be safely discarded: none of the diverging quotes appears to be in the least closer to it than to *Ḥašāʾiṣ*. A more systematic comparison might nevertheless be of some utility.

Then, on chronological grounds AṬṬABARĪ and ARRĀZĪ ought to be taken into consideration as possible transmitters of these passages.¹ Yet, what little overlap there is between explicit quotes from *Materia medica* in AṬṬABARĪ's *Firdaws* and parallel quotes in *Natāʾiġ* is merely coincidental and, most importantly, none of the more drastically reworded passages is included in *Firdaws*. As for ARRĀZĪ, while there is conclusive evidence that the pharmacognostic section and the synoptical tables of *Alḥāwī* were available to IBN ĠANĀḤĪ by the first third of the 11th c.,² virtually nothing is known about the early circulation of the whole collection. It was apparently unknown to IBN ALĠAZZĀR in Qayrawān (who accessed, however, a copy of his *Ḥawāṣṣ*) and it is rarely mentioned (if ever at all) in the Andalusī pharmacognostic tradition prior to ALĠĀFIQĪ (d. 1165).³ A striking coincidence is found in the use of *raḍḍa* (against IṢṬIFAN's *daqqa*) both in *Nat* IX.IV.1 and in the pharmacognostic section of *Alḥāwī* XX, both corresponding to *Materia medica* 2:154 σὶνῆπι. It is also *raḍḍa* that IBN MĀSAWAYH uses in his own paraphrase of the same locus. But the coincidence stops there. The quote handed down by the compiler of ^α*Ḥawāṣṣ* is a true chimera: in featuring *raḍḍa* it aligns with IBN MĀSAWAYH's and with ARRĀZĪ's (own?) paraphrase of *Materia medica*;⁴ for the exact phrase with which periodic fevers are alluded to, in

¹ Mark that ULLMANN 2009: 163–169 has collected some evidence for the use of the *Vetus* by AṬṬABARĪ, which would thus affect the previous assumption that he had paraphrased his materials from a Syriac translation of *Materia medica* (cf. ULLMANN 1970: 258–259) or even directly from the Greek. As for ARRĀZĪ, while apparently obvious reflections of a non-Iṣṭifanī Arabic translation are shown to exist in *Alḥāwī* according to ULLMANN 1970: 261, no word is said on the subject in more recent works.

² Cf. BOS, KĀS, LÜBKE, and MENSCHING 2020: 108–112 (and also their commentary to all the entries involved) for an excellent analysis of this use.

³ For an assessment of ALĠĀFIQĪ's use of *Alḥāwī* (again, mostly its synoptical tables), cf. KĀS 2010: 112. The same source is also consulted by ALʾIDRĪSĪ and quite extensively by IBN ALBAYṬĀR too both in his *Ġāmiʿ* and in *Almuġnī*.

⁴ Comparison of this and other relevant loci in *Vetus* shows clearly that this cannot be the source of ARRĀZĪ's passages. As a matter of fact, *pace* ULLMANN, the text recorded in *Alḥāwī* has all the appearance of a quite drastic rewording of *Ḥašāʾiṣ*. In view of all other witnesses to this particular passage (including IBN MĀSAWAYH and the Qayrawānī physicians), it would be rather

turn, each text appears to transmit a different version. The puzzle is waiting to be solved.

To sum up before turning my attention for a moment to the original DIOSCORIDES, there is a possibility that some of the materials stemming ultimately from *Materia medica* were not accessed directly by the compiler of ^α*Hawāṣṣ*. The now-anonymous physician (or IBN ALHAYTAM in the alternative hypothesis for the origin of this textual family) appears to have exploited a pre-existing compilation that may have contained a sort of anthology in which DIOSCORIDES' book had been not only excerpted but also, and more importantly, partially interpreted and enriched or supplemented with data drawn from GALEN. Confirming or falsifying this intuition shall necessitate some work in the near future but the prospect is certainly enticing.

A note on reading scepticism into anonymisation

Anyone who reads DIOSCORIDES' text will soon notice the recurrence of some impersonal references *φασὶ δέ (τινες ἔνιοι) ὅτι, ἱστορεῖται, ἔνιοι δὲ ἱστοροῦσι*, etc. As has been seen previously when commenting on THEOPHRASTUS' *De lapidibus*, there is a quite long tradition in the quarters of Hellenists to interpret such quotation markers as a token of the author's scepticism and even of overt distrust regarding the information that he is about to reproduce. Such discourse markers would be, thus, DIOSCORIDES' "usual manner of giving a report that he has heard but did not necessarily believe".¹

Once again, while this assumption may be true in some instances, it need not be true in *all* cases. Translating all anonymous reported speech into authorial scepticism is a psychological interpretation highly conditioned by the esteem in which the author is held by the reader. This aprioristically imposed reading conflicts, moreover, with objective evidence in a number of respects. First, there is the rather obvious contradiction between the author's presumed distrust and his repeatedly reporting on such matters. Given that there is no polemical intentionality involved in these loci and that DIOSCORIDES (unlike PLINY) did not apparently intend to record all available medical information on any given item, some justification must be provided for his inclusion of all these reports. He may have been less sceptical than assumed regarding the efficiency of those remedies and, in any case, his distrust was not so strong as to deprive his readers of an information that might eventually happen to be of some avail to them. As

unlikely that the very specific adjunct «*walā yunḥamu daqquh*» were not an echo of IŞTIFAN'S «*daqqaṅ ğayra mustaqṣā*», which is itself a peculiar interpretation of «ὥς ἄλφριτα».

¹ SCARBOROUGH 2002: 184.

I shall show below, whatever DIOSCORIDES' original intention may have been, his heirs in the Islamicate tradition certainly interpreted his reports as a positive *endorsement* of those remedies

Besides, evidence can be found that suggests that some of these impersonal reports have little to do with the author's epistemic attitude but rather obey to a strategy of anonymisation, since they often mask silent unacknowledged borrowings from his sources. This was proved for several loci more than one century ago by WELLMANN, who confirmed an intuition that goes back, in fact, to the end of the 17th c. The merit goes to Claude SAUMAISE (= SALMASIUS) to have first suggested that the striking parallelisms between *Naturalis historia* and *Materia medica* were the natural result of their respective authors having surreptitiously exploited (or, in more modern terms, pirated) the work of some earlier herbalist.¹ Let it be noted that even the title of DIOSCORIDES' book was unoriginal, as SEXTIUS NIGER's own treatise on drugs bore the title *περὶ ὕλης* according to EROTIAN.²

¹ Cf. SAUMAISE 1689: 9–10, where he points towards SEXTIUS NIGER, DIODOTUS, JULIUS BASSUS, “aut quicumque alius veterum recentiorumve”. Even if he provides just one (compelling) example of this practice, his conclusion is categorical: “Ex uno crimine disce reliqua”. This early precedent is duly acknowledged by WELLMANN 1889: 530 in the opening lines of an excellent monographic paper on DIOSCORIDES' use of SEXTIUS NIGER.

² Cf. WELLMANN 1889: 544. On an incidental note, the abrupt end of this subsection (which must have certainly shocked the reader) is quite telling of the circumstances under which this final draft has been compiled. There should have followed an overview of the fortunes of the Dioscoridean text from the particular perspective of the knowledge of the specific properties, but that discussion too shall have to wait.

<i>Nat</i>		<i>Saġ</i>	<i>Mat. med.</i>			
II.vi	1	+	2:49	I 135 ₁₄ -136 ₁	ἀλεκτορίδες	
III.i	1		4:137	II 283 ₃₋₄	αιγίλωψ	
	2	+	2:56	I 138 ₁₀₋₁₅	χελιδόνος	
	3	+	² 2:78	I 159 ₁₉₋₂₀	χολή	δοκούσι
	4	+	1:19	I 25 ₁₇₋₁₈	βάλασαμον	
	5		1:110	I 104 ₁₇₋₁₉	ρόα	ιστοροῦσι δέ τινες
	6	+	1:8	I 12 ₁₇₋₁₉	νάρδος	
III.ii	1	+	1:76	I 158 ₆₋₇	ἀλώπεκος στέαρ	
	2		2:17	I 127 ₁₁₋₁₃	γῆρας ὄφεως	
	3		2:36	I 133 ₁₁₋₁₂	σίλφης	
	4		2:35	I 133 ₈₋₁₀	ὄνοι οἱ ὑπὸ τὰς ὑδρίας	
III.iv	1	+	2:79	I 161 ₅₋₆	λαγῶν αἶμα	
III.v	1	+	2:17	I 127 ₁₁₋₁₃	γῆρας ὄφεως	
	2	+	2:174	I 242 ₄₋₅	λεπίδιον	δοκεῖ
	3		2:20	I 128 ₈₋₁₀	τρυγόνος θαλασσίας	
IV.i	1	+	2:39	I 133 _{8-134₁}	ἀλώπεκος πνεύμων	
	2	+	1:73	I 73 ₁₂₋₁₄	ἄσφαλτος	
	3 [†] -7 [†]					
IV.iii	1	+	2:115	I 190 ₁₇₋₁₈	ἵππολάπαθον	τινες χρῶνται
	2	+	2:42	I 134 ₇₋₉	ὄνυχες ὄνων	
V.i	1 ⁻	+	2:49	I 136 ₂₋₄	ἀλεκτορίδες	
V.vi	1 ⁻	+	2:9	I 125 ₁₋₃	κοχλίας	
	2 ⁻		2:35	I 133 ₅₋₇	ὄνοι οἱ ὑπὸ τὰς ὑδρίας	
V.vii	1	+	1:87	I 82 ₁₄₋₂₀	μυρίκη	
V.viii	1	+	2:35	I 133 ₅₋₁₀	ὄνοι οἱ ὑπὸ τὰς ὑδρίας	
	2			I *** ₋		
	3	+	2:9	I 125 ₁₀₋₁₁	κοχλίας	
	4		2:34	I 133 ₃₋₄	κόρεις	
	5		2:51	I 137 ₉₋₁₀	τέττιγες	
VI.ii	1 [†]					
	2 [†]					

⁻ unascribed | * dubious | [†] ghost-quote

Table 3.1: DIOSCORIDES' *Materia medica* in *Nat* III and *Saġullōt*.

<i>Nat</i>		<i>Saġ</i>	<i>Mat. med.</i>		
VI.III	1	+	3:34	II 46 ₅₋₇	ήδύοσμον
	2		2:164	I 228 ₁₄₋₂₂₉	κυκλάμινος
	3 [†]				
VI.V	1		2:164	I 288 ₁₃₋₁₄	κυκλάμινος φασί δέ ότι
VI.VI	1	+	2:9	I 125 ₄₋₅	κοχλίας
VI.IX	1 [†] -6 [†]				
VI.XII	1	+	2:124	I 196 ₉	άνδράχνη
	2	+	3:58	II 71 ₂₋₃	άνηθον
	3	+	2:136	I 207 ₁₃₋₁₄	θρίδαξ
	4	+	3:45	II 57 ₉₋₁₀	πήγγανον
VII.I	1	+	2:173	I 241 ₅	κάππαρις
VII.II	1	+	2:9	I 125 ₁₋₄	κοχλίας
VIII.V	1 ⁻		4:158	II 303 ₇₋₈	νάρκισσος
	2 ⁻	+	2:9	I 125 ₅₋₇	κοχλίας
	3 [?]	GAL	2:67	I 142 ₁₂₋₁₃	γής έντερα
VIII.VI	1	+	5:131	III 97 ₄₋₆	Άραβικός λίθος
VIII.IX	1		2:16	I 126 ₁₄₋₁₂₇ ₃	έχίδνης σάρξ μυθώδης
	2	+	2:104	I 178 ₉₋₁₃	έρέβινθος
VIII.X	1	+	3:14	II 21 ₅₋₇	σκόλυμος
VIII.XI	1 ^{-?}	+	4:75	II 235 ₆ 237 ₈	μανδραγόρας
VIII.XII	1	+	2:9	I 125 ₄	κοχλίας
VIII.XIII	1	+	2:154	I 221 ₄₋₅	σίνηπι
	2		2:27	I 131 ₅₋₆	σίλουρος
IX.I	1	+	2:126	I 200 ₁₂₋₁₃	άρνόγλωσσον φασί δέ
	2 [†]				
IX.II	1	+		I 200 ₁₂₋₁₄	άρνόγλωσσον φασί δέ
	2		3:11	II 19 ₁₀₋₁₂	δίψακος ίστορούνται
	3	+	2:63	I 141 ₉₋₁₁	άράχνη ίστορεΐται
	4 [†]				
IX.III	1 [†]	+ [?]			
IX.IV	1	+	2:154	I 221 ₅₋₆	σίνηπι

Table 3.2: DIOSCORIDES' *Materia medica* in *Nat* III and *Saġullōt*.

3.1.3 Galen

Commenting even in summary fashion upon the Islamicate reception of GALEN (let alone the original figure) is a daunting task that should not be taken lightly. As the number of Arabic translations available in an annotated critical edition increases,¹ so does our knowledge of the *Galenus Arabus*, and the sheer amount of secondary literature devoted to particular aspects of the profound and lasting impact made by the oeuvre of the physician from Pergamon in Islamicate and non-Islamicate traditions alike recommends utmost caution especially for the non-initiated.

Fortunately for me (and also for the reader) the Galenic materials included in *Nat III* are not particularly rich and they are limited, with one single exception, to the Arabic translation of *Simpl. med.* Unlike in the case of DIOSCORIDES' *Materia medica*, moreover, the history of the reception of this work is fairly (albeit not entirely) straightforward and does not involve any revision. All of this certainly makes the analysis of GALEN-ascribed passages in our text reasonably simple, especially if compared to the quotes from the same source included in *Nat II.1–2*, which necessitate an exploration of unedited and little-known pseudo-Galenic literature.

My remarks, therefore, shall be as concise as possible and they shall focus exclusively on two well-defined subjects. On the one hand, the presence of GALEN in *Nat III* and the relation of those quotes to the Arabic transmission of similar Galenic ḥawāṣṣic passages. On the other hand I shall attempt to highlight those loci in the original Galenic collection² that may have been interpreted by Islamicate authors as an explicit endorsement of the medical use of specific properties.

¹ To cite only the more important additions of the last fifteen years, an edition-cum-translation of GALEN, *Dieb. decret.* was published by COOPER 2011, and the two versions of the translation of the Alexandrian summaries of that work were edited and translated by BOS and LANGERMANN 2017 [n.v.]. Then VAGELPOHL 2014|2016|2022 has contributed three impressive volumes (for a total of over 3700 pages!) with the critical edition and English translation of GALEN's commentary on HIPPOCRATES' *Epidemics*.

² Following the lead of French scholars who favour the use of 'collection' rather than 'corpus' for the literary output of GALEN (and also of HIPPOCRATES) I consistently refer to the 'Galenic collection' (and accordingly to the 'Hippocratic collection'). For a recent explicit justification of this practice, cf. "in fact, the very term of 'corpus' could be deemed inappropriate, since Galen himself did not control the publication and the diffusion of his works, and, in turn, many works not by him were transmitted under his name [...] it seems more adequate to talk of an open tradition, a basic collection to which elements were successively added, each with a specific textual transmission and a chaotic fate" (PETIT 2013: 58).

Galen in Natāʿiḡ III

A number of implicitly and even explicitly misascribed passages aside, there is a dozen genuine quotations from GALEN in our text (see Table 3.3). There is also a nosological definition of buboes (*tawāʿīn*) that can hardly be considered ḥawāṣṣic material and might even be an addition by ALʿILBĪRĪ himself, and in any case its origin must be searched for in some Arabic gloss to a Galenic text. Of those passages, eleven have their ultimate origin in an Arabic translation of *Simpl. med.*, whereas *Nat* V.III.1 is a composite mentioning four different simple drugs only two of which are attributed an antihelminthic property in that text. Although in Table 3.3 a reference has been provided to *Meth. med.*, in which the same property is attributed to the main element of the passage (namely wormwood), it is rather unlikely that the quote should have been directly extracted from there. There must have been some mediating text in which the same combination of herbs may have been also present.

It is quite evident that ALʿILBĪRĪ's choice of quotes shows a noticeable bias towards drugs of animal origin, although from what can be inferred from *Saḡul-lōt* this may have already been a feature of the parent compilation. In *Nat* III the genuine GALEN is quoted on goats, hens and cockerels, woodlice, cicadas, and even human bones. Three passages involve an active element of plant origin (the caper tree, aloe, and wormwood) and one single quote mentions a mineral (yellow alum, which at least in origin is not what it appears to be).

The ophthalmic use of a goat liver against nyctalopy in *Nat* III.I.7 \equiv *Saḡ* III.I.5 may well be the single most-cited Galenic passage in the whole Islamicate corpus, as it is reproduced in all sort of variations (from extensive literal quotations to minimal abridgements) across most medical genres. Allusions to this locus can be found in the epigraph on nyctalopy in general therapeutics and, of course, in ophthalmologic treatises, but also in *Ḥayawān* texts (in which it is usually anonymised) and in *Ḥawāṣṣ* compilations. There is no distinctive trait in the text inherited by the author other than trivial simplification.

Woodlice in *Nat* III.II.5 are described but not identified by a name. Moreover, this passage preserves ḤUNAYN's qualification of this bug as a 'worm' (*dūd*, which did not quite correspond to the original ζῶα). Comparison to the immediately preceding passage from DIOSCORIDES on the same animal could not be more illustrative of an only partially harmonised coalescence of parallel traditions. When quoted from *Ḥašāʿiṣ*, the bug is "the animal [*ḥayawān*] that is found under pitchers"; when from *Mufradah*, it is "the worm of the pitchers", which reflects faithfully the different translations of those two loci, yet both *Materia medica* and *Simpl. med.* had ζῶα here. On the other hand, the self-defence technique of the woodlouse is described in different words by the two Greek physi-

cians and also in their respective Arabic translations, but the exact same phrase features in the two quotes transmitted in *Natāʾiḡ*. The synonym *qaranbā* inherited from *Hašāʾiḡ*, in turn, has not spread to the contiguous passage. The Galenic quote, in sum, is neither a mechanical reproduction of the locus in *Mufradah* nor an entirely normalised adaptation of it.

The case of *Nat* V.IV.1 on cicadas, which are referred to as “the animal called ‘the chirper’ [*šarrār*]”, is even more interesting. This quotation is a slight rewording of the original locus in *Mufradah*, yet ḤUNAYN left the Greek name of the insect untranslated («*alḥayawānu lmusammā “tāṭiḡis”*» E 178v 10). Moreover, in his translation of *Materia medica* IṢṬIFAN provided a Syrian (but not Syriac) name *zīz* for τέττιξ (which he transcribed differently as «ططغيس»).¹ Our text reflects, therefore, an identification that was not available in the original translations of either DIOSCORIDES or GALEN. In Andalus *šarrār* is indeed the Arabic equivalent assigned to τέττιξ by IBN ĠULĠUL, who also adds “Latin” *ḡiqāla* (جقالة) to this equation.² This identification does not seem to have been widely received (or accepted) even in the Andalusī tradition, which makes the testimony of *Nat* III (and probably already of ^α*Hawāšš*) all the more significant.³

¹ Cf. DIOSCORIDES, *Hašāʾiḡ* 2:42 ططغيش (B 69r 2–4 | P 33v 19–20 | T 143_{20–22}) ≡ *Mat. med.* 2:51 τέττιξ (W I 137_{9–10}). On an incidental note, DOZY, *SDA* I 618b–619a s.v. زيز identifies this word as Amazighic *abzīz*, which in view of IṢṬIFAN’s testimony ought to be dismissed in favour of an onomatopoeic etymology as echoed by himself from the *Muḥiṭ*, cf. perhaps also *zī zī* as an imitation of “the sound of the *ḡinn*” in AZZABĪDĪ, *Tāḡ* XV 172a 7–9 s.r. √زيز.

² Cf. IBN ĠULĠUL, *Tafsīr* 2:39 ططغيس (G 30₃ | D 44_{5–6} | P 33v 19 right margin). The local non-Arabic synonym word reflects either Late Latin *cicala* or some continuation of it, cf. the type represented by Catalan and Occitanic *cigala* (also Catilian *cigala* with a radical change of meaning).

³ No mention of cicadas is made by IBN ĠANĀḤ in *Talḥiṣ* under any name. Unfortunately it is impossible to retrieve the original entry in IBN WĀFID’s *Mufradah* (if there was any, because *Mufradah* 23₁₂ is of no help in this regard) and in his quote from this Galenic locus only the Greek name of the insect is found: «הנקרא בלשון יון טאטיטוס» ≡ «*animal quod dicitur in Greco ṭ carochas*», cf. the fragment interpolated within the entry on swallows in *Mufradāt* 383v 29–33 כנניית-כטאף (K 21) ≡ *Liber Serapionis* [430] *chattaph-hyrundo* (A 285_{5–10}). Then ALĠĀFIQĪ records only IṢṬIFAN’s synonym *zīr* in *Mufradah* ط-II s.v. ططغيش (M 228v 7–8 | T 414₅) and also a little before in *Mufradah* ط-II s.v. طاطحس (M 226v 20–21 | T 411_{16–17}), where he compares it to the locust and adds «*wayašīhu billayl, wašīyāḥuhū šarīr*» without however mentioning the word *šarrār*. Strikingly enough, IBN ALBAYṬĀR appears to have inherited a misreading that transformed *šarrār* into *šarāšīr* (western plural for *šarāšīr*). In his own explanation of *Hašāʾiḡ* he glosses it as “it is a little animal known as *šarāšīr*” (which the editor pseudocorrects as *šaršar*) and adds IṢṬIFAN’s Syrian *zīz*, cf. *Tafsīr* 2:40 جطيلس (B 167_{1–2}). In his *Ġāmiṭ*, in turn, he echoes rather IBN ĠULĠUL’s text by equating *šaršar* (sic) with *ḡiqāla*, to which he adds the Syrian synonym and also a remark about *šarāšīr* being amongst them (ie amongst Syrian people) cockroaches, cf. *Ġāmiṭ* صرصر 16–ص (B III 83_{1–2}).

The more conventional reading transmitted by the three quotes on chicken and cockerel broth in *Nat* V.II.3 \equiv *Sāg* V.II.4, *Nat* V.IV.2, and *Nat|Sāg* VIII.I.2 conceals a probable case of hybridisation with Dioscoridean materials, as the text incorporates distinctive elements from *Materia medica* (see below for an analysis of this mixture). Then *Nat|Sāg* VII.II.2 on a medical application of burnt human bones and *Nat|Sāg* VIII.IV.1 on a conspicuously like-heals-like use of a ram's skin are quite telling of the large space allotted to ḥawāṣṣic medicine in GALEN'S oeuvre and of the reception of these accounts in the Islamicate tradition.

As for medicinal plants, in *Nat* V.VII.2 the well-known splenetic property of several parts of the caper tree is mentioned, in *Nat|Sāg* VI.XIV.1 the colletic or agglutinant power of aloe for wounds on the vulva and the penis, and in the composite *Nat* V.III.1 \equiv *Sāg* V.III.3 wormwood is the lemma or main item but the pulp of colocynth, "the narcissus plant [*nabātu nnarḡis*]", and bitter lupines are also included in this catalogue of herbs possessing the specific property of bringing tapeworms out. If the former two passages can be derived, with some rewording, from *Mufradah*, the latter is quite problematic and shall be dealt with below.

Finally, the mention of "yellow alum" *Nat* V.II.2 springs from the same obvious misreading of يشب/يسب 'jasper' (\equiv ἰασπις) as attested before in a quote from DIOSCORIDES in *Nat* V.I.3 \equiv *Sāg* V.I.6. The parallel transmission of the Galenic locus in Andalusī pharmacognosy preserved far better what seems to have been ḤUNAYN'S original transliteration and so did overall the lithognomic tradition, but reinterpretations of the unpointed ductus اسب as بئد 'coral' are documented as early as ARRĀZĪ. Even if there is at least one additional witness for the same misreading outside the family of ^a*Ḥawāṣṣ* (namely ALBALADĪ), this particular apomorphy appears to be quite characteristic of that subtradition.

<i>Nat</i>		<i>Sag̃</i>	SOURCE		
III.I	7	+	SM XI.I.11	K XII 336 ₁₋₆	Περὶ ἥπατος αἰγῶς καὶ τράγου
	8 [†] -17 [†]		[TAB RAZ]		
III.II	5		SM XI.I.49	K XII 366 ₁₆ -367 ₈	∈ Περὶ δράκοντος θαλαττίου καὶ τρίγλης
III.III	1 [†] -2 [†]	+	[DIOSC]		
III.VI	1		[GAL ∈ <i>Haw</i> 82v 19]		
IV.II	1 [†]		[TAB ∈ <i>Haw</i> 82v 18]		
	2 [†] -4 [†]		[TAB]		
V.II	2		SM IX.II.19	K XII 207 ₃₋₅	ὁ χλωρὸς ἴασις
	3		SM X.I.38	K XII 361 ₁₅₋₁₈	Περὶ ἀλεκτοριδῶν
	4 [†]		[THEOPHR ∈ <i>Haw</i> 84r 10]		
V.III	1	+	← ? <i>Meth.med.</i>	K X 1021 ₆₋₇	
V.IV	1		SM X.I.36	XII 360 ₃₋₆	Περὶ τεττίγων
	2		≅ SM X.I.38	K XII 361 ₁₅₋₁₈	Περὶ ἀλεκτοριδῶν
	3 [†] -4 [†]		[DIOSC]		
	5 [†]		[ARCHIG ∈ <i>Haw</i> 79r 4]		
V.VII	2		SM VII.x.7	K XII 910-103	Περὶ καππάρεως
VI.VI	2 [†]	+IMW	[DIOSC]		
VI.XIV	1	+	SM VI.I.23	K XI 822 ₁₁₋₁₄	Περὶ ἀλόης
VII.II	2	+	SM X.I.18	K XII 342 ₅₋₇	Περὶ ὀστέων κεκαυμένων
VIII.I	2	+	SM X.I.38	K XII 361 ₁₅₋₁₈	Περὶ ἀλεκτοριδῶν
VIII.IV	1	+	SM XI.I.20	K XII 342 ₁₁₋₁₅	Περὶ δέρματος προβάτου
	2 [†]	+	PS-GAL?		

Table 3.3: Galenic quotes in *Nat* III and *Sag̃ullōt̃* (*SM* = *Simpl. med.*).

Ghost-quotes: accidental misascription and possible hybridisation

The clearest example of unintentional (and actually only apparent) misascription is the long sequence *Nat* III.I.8–17 following an authentic quote from GALEN. The particular selection of passages made by ALḤILBĪRĪ (and probably a dose of careless compilation) resulted in the omission of the names of AṬṬABARĪ and ARRĀZĪ to which these passages ought to be ascribed.

The mention of the diamond stone by GALEN as apparently implied by *Nat* V.II.4 would certainly be an apocryphal one, but the passage (which has perhaps been dislocated) is in fact borrowed from ARRĀZĪ's *Ḥawāṣṣ*, where it is ascribed to THEOPHRASTUS.¹ The parallel sequence in *Saḡullōt* does not help to ascertain whether this misascription may go back to the parent text or not.

Another example of such accidents is provided by *Nat* VI.VI.2 on a mixture of naphtha, wine, and castoreum used as an emmenagogue. The passage is also clearly non-Galenic in origin (naphtha does not feature amongst the drugs mentioned in *Simpl. med.*) and can be safely derived from DIOSCORIDES (who is in fact quoted for the preceding passage in that chapter). The cognate locus *Saḡ* VI.VI.2 is unascribed and it is located between a passage from IBN MĀSAWAYH and a genuine Galenic quote on castoreum, which may perhaps explain the mistake in *Natāʾiḡ*.

For the shocking misascription of two passages from DIOSCORIDES and a third one from ARCHIGENES (through ARRĀZĪ) in *Nat* V.IV.3–5 a combination of drastic dislocation and omission of sources could be invoked. However the arrangement of the chapter is irregular also in *Saḡullōt*, for it opens with GALEN and only mentions DIOSCORIDES *after* him. Moreover, *Saḡ* V.IV.3 would seem to preserve an exceptional quote from AHRUN,² and in *Nat* V.IV.6 ARISTOTLE is quoted on the lazuli stone. Any reconstruction of the original chapter in the parent text on this evidence is highly speculative, but one may suggest that the anomalous order was probably already there and that the omission of DIOSCORIDES' name appears to have been introduced only in *Natāʾiḡ*. Whether ^α*Ḥawāṣṣ* retained the ascription to ARCHIGENES or rather mentioned only ARRĀZĪ is impossible to infer from available data.³

¹ Cf. ARRĀZĪ, *Ḥawāṣṣ* الماس 7–8 (I 84r 10–12), and also the subsection on THEOPHRASTUS above for further details on this passage.

² The passage is virtually identical to AṬṬABARĪ, *Firdaws* IV.IX.7 on grinding long red earthworms and drinking them with warm water against colic (§ 256_{11–12}), but AṬṬABARĪ is explicitly (and correctly) mentioned as the source of a five-passage sequence *Saḡ* V.IV.4–8.

³ The two quotes from ARCHIGENES recorded by ARRĀZĪ in *Ḥawāṣṣ* (they have already been mentioned) transmit remedies for colic.

There are on the other hand some explicit GALEN-quotes that may require a different explanation—one that for the time being I cannot provide. They seem to reflect a non-accidental confusion with DIOSCORIDES. Thus *Nat|Sāḡ* III.III *On the treatment of the nose* contains just two quotes in both texts and the only author mentioned there is GALEN, whose name introduces the first passage. And yet that quote on the Arabian stone does not echo GALEN's *Mufradah* but rather DIOSCORIDES' *Ḥašāʾiṣ*, and in a duplicate of the exact same passage in *Nat|Sāḡ* VIII.VI.1 the correct ascription is provided.

The same applies to *Nat|Sāḡ* III.III.2 on the haemostatic property of hen brains, which is actually identical to *Nat* II.IV.1 \equiv *Sāḡ* II.IV.3, where DIOSCORIDES is cited as the source of the passage. In view of the minimal contents of the chapter, it is quite probable that the parent text already transmitted this misascription, but I cannot even guess the reasons for this divergence. It would be tempting to relate this apparent confusion to the Galeno-Dioscoridean hybridisation postulated previously for some passages in which elements from both *Materia medica* and *Simpl. med.* appear in combination. In this case, however, it is only the name of the source that appears to have been altered (and even that only in one of the two instances of each quote), whereas the contents of the passages are purely Dioscoridean.

A few true hybrids can be identified. The aforementioned triad *Nat* V.II.3, V.IV.2, and VIII.I.2 describes one particular medical use of chicken and old cockerels. The first and the third passages are essentially the same quote reporting on the property of chicken broth and both include ḤUNAYN's characteristic *is-fidbāḡ*, yet their wording is not exactly identical and in the second instance the word *ḥāṣṣiyyah* is added to the description. Despite this divergence from *Mufradah*, both passages can be derived from that translation with some authorial intervention. The second passage, on the contrary, transmits DIOSCORIDES' exact instructions to cook the cockerel, following quite literally IŞTIFAN's translation even in the raw use of *qūṭūliyāt* = $\kappa\omicron\tau\upsilon\lambda\alpha\iota$ as a measure. The mention of the constipating power of the meat of old cockerels, in turn, cannot possibly stem from *Materia medica*.

For the composite quote *Nat* V.III.1 \equiv *Sāḡ* V.III.3 a much more convoluted history must be presumed that cannot be outlined here. That history involves a probable misreading «نبات الترجس» in *Natāʾiḡ* for what the cognate locus in *Sāḡullōt* transmits as «פנדרשת», which was then glossed as אקנוש קאשטוש (ie *agnus castus*), pointing towards *فنجكشت as the herb originally mentioned here.¹

¹ It is worth noting that both manuscript families of *Nisyōnōt* (even *Nisy*^A, which is usually remarkably close to *Sāḡullōt*) omit altogether this plant from the list. Besides, *Nisy*^N further di-

But even then the quote is problematic, because the specific property of bringing tapeworms out that is attributed to wormwood, the pulp of colocynth, the chaste tree (if this was the original reading), and bitter lupines is not recorded by GALEN (or by DIOSCORIDES) for all four herbs. The mistransmitted narcissus/chaste tree might perhaps be emended to read فوذج 'mint' (\equiv καλαμίνθη), which is indeed described as a helminthagogue; or it could be read, giving priority to *Natāʿiğ*, as سرخس 'worm fern' (\equiv πτέρις) which is also attributed the same property. But the detailed analysis of these possibilities is better left for the integral commentary.

Galen in ^αHawāṣṣ and a comparison to Arrāzī's compilation

As I have already stated in previous epigraphs, there is not point in trying to reconstruct here the exact contents of the parent text but a provisional outline can nonetheless be provided. From IBN ALHAYTAM's testimony it can be ascertained that some of the ghost-quotes in our text do not go back to ^αHawāṣṣ but were introduced by ALʿILBĪRĪ (or even by later copyists of *Natāʿiğ*) and also that their common anonymous source contained a somewhat larger representation of Galenic materials. The total amount of GALEN-ascribed quotes must have been, nevertheless, remarkably smaller than that of passages borrowed from DIOSCORIDES.

Some of the Galenic quotes not selected by ALʿILBĪRĪ involve the following items:¹ a purple thread used to strangle a snake, the faeces of a child that has been nourished with lupines, and the excrements of a dog fed solely on bones, all three against quinsy in *Sağ* IV.II.1–3. The excrements of dogs and wolfs are to be periapted or taken in a potion against colic in a triple quote from GALEN in *Sağ* V.IV.1. On a tangential note, it seems as if ALʿILBĪRĪ (or, to be more precise, whoever compiled *Nat* III) had been particularly restrictive in his admission of Drekapotheke into his selection. Excrements are present in *Nat* III, to be sure, but only mouse or bird droppings are involved in drinkable remedies, and the use of cattle dung is limited to poultices.

Comparison of this minimal reconstruction of the set of Galenic quotes in ^αHawāṣṣ to ARRĀZĪ's selection for his own treatise reveals something about the strategy of the anonymous compiler. He exploited virtually of the Galenic materials in *Hawāṣṣ* that had a medical application and could be incorporated into his architecture of chapters—and then enriched this set with further

vides the passage into two separate quotes, cf. *Nisy* V.III.3 (L–M 202₂–203₁).

¹ Needless to say, I exclude from this comparison the chapters that are not preserved in the extant form of *Nat* III. In *Sağ* I.I.3–4, for instance, GALEN is quoted on weasel blood and peony against epilepsy.

quotes culled either directly from *Mufradah* or from some previous collection. The three passages excerpted explicitly from *Mufradah* in ARRĀZĪ's *Ḥawāṣṣ* involve the purple thread, the amulet made of asafoetida, and the antiepileptic use of peony. Apart from these, the use of wolf dung is reported also from GALEN without specifying any title. All four are reflected in the sum of *Nat* III and *Iktifāʿ*? From *Mayāmīr* (ie *Sec. loc.*) ARRĀZĪ had selected one single passage on the Persian buttercup (*kabikaǧ* ≡ βατράχιον, *Ranunculus asiaticus* L.), and this is recorded in the *Hārūniyyah* in a locus that must be considered cognate to the passages transmitted in *Nat|Ikt* III.v *On the teeth*.¹

That leaves only two passages of medical interest that cannot be positively postulated for ^α*Ḥawāṣṣ* (but which may have been also borrowed into it): the anaphrodisiac property of a sheet of lead if fastened over the belly,² and the power attributed to the two-headed snake to induce miscarriage by simply being looked at.³ The former could have found a natural place in *Nat|Ikt* VI.x; the latter, in *Nat|Ikt* VI.v alongside an analogous reference to ἄρον and κυκλάμινος from DIOSCORIDES.

On the other hand, the anonymous compiler had no use for the other Galenic (and pseudo-Galenic) materials available in his source, since they report either properties unrelated to medicine (as the antipathy between the scorpion and the gecko [*wazaǧah*]), or the myth about bears being born formless) or a specific medical use not covered in his treatise (that would be the case of a quote from *De antidotis*, as poisons and venoms were not dealt with in ^α*Ḥawāṣṣ*).

Despite this extensive borrowing, ^α*Ḥawāṣṣ* (and therefore *Natāʿiǧ* and *Iktifāʿ*?) does not depend exclusively on ARRĀZĪ's treatise for its Galenic materials. That its author did not limit himself to reproducing that pre-existing selection shows, like the massive incorporation of Dioscoridean passages, that his task of compilation was an active and intensive one, and he deserves some credit for that.

¹ Cf. *Hārūniyyah* I.XIII.7 (G 242₂₀–243₂), where *kabikaǧ* has been mistransmitted as *kākaǧ* (≡ στρύχλον ὑπνωτικόν / ἄλικά(κ)καβον, the winter cherry, *Physalis alkekengi* L., to which no such property was ever attributed). For the origin of this remedy, cf. ARCHIGENES «Ἐάν ὀδονταλγούνη βατραχίου φύλλα ἐπὶ τοῦ κατὰ τὸν ἀλγούνη ἐπιθῆς, ἀπόνους μὲν ποιεῖ» amongst his περιήματα ἀντιπαθῆ ὀδοῦσιν according to GALEN, *Sec. loc.* V.5 (K XII 874₈₋₉).

² According to ARRĀZĪ this would have been mentioned by GALEN “in more than one place in his books, especially in *De sanitate tuenda*”, cf. ARRĀZĪ, *Ḥawāṣṣ* 1–9 أسرب (I 79v 9–10). See an echo of this prescription in *Nat* II.2 *Ther* 4.3.7.

³ From *Attiryāq ilā Qayṣar* (ie the Arabic translation of *De theriaca ad Pisonem*, cf. ARRĀZĪ, *Ḥawāṣṣ* 2–1 حية (I 81r 4–5).

3.1.4 Aṭhūrusfus

One single passage is explicitly ascribed to AṬHŪRUSFUS¹ in our text, namely *Nat* IX.IV.2 on the antipyretic property attributed to the ticks taken from a dog's right ear. The derivation of the text from ARRĀZĪ's *Ḥawāṣṣ* is unproblematic.²

On the basis of external evidence the same authority can be suspected to lie behind the name AṬRĀṬĪS («اطراطيس») in *Nat* VI.I.1. There a fumigation made with human hair is affirmed to avail against womb aches.³ Now, this particular passage is not to be found in ARRĀZĪ's *Ḥawāṣṣ*, which leaves his *Alḥāwī* or otherwise AṬṬABARĪ as the only possible sources. The two pertinent loci are reproduced and analysed (with an exhaustive concordance that permits to trace back the remedy at least to ALEXANDER OF TRALLES) in Chapter 4 for the commentary on *Nat* II.IV.3 on an identical smoking against oblivion.

The particular use of this suffumigation against uterine ailments is well documented in pharmacognosy, *Ḥawāṣṣ*, and *Ḥayawān* texts, and nowhere is an alternative source mentioned: all those passages are either anonymous or demonstrably borrowed from *Alḥāwī* or from *Firdaws*.⁴ As in the case of its application in the treatment of oblivion, an early attestation in PLINY is available, which may be of some significance for the question on the identity of AṬHŪRUSFUS:⁵

¹ To be clear, AṬHŪRUSFUS is a conventional transcription of the majority reading transmitted in ARRĀZĪ's *Ḥawāṣṣ* and *Alḥāwī*. The name can also be read otherwise (and actually it was, both in Arabic and in translation) and in this case I find an approximative (and quite probably wrong) rendering far more readable than an abstract (and in the end no more correct) skeleton *ʔḥwrsfs.

² Cf. ARRĀZĪ, *Ḥawāṣṣ* كـ 1 (I 82r 13–14).

³ ≡ *Saj* VI.I.1 (L–M 312_{25–26}), where the name of the source is partially preserved as «אסטרטיס»; ≡ *Nisy* VI.I.1 (L–M 220_{8–9}), with no ascription; ≡ *Hārūniyyah* I.XII.7 (G 234₈), likewise anonymous.

⁴ Parallel circulation in unscripted form is documented in IBN ʿALĪ, *Ḥayawān*^c [1.15] (R 12); and IBN BUḤTĪŠŪṢ, *Ḥayawān* I (G 4_{10–11} | P 2v 3–4 | Q 2v 2–3) ≡ *Manāfeʿ-e ḥayawān* I (R 51_{9–10}) ≡ *Naʿt*^t 104r 4–5. In Andalusī *Ġāmiʿ* texts, it is received in likewise anonymous form by ALĠĀFIQĪ, *Simplicia* c–99 (V 52vb 26–28); and IBN ALBAYṬĀR, *Almuḡnī* XIII.1 (M 209v 12–13). The whole sequence of benefits is noted down without any ascription but with an apparent addition by ALZIDRĪSĪ, *Ġāmiʿ*^t شعر 23–ش (S III 468_{13–16}). With an ambiguous abbreviation *T* that may in this case represent AṬṬABARĪ, this passage is included by ZUHR in *Ḥawāṣṣ* 1–1 (P 6r 6–7).

⁵ The text of ARRĀZĪ, *Alḥāwī* IX.2 (H IX 69_{18–19}) might suggest that both smoking with aromatic nails (*adḡāru ṭṭīb*) and with human hair against womb suffocation are derived from PAUL OF AEGINA, yet comparison to the original text shows that it is only the first passage that reproduces *Pragmateia* VII.3 s.v. ὄνυχες (H II 247_{18–19}), whereas no such property is recorded for human hair in *Pragm* VII.3 s.v. τρίχης κεκαυμένα (H II 267_{15–16}), where it is compared as to its benefits to burnt wool (ἔριον), to which no benefit for the womb is attributed in *Pragm* VII.3 s.v. ἔριον (H II 211_{10–14}). Neither aromatic nails nor human hair are mentioned, in turn, in the corresponding therapeutic chapter in *Pragm* III.71 Περὶ ὑστερικῆς πνιγῆς (H I 288_{28–31}). A respectably ancient tradition is echoed also in YŪNIYŪS B. ANĀṬŪLIYŪS, *Filāḥah* VI.13.

PLINY, *NH* XXVIII.7.[20] (J–M IV 300₅₋₆)

capilli si crementur, odore serpentes fugari; eodem nidore vulvae morbo strangulatas respirare.

The same AṬRĀṬĪS («اطراطيس») is quoted on another suffumigation in *Nat* VI.I.2 and might be the implicit source of the following two passages too. The fact that this remedy is not included in ARRĀZĪ's but can be found in *Firdaws* (from which the next four passages are borrowed) favours the hypothesis that also *Nat* VI.I.1 may have its origin in the same text rather than in *Alḥāwī* (which would be quite remarkable in the mid-tenth-century Islamicate west).

Then the distorted name *SQṬŪR in *Nat* IX.III.2 is paralleled by שטס in *Səḡullōt*, but the identity of the passage with a quite peculiar quote from AṬHŪRUSFUS in ARRĀZĪ's *Ḥawāṣṣ* leaves no doubt about the source, from which also the following passage *Nat* IX.III.3 was taken.¹

From a strictly a synchronic point of view, at least AṬRĀṬĪS (the reading is shared by the two manuscripts of *Natāʿiḡ*) may have been understood by ALʿIL-BĪRĪ to be an author different from AṬHŪRUSFUS, but his immediate source apparently transmitted a more correct reading. In any case, all these quotations are, like the overwhelming majority of AṬHŪRUSFUS-ascribed materials in the Islamicate tradition, were no doubt acceded first through ARRĀZĪ and then borrowed at third and fourth hand by later compilers.

A digression on der rätselhafte Athoursofos

Quite unfortunately the intriguing figure of AṬHŪRUSFUS does not appear to be a Persian author and therefore he is not covered in the superb analysis of the Sanskritic, Syriac, and Persian sources of *Alḥāwī* conducted by KAHL. In his cursory mention of this physician, in fact, KAHL accepts ULLMANN's old identification of AṬHŪRUSFUS with first-century CE XENOCRATES (Ξενοκράτης) of Aphrodisias and he further points out that in *Alḥāwī* ARRĀZĪ “quotes Xenocrates” by both names, “which means he was using two Arabic translations—a direct one from Greek and an indirect one from Pahlavi”. From his own survey of the tradition ULLMANN had already inferred that AṬHŪRUSFUS's text must have been a treatise on the uses and benefits of animal organs, and on the basis of the nature of the medicines prescribed he was inclined to conclude “daß Xenocrates und Aṭhūrusfus identisch sind”, which would require the name Ξενοκράτης to have been mediated by Syriac or Pahlavi.²

¹ Both passages are analysed in Chapter 4 within the commentary on *On tertian fever*.

Lemma		Istanbul MS
ا-1	إنسان	78v 13–14
ا-4	أفعى بلوطية	79r 11–12
ا-6	السام أبرص الأخضر	79r 19 – 79v 1
ا-7	ابن عرس	79v 2–4
ب-9	بلبل	80r 10–11
د-2	ذُبّ	80r 9–10
د-3	دلفين	80r 13–14
و-3	ورل	80v 9–11
ح-1	حيّة	81r 7–8
ح-3	حمار	81v 3
ح-5	حمار البيت	81v 5–7
ك-1	كلب	82r 13–14
ن-1	نسر	84r 13–14
ع-3	عنكبوت	5r 3–7
ع-5	عظاية	85r 15–17
ف-5	فيل	85v 11–14
ر-1	رخام	86r 14–16
ر-2	رتيلا	86r 17–18
خ-4	خقّاش	I 87r 14–15
ذ-1	ذئب	87v 13–14
ض-3	ضفدع	88v 11–13

Table 3.4: Passages ascribed to Aṭhūrusfus
in Arrāzī's *Ḥawāṣṣ*.

² Cf. KAHL 2015: 51–52 and ULLMANN 1972: 11, respectively. The association of this obscure author known only through quotes with XENOCRATES actually goes back to WELLMANN, whose hesitant formulation I have paraphrased in the rubric to this epigraph: “der rätselhafte Athoursofos, Athuriscus (Xenokrates?)” (WELLMANN 1928: 17). Two centuries earlier FABRICIUS 1726: 92, 94 had tentatively identified the *At(h)uristus* that he found in the Latin translation of *Alḥāwī* (ie the *Liber continens*) with the *Ateuristus* (= Ἀτευρίστος) mentioned by GALEN in *Sec. loc. X.1* (K XII 251₅₋₈), but WELLMANN 1928: 17 n. 1 suggests that it was probably the other way round and that this particular reading in the Greek text may be based on a conjecture by some physician acquainted with the Arabo-Latin tradition.

It is quite symptomatic of how the ḥawāṣṣic tradition has been approached by modern scholarship that AṬHŪRUSFUS should not be mentioned in ULLMANN's still unparalleled survey of the Islamicate *medical* tradition but rather in its likewise masterly account of the natural and occult sciences.¹ That this figure was somehow close associated to the lore of the specific properties is obvious, and the twenty excerpts that ARRĀZĪ selected for his *Ḥawāṣṣ* (some of which represent indeed the whole lemma) are definitive proof of that connection (see Table 3.4).² Now, a closer examination of the materials transmitted from the same source *Alḥāwī* offers a wider glimpse of the essentially *medical* nature of AṬHŪRUSFUS' text. In his ultimate anthology of quotes ARRĀZĪ includes fifty-odd additional passages that are (at least apparently) drawn from the same book.³

Ḥ I.8 on tortoise blood clysterised with some castoreum against spasms (H I 180₁₃₋₁₄).

Ḥ II.4 on a preparation that includes the marrow of calf bones for the eyelids (H II 143₁₀₋₁₂).

Ḥ III.2 on woman milk for stinking ears, human urine against earaches, and wormwood against suppurating ears (H III 51₄₋₉); III.4 on the use of the sharp tail bones (ed. «ذيل», to be read as «ذيل») of the wolf for dental scarification (H III 139₁₀₋₁₂); III.7 on the power of the excrements of the *nims* to extract swallowed bones, thorns, etc (H III 206₈₋₉); III.11 on the fat of ducks and hens as a liniment for a rough tongue (H III 216₁₅₋₁₆); III.11 on aged human urine for swellings of the amygdalae, the throat, and the uvula (H III 230₅₋₆); III.11 on several remedies against quinsy, amongst which burnt swallows, hot milk, and a viper previously choked with a thread of linen (H III 276₆₋₁₃).

Ḥ IV.1 on a fox lung fo respiratory conditions (H IV 16₃₋₅ and again on IV 27₁₃₋₁₅); IV.1 on human urine against asthma and orthopnea (H IV 18₄₋₅).

Ḥ VI.7 on bull's-hide glue (*ḡirāḡu lḡulūd* ≡ ταυρόκολλα) and isinglass (*ḡirāḡu ssamak* ≡ ἰχθυόκολλα) against diarrhoea (H VI 185₂₋₃); VI.7 on eating *wiršān* for loose bowels

¹ Cf. ULLMANN 1972: 11 (+ 452), 364, 407.

² An additional passage on henna (حناء) is transmitted exclusively in *Ḥawāṣṣ* Q 152₂₋₄, which is identical to what in the same manuscript is found under the lemma on the gecko (cf. Q 224₆) and most likely represents a duplicate, born perhaps from a gloss (?) in which the synonym حناء may have featured in substitution for the original denomination.

³ The exacting task of registering all the passages overviewed hereunder was carried out already in ULLMANN 1972: 11. No volume is indicated there for the quotes mentioned in the additions (cf. ULLMANN 1972: 452) and they have not been included in the present survey. Numeration of chapters within each book is sometimes only approximative and in a few cases it is simply impossible. There are certainly a few more passages that have escaped my attention and some of the collected ones might not be actually related to AṬHŪRUSFUS (the manuscript transmission of *Alḥāwī* is especially challenging in this regard).

(H VI 209₇), a similar effect is attributed to the flesh of *šūdāniq*, roasted sparrows, and boiled or roasted partridge (H VI 209₁₀₋₁₃).

H VII.3 on woman milk as a diuretic hepatic remedy (H VII 90₁₋₂); VII.6 on dolphin fat as a diuretic and on drinking seven cantharides against dropsy (H VII 259₇₋₁₁).

H VIII.1 on hare rennet against dysentery and on cheese against intestinal ulcers (H VIII 87₁₀₋₁₄).

H IX.1 on woman milk against womb ache (H IX 28₁₃₋₁₄); IX.1 on seal rennet and also squill vinegar against womb suffocation (H IX 70₁₋₂); IX.2 on duck droppings helping conception if rubbed all over the penis and on male- and female-conception induced by drinking the rennet of a hare or the gall of a bear (H IX 121₃₋₈); IX.4 on human urine as a womb cleansing remedy (H IX 173₃₋₄); IX.5 on the same property of human urine (H IX 193₁₃₋₁₄).

H X.4 on the litholytic power of burnt scorpions, via AṬṬABARĪ (H X 100₈₋₉); X.4 on deer blood (ed. «لأجل», read «لأجل») as a litholytic and on goat blood breaking the magnet stone (H X 127₁₆₋₁₈); X.4 on wild boar urine breaking kidney stones (H X 134₅₋₆); X.4 on earthworms as a litholytic and the comparison of deer blood, which breaks kidney stones, to goat blood, that breaks calculi and the magnet stone (H X 143₄₋₅); X.5 on the diuretic property of bedbugs (the text is defective but the element can be still be identified by the word «سمر»), the mud of swallow nests, and lice (H X 185₅₋₈); X.10 on the aphrodisiac power of the eggs and bodies of sparrows, as well as of a stag's penis and testicles (H X 331₇₋₉).

H XII.1 instructions to burn a sea tortoise and poulticing it over ulcerous cancers; also on a liniment made of hare rennet and another one made of burnt stag horn to the same effect (H XII 6₁₃₋₁₇), XII.4 on hydromel (*māḍu l'asal*) against abscesses (*dubaylah*); also a mixture of pigeon droppings, figs, and *šaylam* meal with oxymel against abscesses and scrofulas (H XII 107₅₋₇); XII.5 burning house vipers and plastering their ashes over scrofulas; also on fats in general and on burnt donkey hoofs for the same benefits against scrofulas (H XII 145₁₋₄); XII.5 on the liver of a bustard (*ḥubārā*) instilled into the ear against parotid tumours (H XII 151₂₋₄); XII.6 on grinding earthworms to make a poultice for ruptured sinews (H XII 199₁₋₂).

H XIII on hide glue against burns caused by fire and hot water (H XIII 114); on the flesh of molluscs (*lahmu ṣṣadaḡ*) and also on fish glue both plastered over fire burns (H XIII 124₁₂₋₁₄); on several remedies against bruises and broken bones: on the one hand molluscs, on the other hand bear fat (H XIII 250₁₄₋₂₅₁₃).

Ḥ XIV on dried human faeces given to drink against periodic fevers (H XIV 55₁₀₋₁₁; perhaps also the immediately following statement on the antipyretic benefit of purslane).

Ḥ XVI.13 on drinking three or four drops of blood taken from an donkey's ear against phlegmatic fevers (H XVI 91₁₂₋₁₄); XVI.15 on a human bone periapted against quartan fevers (H XVI 128₁₁).

Ḥ XVII.2 on propolis («washu lkuwārāt») poulticed against smallpox (H XVII 33₁₂₋₁₃); XVII.4 on human earwax against non-suppurating swellings of the roots of the nails (H XVII 63₉₋₁₀), a few lines before XENOCRATES has been mentioned; XVII.5 on the invigorating property of honey (H XVII 119₁₀₋₁₂).

Ḥ XIX.21* on isinglass rubbed and poultices over a dog bite (H XIX 245₇); XIX.22* on aged human urine against poisonous bites, and apparently also the following one on burning human faeces and sprinkling them over the bite to the same effect (H XIX 246₅₋₇); XIX.2* mentioned in coordination with BADĪĠŪRAS on the specific property of human faces against poisons and lethal drugs (H XIX 300₃₋₄).

Ḥ XX [35] إنسان on human hair soaked in vinegar against dog bites (H XX 33₁₄₋₁₅, and probably also some of the following passages on the same element).

A few distinct features emerge from these excerpts.¹ There may be some reason to modify ULLMANN's initial classification of AṬHŪRUSFUS' text as zootherapeutic (ie a *Ḥayawān* of the *Manāfiʿ* type, which would then be a precedent to IBN ʿALĪ's book). While the prevalence of elements of animal origin in these AṬHŪRUSFUS-ascribed passages is indisputable, there is some evidence suggesting that the text may have been actually arranged according to a head-to-toe plan, which is uncharacteristic of the Islamicate *Ḥayawān* genre but makes it a typological parallel to medical *Ḥawāṣṣ* texts.

Moreover, if the posthumous compilation of *Alḥāwī* did not break entirely the continuity of the sequences, in *Alḥāwī* III 51₈₋₉ wormwood is mentioned immediately after human urine, and in *Alḥāwī* IX 70₂ squill vinegar follows the

¹ On a side note regarding ARRĀZĪ's compilatory strategy, it is worth noting the striking lack of overlap between the passages selected for *Ḥawāṣṣ* and those included in *Alḥāwī*. Parallel attestations are exceptional (cf. the amulet made of human bones against quartan fevers in *Ḥawāṣṣ* I 78v 13-14 ≡ *Alḥāwī* XVI 128₁₁) and this disparity is all the more remarkable in such cases as the element in question is the same in both texts (e.g. the dolphin, its teeth being mentioned in *Ḥawāṣṣ*, its fat in *Alḥāwī*). This trait is by no means exclusive to AṬHŪRUSFUS-related materials. The same overall lack of coincidence can be noticed for any author cited in those two texts. Let it be recalled that DIOSCORIDES is not even mentioned in *Ḥawāṣṣ*, whereas many a *ḥāṣṣiyah*-like passage is quoted from him in *Alḥāwī*. In the latter compilation there are, in fact, hundreds of explicit *ḥawāṣṣ* related to simple drugs and foodstuff that did not find their way into the specific monograph on that matter. The possible causes and the consequences of this differential approach might be worth exploring.

use of the rennet of a seal. The medicinal stock of the text was not therefore limited to drugs of animal origin. In this particular regard the evidence provided by *Alḥāwī* III 276₆₋₁₃ is even more compelling and the sequence transmitted there seems to point towards an organ/ailment-centred medical text from which not even surgery was excluded:¹

Alḥāwī III.11 (H III 276₆₋₁₃)

أطهورسفس قال: «تُحرق الخطاطيف حتى تصير رمادًا ويُطلى في اليوم مرّاتٍ، ويُنفخ في الخلق منه — فإنه يُبرئ».
قال: «وتُحرق مرّتين حتى تصير رمادًا، فإنّها لا تنفع إلّا كذلك، وهي كذلك أنفع ما تكون. واللبن الحارّ، إذا تُغرغر به، جيّد في الخوانيق، لأنّه يُنضح».
قال: «لا تقطع اللهاة حتى تراها مسترخيةً ذابلهً شبه السير؛ فعند ذلك، فاقطعها — فإنّها لا يعرض من قطعها نرف، ولا شيء من الأعراض الرديئة».
قال: «وإن خُنقت أفعى بخيط كتّان ورُبط ذلك الخيط في عنق من به خوانيق، سكتن ورم اللوزتين».

Continens III.7 (P 136rb 22–29 | V 75rb 50–57)

Acursisius dixit: «Comburantur yrundines donec conuertantur in cinerem, et sufflandum est de eis in gulam pluries in die, eo quod curabitur. Et si gargarismus fiat cum lacte calido, ualet ad maturandam sinantiam. Dixit quod si ligatur collum uipere cum filo lini et ex districtione ipsius pefocatur vipera et ligatur in collo patientis squinantiam, mitigabit passionem huius statim, uidelicet amigdalorum».

Acursisius] Accursius V | yrundines] yrudines P | conuertantur in] fiant et conuertantur ad V | quod] + bene V | maturandam] maturandum V | sinantiam] squinantiam V | ipsius] + fili V | districtione] distictione P | sinantiam] squinantiam V.

The same inference seems to apply at least to *Alḥāwī* IX 121₃₋₈, X 185₅₋₈, XII 145₁₋₄, and XIII 250₁₄₋₂₅₁₃.²

¹ Given ARRĀZĪ's compilatory technique it is highly unlikely that he might have put together *into a single passage* different segments scattered throughout the original text.

² There is a slight possibility, of course, that this juxtaposition of passages might conceal different sources (something resembling the ghost-quotes discussed in Chapter 1). In view of the coherence of the sequences, however, I doubt very much that they should be the result of a mere transmissional accident.

Then, if the text of *Alḥāwī* III 5₁₄₋₁₈ is not corrupt, AṬHŪRUSFUS appears to have quoted GALEN on the benefits of human urine, juice of onions, and the eaves of wild olive trees against ailments of the ears. As a matter of fact, many of his prescriptions are remarkably similar (and occasionally even identical) to those inherited directly from the Graeco-Byzantine tradition.¹ That, needless to say, would be only natural if AṬHŪRUSFUS happened to be indeed XENOCRATES.

There we have another lost text to salvage from indirect transmission. The remains of this treatise (or are they two different treatises?) are scattered across genres and there are even a few pieces handed down by alternative sources other than AṬṬABARĪ and ARRĀZĪ.² There can be no doubt that an anthology-cum-analysis of AṬHŪRUSFUS' excerpts would greatly advance our understanding of the early medico-ḥawāṣṣic tradition.

¹ The overall standard nature of his terminology, on the other hand, might be due to the Arabic translator of the text. As seen in Part I Chapter 5, AṬṬABARĪ's paraphrases of Ayurvedic texts are hardly distinguishable from his own rewording of Hippocratic and Galenic materials.

² Cf. especially the passage on the peacock (*tāwūs*) in ADDAMĪRĪ's *Ḥayawān* pointed out by ULLMANN 1972: 11. In that locus ADDAMĪRĪ refers to a certain treatise entitled *Ṣaynu ḥawāṣṣ* in which AṬHŪRUS (sic) was apparently quoted alongside the collective "sages", cf. *Ḥayawān* [566] (§ III 15₁₋₂). All other references provided by ULLMANN, in turn, are either false leads (eg the original Arabic PSEUDO-PLATO, *Nawāmis* does not mention him) or derivative (eg [PSEUDO-]ĠĀBIR B. ḤAYYĀN, *Mawāzīn*^ṣ 117₁₄ and 119₁₉; IBN ALṢAWWĀM, *Filāḥah* XXXI (B II 467₂₃₋₂₆); and any echoes in IBN ALBAYṬĀR's *Ġāmiṣ*).

3.1.5 Pseudo-Aristotle's *Aḥḡār*

In an early Hellenised Islamicate context, the pseudo-Aristotelian *Aḥḡār* is probably the non-medical text that had the deepest and longest-lasting influence on the medical and pharmacognostic traditions—most particularly in the west, where a great many excerpts were selected by IBN ʿIMRĀN as worth integrating into the *Mufradah* genre. The text still awaits a proper critical edition and it has not received much scholarly attention since RUSKA's groundbreaking study. The most notable exception to this neglect is KĀS, whose compact description of *Aḥḡār* is reproduced here as it is both pertinent to my discussion and incidentally illustrative of the magicalising tendency to which I am constantly alluding throughout this dissertation:

Obschon es eigentlich eher der hermetisch-magischen Tradition zugehörig ist, beinhaltet es doch auch medizinische Angaben. Dieser Umstand in Verbindung mit dem zugkräftigen Namen hat viele Pharmakognosten dazu gebracht, dieses K. al-Aḥḡār in teils erheblichem Umfang auszuschreiben. Man kann somit sageb, dass dieses Machwerk von der arabischen Drogenkunde quasi adoptiert wurde und das obschon sie derartigen Schriften sonst recht reserviert gegenübersteht. Was also die offiziellen Mineralien betrifft, so genießt Aristū besonders bei den westlichen Fachschriftstellern eine Wertschätzung, die nur noch von derjenigen gegenüber Dioskurides und Galen überboten wird.¹

As seen in Chapter 2, *Aḥḡār* is one of the main paths of penetration of the doctrine of *ḥawāṣṣ* into the specifically medico-pharmacognostic tradition. Quite significantly, it is cited once explicitly (and more often silently) even in the epigraph *On stones* in *Nat I* APOTHECONOMY, but it is in the *ḥawāṣṣ*ic section where

¹ KĀS 2010: 5. For the particularly strong link to the western tradition, cf. further “so ist die Benutzung des K. al-Aḥḡār schwerpunktmäßig im islamischen Westen lokalisierbar”, whereas “[i]m islamischen Osten hat die Aristotelesrezeption nur einen sehr beschränkten Umfang” (KĀS 2010: 7). The brief but insightful epigraph devoted by the author to *Aḥḡār* is the best assessment to date regarding the origin, contents, and ascendancy of this treatise in the Islamicate written tradition (cf. KĀS 2010: 5–8, and then virtually every lemma corresponding to the minerals included in the original text). In what concerns particularly mineralogical matters but also intertextual comparisons (above all with the Hebrew and Latin translations of the work) RUSKA 1912: 1–92 still ought to be consulted. As indicated in the Bibliography, I refer to RUSKA's edition of the Paris manuscript as *Aḥḡār*^p and to IBRĀHĪM's edition of the Taymūr manuscript as *Aḥḡār*^r, while *Aḥḡār*^b refers to the text transmitted in Baltimore, Walters Art Museum MS W.589, fols. 33v 1 – 47r 13 (an Ottoman copy dated 1581), which shows some readings relevant to the analysis of the pseudo-Aristotelian passages in *Nat III* but may be either heavily interpolated or actually some acephalous treatise (perhaps by ARTĪFĀŠĪ?). Mark that the existence of two additional manuscripts currently in Istanbul is indicated by AKSOY 2016.

its presence becomes most evident. On the other hand, with regard to the particular link to the Qayrawānī school it ought to be stressed that the pseudo-Aristotelian lithognomion is not to be found amongst the sources of ARRĀZĪ'S *Ḥawāṣṣ* (where other far more enigmatic books of stones are quoted from) and that all the passages transmitted in *Nat* III and *Iktifāʿ*? must have been gleaned, either directly or indirectly, by the compiler of ^α*Ḥawāṣṣ*. In view of the virtually non-existent eastern reception of the text, this addition should be considered a new and quite compelling piece of evidence for the western origin of the postulated parent compilation.

In quantitative terms the contribution of *Aḥḡār* to the text of ^α*Ḥawāṣṣ* is rather modest. As a matter of fact it is even marginal once all ghost-quotes have been subtracted from the total figure. The problem, however, is that at the present moment and without a critical edition of *Iktifāʿ*? there is no certainty as to whether the misascription of a number of stone-related passages to ARISTOTLE was already a feature of the parent text or not. An educated guess can be made in some cases with the support of external evidence and since I can imagine no reason why the anonymous compiler should have manipulated on purpose the attribution of the passages, I am inclined to interpret these misascriptions as instances of ghost-quotes resulting from accidents, both authorial and clerical, in the transmission of the texts involved.

In *Nat* V.III.2 and then again in *Nat* V.IV.6 ARISTOTLE is explicitly quoted on the property of the lazuli stone to purge black bile when four carats of it are taken in a drink with some syrup of roses. The ascription of the passage is apparently corroborated by *Iktifāʿ*?¹ but the passage cannot be located in the corresponding entry in any of the available versions of *Aḥḡār* except for *Aḥḡār*^β, which as I have previously stated might not be a genuine member of the family or otherwise may transmit some interpolations.² Essentially the same text is transmitted anonymously first by IBN ṢIMRĀN and then by IBN ALĠAZZĀR, which might lend some credibility to the ascription shown by the two Andalusī descendants of ^α*Ḥawāṣṣ*.³ The question is further complicated by the fact that an identical passage is ascribed to ALEXANDER OF TRALLES by IBN SAMAGŪN and also by MESUE, which happens to be historically correct.⁴

¹ Cf. *Səḡ* V.III.4 (L–M 309_{16–18}) ≡ *Nisy* V.III.4 (L–M 202_{3–5}).

² Cf. *Aḥḡār*^β [15] (W 44r 7–11). For the negative evidence of the remaining witnesses, cf. *Aḥḡār*^p [12] (R107_{4–8}) ≡ *Aḥḡār*^r [13] (I123_{8–124}) ≡ *De lapidibus*^l 366_{3–10} ≡ *De lapidibus*^m [12] (R 391_{22–28}).

³ For IBN ṢIMRĀN, cf. IBN SAMAGŪN, *Ġāmiʿ* J–4 (S II 199_{16–200}); then IBN ALĠAZZĀR, *Iʿtimād* II.52 (S 70_{12–15} | M 31r 16–19) ≡ *Fiducia* II.52 (B 108ra 1–6 | V 213ra 38–46).

⁴ Cf. IBN SAMAGŪN, *Ġāmiʿ* s.v. (S II 199_{4–12}); MESUE, *Canones universales* II.B.13 (L 63v 31–34, 64 5–7). The original locus is found in the epigraph Περὶ τῆς δόσεως τοῦ Ἀρμενικοῦ λίθου in

The case is even slightly more dubious in the immediately following passage *Nat* V.III.3 on the emerald, since the ascription is only implicit here and also in the cognate locus in *Sāḡullōt* (ie the verb *qāla* lacks an overt agent and the quote appears thus to be coordinated to the preceding one).¹ Once again, a parallel can be found in *Ahǧār*^p but not in any of the other extant versions of that treatise,² and once again alternative ascriptions are transmitted in the parallel circulation of the quote. It is handed down as anonymous («*zaḡamū*») by IBN ALĠAZZĀR, then probably through him by AZZAHRĀWĪ,³ but ARRĀZĪ borrows it explicitly from IBN MĀSAWAYH.⁴ All in all, while it is far from implausible that the same report may have entered the written tradition by the hand of more than one author, a misascription (perhaps already in ^α*Hawāṣṣ*) appears as the most probable hypothesis. Mark, in any case, that in *Natāʔiǧ/ Iktifāʔ* the quote is included in the chapter *On the treatment of the bowels* and that no mention is made of blood, which means that the compiler may have misinterpreted the word *ishāl* in the sense of *bowel* discharge rather than as *blood* discharge (originally «*min nazfi ddami waʔishālihī*»), which certainly looks very much like the kind of mistake that the anonymous compiler was particularly prone to commit.

Incidentally, IBN ALBAYṬĀR provides an invaluable echo of *realia* that is a most welcomed counterpoint to the strongly bookish impression made by the ḥawāṣṣic tradition. According to the Malaqī physician, the ZUHR family would have used emerald powder in a potion to the same effect as prescribed by ḥawāṣṣic texts. This can be read as a sort of “normalisation” or conventionalisation, in which it is only the *mode of application* that is changed (periapts being rather low in the scale of perceived rationality of remedies) but both the active element (ie the emerald) and its alleged effect remain unquestioned:

ALEXANDER OF TRALLES, *Therapeutica* I.17 Περὶ μελαγχολίας (P I 611–20), followed by the formula for some purgative pills (καταπότια) based on the Armenian stone.

¹ Cf. *Sāḡ* V.III.5 (L–M 309_{18–19}).

² Cf. *Ahǧār*^p [3] (W 38v 6–7); ≠ *Ahǧār*^p [2] (R 98₁₀–99₆), *Ahǧār*^r [2|3] (I 102₁–104₁₁), *De lapidibus*^M [2] (R 38_{514–29}), the entry is missing from *De lapidibus*^L.

³ Cf. IBN ALĠAZZĀR, *Istimād* II.77 (S 82₁₂ | M 36r 15) ≡ *Fiducia* II.77 (B 110v 6–7 | V 217ra 4–7); AZZAHRĀWĪ, *Taṣrif* XXVII.II ; II.3 (S II 349₁₀); also unascribed in IBN ALBAYṬĀR, *Almuǧnī* XIII.10 (M 214v 12–13).

⁴ Cf. ARRĀZĪ, *Hawāṣṣ* ǧ–2 (I 80v 14–15 | Q 13_{16–17} | V 5v 14). The locus is by no means ambiguous regarding the ascription of the passage: the two only quotes in the entry are both from IBN MĀSAWAYH. From *Hawāṣṣ* the text was received by IBN SAMAGŪN, *ǧāmiʕ* ǧ–24 (S I 73_{2–3}), who however ascribes it to IBN MĀSSAH (a confusion that is far from rare in the corpus); then by ALĠĀFIQĪ, *Mufradah* ǧ–21 (M 169v 9–10 | T 30₁₂), thence by IBN ALBAYṬĀR, *ǧāmiʕ* ǧ–44 (B II 167_{7–8}); in the east, by ALQALĀNISĪ, *Aqrabādīn* XLIX s.v. ڤمزج (B 30_{17–18}).

Almuǧnī VIII.10 في الإسهال المزمن وقروح الأمعاء وسمجها والزحير

L 267v 9–11 | M 162r 3–5 | P¹ 144v 15–16 | P² 250r 14–16

الزمرّد — حُكي عن بني زهرس بالأندلس أنهم كانوا يسقون منه مسحوقاً وزن ثلاثة قراريط
في إسهال الدم، فيمسكه، من المعاء كان أو من الكبد، في مرّة واحدة.

بالأندلس [الأندلس M | كانوا] – P¹ | المعاء [المعاء P¹].

The probability of a mistake is even higher in the case of *Nat* V.III.4, which prescribes hanging a diamond on the belly against abdominal pain (*maḡṣ* ≡ τεινεσμός / τηνεσμός).¹ Coming third in this apparent sequence from PSEUDO-ARISTOTLE, the passage is further removed from the initial mention of the source and, in fact, the same quote features in *Nat* V.II.4 with no ascription (it is only apparently assigned to GALEN). The actual origin is THEOPHRASTUS (or, to be more precise, the treatise on stones attributed to him that is echoed in the Islamicate tradition) and as I have shown in a preceding epigraph the passage must be considered an indirect borrowing through ARRĀZĪ.² There is, however, at least one late source that associates the exact same remedy to ARISTOTLE, namely ATTĪFĀŠĪ in *Azhār* 110^{7–8}.

Besides, there are three different genuine quotes from *Aḥḡār* in our text. The blood staunching property of the carnelian stone is echoed twice, in *Nat* VI.VII.1 and in *Nat* VIII.VI.2,³ and the text reproduces quite literally the words of the source. This passage gained indeed a wide circulation not least because of the medical interest of the effect attributed in it to the stone.⁴

The apotropaic virtue of a ruby stone against pestilence is without any doubt the most quoted passage in *Aḥḡār*, and a medicine-centred *Hawāṣṣ* compilation could not fail to include it even if it was in an unclearly defined chapter

¹ The word *maḡṣ* / *maḡs* (also basilectal *maḡaṣ* / *maḡas*) is defined as «*taqṭiṭun fi asfali lbaṭni walmiṣā wawaḡaṭun fihī*» in IBN MANḌŪR, *Lisān* VII 93b 26 s.r. √منص, and its Greek equivalent as 'a vain endeavour to evacuate' in LIDDELL–SCOTT, *Lexicon* 1533a s.v. τεινεσμός, which may have ranged from temporal cramps to conditions akin to what is currently labelled as irritable bowel syndrome.

² See above the subsection on THEOPHRASTUS for the exact reference to ARRĀZĪ's *Hawāṣṣ*.

³ Corresponding to *Saḡ* VI.VII.1 (L–M 314^{22–25}) and *Saḡ* VIII.VI.2 (L–M 321^{24–27}), ≡ *Nisy* VI.VII.1 (L–M 234^{7–9}) and *Nisy* VIII.VI.1 (L–M 272^{21–2742}), respectively.

⁴ Cf. *Aḥḡār*^p [5] (R 103^{2–5}) ≡ *Aḥḡār*^t [6] (I 114^{14–1152}) ≡ *De lapidibus*^l [5] (R 387^{19–24}) ≡ *De lapidibus*^t 360^{20–25}. For its fortunes, cf. IBN ALĠAZZĀR, *Iṣtimād* I.62 (S 35^{2–7} | M 16v 3–9) ≡ *Fiducia* I.58 (B 100vb 29–35 | V 202ra 7–17) and also *Fuqarā*? LIX (Ā 162^{6–8} | J–Ā 215^{6–9}); then AZZAHRĀWĪ, *Taṣrif* XXVII.11 s. 1.4 (S II 361^{17–19}); IBN WĀFID, *Liber Serapionis* [390] (A 263^{15–18} | P 168rb 18–22) ≡ *LMP* s.v. *cornalina* (F 165^{22–24}). It is not hard to find echoes of this property in Latinate literature, cf. for instance THOMAS OF CANTIMPRÉ, *De natura rerum* XIII.XXII.1–4 (B 360).

on pain-killers or *ἀνώδυνα* that may well have been created *ad hoc* to provide a locus for this property. In any case, the quotation was selected by both IBN ALHAYTAM and ALʿILBĪRĪ, the latter for *Nat* VIII.I.1.¹ The identification of the origin is unproblematic and a full monographic could be compiled by merely collecting the echoes of this passage in Islamicate (then Latinate and vernacular) literature across genre boundaries. Once again it is also cited in the chapter on mineral substances in *Nat* I.²

Finally, the same source is cited for the benefit of cauterising with gold in *Nat* VIII.XI.2.³ It is worth noting that this passage circulated unasccribed in western pharmacognostic texts already in IBN ʿIMRĀN's now-lost treatise, which suggests that the compiler of *Ḥawāṣṣ* may have actually accessed these materials directly from a copy of *Aḥǧār*.⁴

Two final considerations before leaving this fascinating text. First, I should recall here that it is mainly on what I have called “topological” grounds that similar (and even virtually identical) passages drawn equally and explicitly from *Aḥǧār* by the author of the *Hārūniyyah* and by ALMADĀʿINĪ are not considered here *cognates* in a strict sense but rather more distant relatives. The genetic affinity

¹ ≡ *Saǧ* VIII.I.1 (L–M 320_{18–21}) ≡ *Nisy* VIII.I.1 (L–M 264_{4–7}).

² The locus quoted without noticeable alteration of its original wording corresponds to *Aḥǧār*^R [3] (R 99_{17–100}) ≡ *Aḥǧār*^T [4] (I 106_{2–4}) ≡ *Aḥǧār*^S [2] (W 37_{1–2}) ≡ *De lapidibus*^S 354_{18–20} ≡ *De lapidibus*^M [3] (R 386_{23–25}). For its reflections in the most directly concerned texts, cf. especially *Hārūniyyah* I.XIV.11 (G 267_{12–13}), in its section on stones that is essentially an abridging selection of *Aḥǧār*; IBN ALĠAZZĀR, *Iʿtimād* I.55 (S 31_{23–32} | M 15_{13–15}) ≡ *Fiducia* I.51 (B 100₁₈ 28–30 | V 201₁₈ 41–44); IBN SAMAGŪN, *Ġāmiʿ* ʿ-3 (S II 10_{5–7}), with a further reference in *Ġāmiʿ* II 10_{7–8} to IBN ʿIMRĀN having also transmitted the same quotation; IBN WĀFID, *Liber Serapionis* [388] (A 262_{49–54} | P 168₁₈ 28–37) ≡ *LMP* s.v. *robiz* (F 165_{14–15}). Anonymous and remarkably simplified, in ALĠĀFIQĪ, *Mufradah* ʿ-8 (M 239₁ 6–7 | T 435₄); with some rewording, ZUHR, *Ḥawāṣṣ* ʿ-4 (H 208_{14–15} | P 105₁ 9–10); anonymous in IBN ALBAYṬĀR, *Almuǧni* XVIII.5 (M 325₁ 17) and actually omitted from the excerpt from *Aḥǧār* in the corresponding entry in his *Ġāmiʿ* ʿ-2 (B IV 203_{4–8}). Beyond pharmacognostics, cf. ALQAZWĪNĪ, *ʿaǧāʾib* II *Kāʾināt* I.2,144 (W 242_{2–4}); or still IBN ALWARDĪ, *Ḥarīdah* (Z 296_{6–7}). Strikingly enough, the passage is not included by IBN ĠULĠUL in his entry on rubies in *Tāminah* [45] (G 22_{2–8}) despite his evident use of *Aḥǧār* (even in this very lemma) as a supplement to DIOSCORIDES' section on minerals in *Materia medica*. For an exhaustive concordance and an analysis of the presence of rubies in Islamicate pharmacognostic literature, cf. KĀS 2010: 1106–1111; for late echoes of this specific property in treatises of pestilence such as fourteenth-century AŠŠAQŪRĪ's *Naṣiḥah*, cf. ARIÉ 1967: 197, 1986: 73; and also GIGANDET 2005: 261–262.

³ ≡ *Saǧ* VIII.XI.2 (L–M 323_{10–12}) ≡ *Nisy* VIII.XI.2 (L–M 278_{10–11}). The quotation is drawn from *Aḥǧār*^P [57] (R 121₆) ≡ *Aḥǧār*^T [57] (I 157_{1–2}).

⁴ For IBN ʿIMRĀN, cf. IBN SAMAGŪN, *Ġāmiʿ* ʿ-1 ʿ-1 ʿ-1 (S IV 215_{9–10}). Likewise anonymous in IBN ALĠAZZĀR, *Iʿtimād* I.21 (S 15_{2–3} | M 8_{1–2}) ≡ *Fiducia* I.20 (B 97₁₈ 4–5 | V 196₁₈ 19–22); AZZAHRĀWĪ, *Taṣriḥ* XXVII.11 ʿ-1.2 (S II 347_{17–18}); IBN WĀFID, *Liber serapionis* [415] (A 279_{50–51} | P 178₁₈ 37–40) ≡ *LMP* s.v. *or* (F 168_{10–11}); ALʿIDRĪSĪ, *Ġāmiʿ*^T ʿ-1 ʿ-1 ʿ-1 (S III 509_{10–11}).

between the pseudo-Aristotelian quotations transmitted in *Iktifāʿ* and *Nat* III on the one hand and the ones included in separate sections on stones in those two texts goes back, to be sure, to an ultimate common node (namely *Aḥḡār* itself) but in taxonomical terms the textual family of *Ḥawāṣṣ* and those sections (but not other segments within the same treatises) represent different clades. The exact same relationship obtains with the passages that stem from some primitive *Ḥayawān* source and which are inherited, through different paths, by the members of this constellation of texts. In both cases textual criticism may provide (by detecting significant differences in the wording or exclusive apomorphies) tangible evidence for this assumption, but even when there is no such evidence, or when it is far from conclusive, the location of a given passage within the text is a compelling indicator at least as far as those two texts are concerned.

On the other hand, it would be extremely interesting—and it would also shed some light on one of the most intriguing and less understood phases of the Islamicate assimilation of foreign epistemic traditions—to explore the different strands that intertwine in the pseudo-Aristotelian *Aḥḡār*. Fortunately, there is enough material available for the narratives about ALEXANDER'S eastern invasions, explicit references to which are recurrent throughout the text. In this regard, attention should perhaps be given to the epigraphs on stones that are included in some versions of the *Secretum secretorum*.¹ Moreover, traces of genuinely ancient medical traditions emerge here and there, as insightfully pointed out by KĀS, and it is most certain that in this and in many other similar cases pseudepigraphy does not equate to falsity.² Some remarkable terminological features (not least the idiosyncratic use of *naṣt*) seem to point towards a proximity, either genetic or contextual, to the pseudo-Aristotelian *Kitābu naṣti ḥayawān* (= *Naṣt*^L and most especially *Naṣt*^T, which is much closer to the Graeco-Syriac Vorlage and further includes several lemmata on stones and plants).³ In view of several literal coincidences it might also be worth

¹ The brief paragraphs mentioning stones in *Sirr* X (B 167₉–168₆) are of little direct interest, but the passages transmitted in the Hebrew and East Slavic versions show several remarkable coincidences, cf. RYAN 1990: 49–50 for a preview and further references. The Slavic text has been recently edited and translated by RYAN and TAUBE 2019 [n.v.].

² Given that the edition of the Taymūr manuscript was not available to KĀS and that the nature of its contents may be unknown to most readers, let me draw attention to the fact that just in the entry on emeralds in *Aḥḡār*^T [2|3] (I 102₁–103₁) DĪMŪQRĀṬĪS is explicitly mentioned, then all the authors of a *Ḥawāṣṣ* treatise are referred to collectively, and finally a ḥadīṭ is cited from MUḤAMMAD on wearing a signet or ring made of emerald, nothing of this being found in the corresponding entry in *Aḥḡār*^P 98₁₀–99₆.

³ Cf. the epigraph «ذكر الحجاره وأصنافها» in *Naṣt*^T 146r 3 – 147v 7, which contains five different entries

examining the relationship between *Aḥḡār* and the lithognomion ascribed to HERMES with the title *Kitābu ḥawāṣṣi lʾaḥḡār wanuqūšihā*.¹

But the most urgent task is to make available an updated edition of the texts—in the plural. That one ought to desist from any hope of reconstructing an ideal prototext was made quite clear already by RUSKA more than a century ago. A more contemporary approach would consider offering a complex edition, perhaps even a synoptical one following RAGGETTI’s courageous lead with IBN ʿALĪ’s *Ḥayawān*. Inspiration for such a project ought to be drawn also from the model of comprehensive edition set by BOS, KÄS, and McVAUGH with their work on IBN ALĠAZZĀR’s *Zād*, and the influence of the Hebrew translation (which remains to be edited) and the Latin versions in their respective linguistic traditions makes such a multilingual focus all the more necessary.

on the diamond (*adāmūs*), the magnet (*maḡnāṭīs*), the fire stones (*ḥiḡāratu nnār*), the stone called “*aḡāmāntūs*” in Greek, and finally the “Indian stone” (*alḥaḡaru lhindī*). As the remainder of the text, the section overlaps large and by with the Syriac *Buch der Naturgegenstände* edited by AHRENS, cf. *BNG* [121–125] (A 66₁–67₁₅).

¹ This brief tract is referred to as “HERMES, *Aḥḡār*” in the commentary on *Nat* III and I have accessed its text through Berlin, SBB MS Wetzstein II 1208.

Commentary sample

As stated in the introduction to Part III, the criteria for selection of the elements of this sample are subjective and they are further conditioned by practical limitations. While the integral commentary on *Nat* III was initially conceived as a project in its own, it soon outgrew reasonable dimensions. In the specific context of this dissertation, these materials have been largely resignified as a complement to and an illustration of the analysis conducted in Chapters 1–3. The discussion is in fact built on the premisses laid there and no explicit justification shall be offered for every assumption of cognacy. Let it be recalled that the working hypothesis that underpins the whole commentary is that *Nat* III draws extensively (and very probably entirely) from a previous compilation of the medical organ/ailment-centred *Ḥawāṣṣ* subgenre. That no longer extant parent text shall be consistently referred to as ^α*Ḥawāṣṣ* and the evidence analysed in this chapter should demonstrate sufficiently that the parent text cannot be IBN AL-HAYTAM's *Iktifāʾ*? and that the Qurṭubī physician quite probably resorted to the same strategy as ALʿILBĪRĪ. The different criteria for inclusion applied by those Andalusī authors resulted in the compilation of two half sibling texts, but the genetic link is impossible to miss. This hypothesis, however, is not an axiom and my own doubts shall occasionally be voiced about the soundness of this assumption. I have already shown in Chapter 1 that the original *Iktifāʾ*? appears to have been larger than what the extant testimonies reflect and also that both IBN ALHAYTAM's professional profile and assertiveness of his prologue may cast some doubts on the existence of any ^α*Ḥawāṣṣ* other than *Iktifāʾ*? itself.

As for the commentary, the main focus lies throughout on text and source criticism, with particular emphasis on philological micro-analysis and intertextuality. The primary task is to detect, or to infer, genetic affinities between passages, sections, or entire books, essentially with regard to *Nat* III. In order not to divert the reader's attention from this focus, the general introduction to *Nat* IX *On fevers* (which included rather lengthy remarks on phytonymy and zoological identification) has been excluded from the sample. A general exception has been made, of course, in the case of such elements as might be of particular relevance to the discussion.

For the sake of clarity, all non-essential cross-references to other sections or chapters of the commentary have been omitted. To the same effect data relative to secondary developments that are not directly pertinent to the analysis of the individual passages have been left out. Such information (which shall be hopefully made available in the near future) is of great interest for the transmission of this knowledge in the so-called postclassical period but only rarely does it shed any light on earlier phases. Whenever a later testimony can be useful or simply illustrative enough, however, its mention has been retained here.

As for the layout and presentation of the information, the same system of reference as elsewhere in this dissertation has been used, including abbreviations. Excerpts from unedited works are reproduced, when possible, in critical form on the basis of all manuscript evidence available to me at the moment. In the footnotes, in turn, references are limited to one main witness unless additional evidence is required. The following particularities ought to be borne in mind. Given the impracticality of the reconstruction of some segments of *Nat*^L, some of its materials have been provisionally referred to by the entry or lemma under which they are transmitted in the manuscript (= s.l.). Within the same text family, since ALMAWŞILĪ's *Manāfiʿ* is the author's copy of IBN BUḤTĪŞŪʿI's *Ḥayawān* for private use, an explicit reference to chapter and entry has been provided only when it differs from that of the original text; otherwise folio and line of the Escorial manuscript are indicated. For a similar reason references to the multi-volume edition of ALṢUMARĪ's *Masālik* are given in a *sub voce* format (= s.v.).

A general exception has been made in this sample to the transcription of Arabic words, phrases, and passages. Unless typographical considerations recommend otherwise, Arabic materials are reproduced in alifatic script.

4.1 Nat II.IV—On oblivion

IBN ALHAYTAM, *Saḡullōt* II.IV בשכחה (L–M 301₂₂–302₆) || PSEUDO-ABENEZRA, *Nisyōnōt* II.IV בשכחה (L–M 162₆–164₅) || ALMADĀṬINĪ, *Ḥawāṣṣ* II.6 (M 320₁₅–18).

Nat–1 hoopoe tongue | Nat–2 hoopoe tongue and eye | Nat–3 human hair | Nat–4 bats.

Cognates

The parallel epigraph in the Arabic copy of IBN ALHAYTAM's *Iktifāʾ* contains three different passages beginning with AṬṬABARĪ on the eye and tongue of a hoopoe, then on the tongue of the same bird taken in a drink (= Nat–2|1 in inverted order), and ending with ARRĀZĪ on lion fat.¹

The text of both *Saḡullōt* and *Nisyōnōt*, on the other hand, contains four passages and only two of them overlap with the Arabic copy. The two Hebrew texts open with a quote from DIOSCORIDES that apparently involves the Judaic stone.² In that form the passage can not, however, have its origin in *Materia medica* since, even if the description of the item may be said to vaguely match DIOSCORIDES' Judaic stone, the Anazarbean author does not mention any benefit against forgetfulness for that mineral, but only its litholytic power.³ The

¹ Cf. HASANI 1999: 24. The English translation of this epigraph as transmitted in the Tashkent manuscript has been reproduced in Chapter 1. I can find no parallel for this property attributed to lion fat. It certainly does not stem from ARRĀZĪ's *Ḥawāṣṣ* and none of the several uses of this product in IBN ʿALĪ, *Ḥayawān* [2] (R 28–30) is even remotely related to oblivion. The same passage is transmitted, in any case, by IBN ALBAYṬĀR in *Almuḡnī* (see below).

² The reading is shared by both *Saḡ* with «אבן יהודית» and *Nisy* with «אבן יהודית», which seem to echo an original Arabic حجر يهودي, although the former might actually reflect rather حجر اليهود, a form which is admittedly less common yet was known in Andalus already to IBN ĠANĀḤ, *Talhīs* [363] (but not in *Talhīs* [563]) and is used by IBN WĀFID in his introductory classification of drugs according to their degrees in *Mufradah* 236—nevertheless the actual lemma, which is missing from the Judaeo-Arabic unicum, is preserved in Latin translation as *hager alieudi–lapis Iudaicus* in *Liber Serapionis* [380] (A 258₅₃–259₁₅ | P 165va 14 – 165vb 5) and in Catalan as *judaycha / judaiga* in *LMP* 163₁₅–23. In the Islamicate east حجر اليهود was used by ALMASĪḤĪ, IBN SĪNĀ, and ALBĪRŪNĪ, amongst others (cf. KĀS 2010: 524–525 for further references). In the Syriac tradition, in turn, only the *nisbah*, namely ܣܗܪܝܘܕܝܬܐ, seems to have been in use (cf. BAR BAHLŪL, *Lexicon* 86_{421–23} with a quote from MASĪḤ), while a hybrid Graeco-Syriac ܣܗܪܝܘܕܝܬܐ is attested once in an alchemical text, where it is glossed as ܣܗܪܝܘܕܝܬܐ (cf. MARGOLIOUTH, *Supplement* 152). In Syriac a raw transliteration ܣܗܪܝܘܕܝܬܐ (sic, with /-n-/ instead of /-y-/) is also documented in BAR BAHLŪL, *Lexicon* 97_{11–12} and in a further altered form ܣܗܪܝܘܕܝܬܐ in *Lexicon* 210_{9–12} (from ĠIBRĪL B. BUḤTĪŠŪṢĪ, with a reference to GALEN for which see below).

³ Cf. *Mat. med.* 5:137 'Ιουδαϊκός λίθος (W III 99_{1–4}) ≡ *Ḥašāʾiš* 5:61* ومعناه في اليوناني* «الحجر اليهودي» (P 129v 16–19 | T 436_{6–12}); also GALEN, *Simpl. med.* IX.II.5 Περὶ 'Ιουδαϊκοῦ (K XII 1996–15) ≡ *Mufradah* IX.3 الحجارات اليهودي s.v. الحجر اليهودي (E 148r 18–22), who reports that in his own experience the stone is of no avail against stones in the bladder but has a drastic power against

text of *Saġullōt*, however, adds here an alternative reading «נחש» introduced by the abbreviation «נא» (ie “in another copy”), which should be understood as being the second element of a nominal annexation, namely נחש אבן ‘snakestone’, presupposing Arabic الحجر الحية in the source text. The stone in question would therefore be DIOSCORIDES’ ophite or serpentine in *Materia medica* 5:143 and in fact the third variety of ophite, the one striped with white lines, is reported there to be beneficial against λήθαργος and headaches.¹

Then, after the passage on the hoopoe, *Saġ*-3 goes on still with AṬṬABARĪ on

nephritic calculi. This property of the Judaean stone was widely known in the Islamicate tradition as seen, for example, in the fragments gathered from DIOSCORIDES himself, GALEN, PAUL, ADDIMAŠQĪ, and AṬṬABARĪ by IBN SAMAGŪN in *Ġāmiʿ* 47 حجر يهودي (S I 232₁₈-234₁₆). Even the epithetical designation τριγλίθος that Byzantine physicians bestowed upon the snakestone and that shows up already as *tecolithos* in PLINY, *NH* XXXVII.10.[68] (J-M V 466₆₋₈), was introduced into the Arabic pharmacognostical tradition as مُذَوَّب الحصى / مُذَوَّب الحصى through PAUL OF AEGINA, *Pragmateia* VII.III A-21 λίθοι (H II 237₁₃₋₁₅) ≡ IBN SAMAGŪN, *Ġāmiʿ* I 234₈ and also IBN ĠĀNĀH, *Talhīṣ* [563]: «مذوب الحصى هو الحجر اليهودي» (cf. also KĀS 2010: 528-529; in *Talhīṣ* in fact the gloss would seem to be wrongly ascribed to DIOSCORIDES, cf. BOS, KĀS, LÜBKE, and MENSCHING 2020: 734-735). On a tangential note, an excerpt from NECHEPSUS on the τριγλίθος is transmitted by AETIUS, *Iatrica* II.19 (O I 163₆₋₁₀), where it is identified as “the Syrian stone” and put in connection with Arabian sea farers (for the link, probably already implicit in GALEN, between the Judaic stone and the Syrian stone, cf. KĀS 2010: 527-528).

¹ Cf. *Mat. med.* 5:143 λίθος όφίτης (W III 101₁₋₆) ≡ *Haš* 5:66* ليش افطس (P 130r 8-12 | T 437₁₅₋₂₁); and also PLINY, *NH* XXXVI.7.[11] on the *ophites*: «quidam phreniticis ac lethargicis adalligari iubent candicantem» (J-M V 326₂₁-327₁). Pace KĀS 2010: 452, it is not only from the DUBLER-TERÉS edition that the Arabic equivalent الحجر الحية is missing: judging from the combined testimony of MSS BPT IŞTIFAN seems to have left the lemma untranslated and it was only later that a gloss was added. On the right margin of *Hašāʿiṣ* P 130r one can read a note «ومعناه حجر الحية صح» and both ALBALADĪ in the east and ALĠĀFIQĪ in Andalus have incorporated a similar gloss in their respective quotations from *Haš* 5:66* (cf. KĀS 2010: 451-452). Furthermore, ḤUNAYN’s translation of GALEN, *Simpl. med.* IX.II.18 Περὶ όφίτου (K XII 206₁₄₋₁₈) ≡ *Mufradah* XI.3 ذكر الحجارات s.v. الحجر الحية (E 149v 6-8) must have helped in the process of substitution of a chaste Arabic name for the original transliteration. The stone is indeed already referred to by this name by ARRĀZĪ, *Alḥāwī* XX [275] حجر الحية (H XX 369₈₋₉) and by all Andalusī pharmacognostics since IBN SAMAGŪN, *Ġāmiʿ* 44-45 حجر الحية (S I 230₄₋₉), who nonetheless depends exclusively from GALEN and makes therefore no reference to oblivion but merges the original passage on όφίτης λίθος with the one on όμφατίτης λίθος originally included in the following lemma in *Simpl. med.* IX.II.19 (K XII 207₁₂₋₁₅) and which ḤUNAYN translates (either through a misreading or from a defective Vorlage) as «الحجر المعروف بحجر الحية» in *Mufradah* (E 149v 14-15). For an exhaustive concordance and survey of both stones in the Islamicate tradition, see KĀS 2010: 450-454, 524-529—but mark that the locus *Firdaws* 524₂₁ included there has nothing to do with the snake-stone (حجر الحية) but rather with its lair (حجر الحية), cf. the same passage on الحجر الحية correctly edited in AṬṬAWḤĪDĪ, *Imtāʿ* 10-12 (A-Z I 191₁₄₋₁₅). At any rate, the lexical substitution in the Dioscoridean passage was already completed by the time ^o*Ḥawāṣṣ* was compiled. At a later date MIHRĀN provides the same Arabic equivalence in his own translation of *Materia medica*, cf. «حجر الحية» in Istanbul, Ahmet III Kütüphanesi MS 2127 fol. 273v 11-12, and also KĀS 2010: 450.

smoking the patient with burnt human hair and on doing so with castoreum («קשטור») to the same effect.¹

At the end of the epigraph *Saġ*-4 quotes ARRĀZĪ on taking the eyes and claws of a hyena, as well as its left paw—or otherwise a wolf's teeth, claws, and right paws—then bundling them in a linen cloth («בבגד פשתן») to be hung from the neck. Here as elsewhere in the Hebrew transmission of the text, some confusion can be suspected in the interpretation of Arabic *dub(b)* and *dīḥ/dīb* (which are graphically similar in alifatic script), and also of *ḍabḥ* (which seems to point rather to a context of orality).²

This divergence between the Hebrew translation and what ought to be a copy of its Arabic Vorlage is remarkable but nevertheless even the summation of both testimonies cannot account for all the passages included in *Natāʾiġ*.³ With regard to the reconstruction of the original series in *Iktifāʾ*, IBN ALBAYṬĀR may contribute some support for the inclusion of both lion fat (= Taskhent

¹ The appended segment on castoreum is not included in *Natāʾiġ* and it appears as a separate quote in *Nisy*-4 following ARRĀZĪ on the wolf. An attribution to AṬṬABARĪ might be correct on the basis of *Firdaws* VI.IV.33 on castoreum: «وإن شرب أو تُدخّن به، نفع من النسيان» (§ 4386). However, ARRĀZĪ would be an equally plausible candidate, since in *Alḥāwī* XX [219] s.v., in his own synthesis of the entries of DIOSCORIDES, GALEN, and PAUL OF AEGINA, he records the virtue of castoreum particularly against «الداء المستقى "ليثغس" (وهو النسيان)» and the same effect is said to obtain when smelled or smoked with («إذى استنشق به أو تُبخّر به») (H XX 265–266* | B 3007₁₋₃)—yet it is far from certain that the author of ^a*Hawāṣṣ* exploited ARRĀZĪ's colossal collection of quotes. In any case, the origin of this therapeutical use of castoreum can be traced back to *Mat. med.* 2:24 ὁ τοῦ κάστορος ὄρχις (W I 129₁₁₋₁₄) ≡ *Has* 2:25 فاسطر (P 32r 18–19 | T 136₂₋₄): «τὸς ληθαργικὸς καὶ τοὺς ὀπωσδηῖποτε καταφερομένους» ≡ «مَن به ليثغس أو أتى سبات كان» when mixed with rose oil and anointed over the head and also if smoked with it (see below the commentary to *Nat*-3 for further references).

² A gloss «דורס» to the text of *Saġ* might reflect Romance *d'ors* (less probably *d'orso*) 'of a bear'—this being not the only instance of the uncertainty as to whether the animal involved is a wolf or a bear (see also *Saġ* V.IV.1, V.IV.4, V.VIII.12, VI.II.2, and VI.X.15). Some confusion, either bookish or induced by a dialectal pronunciation, may have obtained between ذيب/ذيب while working on an Arabic Vorlage, but hardly so in Hebrew, where דב and זב stand in strong graphic and phonetic opposition. In *Nisy* the corresponding passage comes third and it only mentions the teeth, claws, and feet, with no specification whether left or right, of a wolf (זב). The source of the quote involves actually a hyena (ضبع), cf. the anonymous («وقال») passage in ARRĀZĪ, *Hawāṣṣ* ضبعة العرجاء 1-ض (I 88v 5–7 | T 111v 6–7), borrowed also by ZUHR, *Hawāṣṣ* ضبعة العرجاء 2-ض (P 60r 11–13). Not far from this, cf. *Sexaginta XVII De zaboā*: «Dens eius suspensus super brachium dextrum ab humero usque ad cubitum, ualet contra obliuionem. Pes sinister et unguis eius positi in panno lini ligati brachio dextro alicuius, non tradet obliuioni [non tardet obliuionem V] quicquid audierit aut sciuerit» (A 67vb 23–27 | V 106va 42–46).

³ The suspicion may have arisen that, if such a wide disagreement between the witnesses were to hold true for the whole treatise, there would be a distinct possibility that *Iktifāʾ* might be, after all, the postulated parent compilation ^a*Hawāṣṣ*. As far as the evidence garnered so far goes, however, that hypothesis cannot be verified.

manuscript) and hyena claws (= Hebrew translation) in it. It also offers a cognate for *Nat*-4 that shares the same characteristic ascription to ARRĀZĪ (for this, see below the analysis of that passage), and two additional passages that on topographic and typological grounds might also derive from the same textual tradition:

Almuġnī I.11 المزيّدة في الدماغ والعقل، المحمّدة للذهب، النافعة من النسيان
L 25r 12-13, 26r 7-11 | M 15r 1-2|23 - 15v 3 | P² 23v 8-9, 24v 1-5

شحم الأسد — ينفع من النسيان إذا طلي به على الرأس». [...] [...]
مرارة الكركي ودماغه — إذا خلطاً بدهن زنبق وأسعط منه صاحب النسيان، ذكر ما نسيه.
شحم الدب — إذا أذيب بزيت ومُسح به الوجه، كان صاحبه حسن الفهم لكلّ باب يتعلّمه.
مخالب الضبعة — قيل إنّها، إذا علقت على الإنسان، نفعته من النسيان وذكرته بما قد نسي.

خُلطاً [خلطها LM | أُذيب [ديف M، ذيف L | إنّها، إذا أنّها ان L، ان M.

On the other hand, the exact same sequence of quotations transmitted in *Natā?iġ* is recorded, quite exceptionally, by ALMADĀ?INĪ with only a minimal difference in the relative order of the two initial passages. This segment does not include any of the differential passages selected by IBN ALHAYTAM:

Hawāṣṣ II.6 (M 320₁₅₋₁₈)

وقال: «عين الهدد ولسانه، إذا علقت على الإنسان، نفعاً من النسيان؛ وإذا شرب لسان الهدد محرّقاً بطلاء، أذهب النسيان وأجاد الحفظ». قال: «ومن تدخّن بشعر تمّن يعتريه النسيان، أذهبه». قال: «ومن أكل خفّاشاً، عاد حافظاً وقلّ نسيانه وجاد حفظه».

A parallel (but quite probably not cognate) tradition related to the hoopoe is echoed in the *Hārūniyyah* under the authority of PAUL and shall be commented upon below for *Nat*-2.

Remarks on nosonomy

The contents of the epigraph are true to its title and all passages describe exclusively remedies against oblivion or forgetfulness both in *Natā?iġ* and in its siblings. Since the chapter devoted to mental illnesses is missing from *Nat* II.2 THERAPEUTICS and given that the identification of Arabic نسيان with the λήθαργος of the Graeco-Byzantine medical tradition is not one simply inherited from

ninth-century translations, a few philological remarks on this equation may not be totally unwarranted here.

While Greek λήθη belongs to the common lexicon in its non-technical meaning ‘forgetting, forgetfulness’, it is possible that it had already gained some medicalised connotation by the time it appeared in the Hippocratic collection.¹ In the strictly medical tradition, nevertheless, it is a derivative λήθαργος (and the corresponding adjective ληθαργικός) that refers to an acute sickness (actually a fever) distinguished, amongst other symptoms, by obliviousness (λήθη).² In HIPPOCRATES, *Aphor.* III.30 λήθαργοι is listed indeed alongside φρενίτιδες and καύσοι amongst diseases typical of those who have left youth behind, and it is translated into Arabic as «المحى التي يكون معها السهر», which is quite an accurate depiction of the ailment.³

When translating DIOSCORIDES’ *Materia medica*, on the other hand, IŞTIFAN provides no Arabic equivalent for λήθαργος / ληθαργικός and resorts quite significantly to a transliteration of the Greek word introduced by the word “disease” (مرض) rather than “fever” (حمى): «المرض الذي يقال له ليثرغس»: (حمى).⁴ Now at four of these

¹ Cf. BERRETTONI 1970: 94 no. 279.

² It is worth noting that, despite the transparent derivation of the nosonym, no mention of forgetfulness is made in the description of «νοσος ἢ καλουμένη λήθαργος» in HIPPOCRATES, *Morb.* II.65 (L VII 100₁₋₇). It features conspicuously, in turn, in the chapter devoted to the treatment of patients suffering from λήθαργος in ARETAEUS, *Cur. acut. morb.* I.II Θεραπεία Ληθαργικῶν (A 143₁–148₆ | H 98₈–102₁₁). A clear picture of the conceptualisation of this disease in Graeco-Roman times can be gained from the epigraphs garnered from a diversity of sources on *lethargus* / *lethargia* by CAELIUS AURELIANUS in *Cel. pass.* II.I–IX (B 130₁–164₁₄), where the etymology of the name is made explicit: «uocatur lethargus a consequenti passioni[s] obliuione, Graeci enim lethem obliuionem uocauerunt, argiam uacationem, quam corpori atque animae ingerit uis supradictae passionis» (B 130₅₋₈). Further reference to Byzantine authors shall be made below.

³ Cf. *Aphor.* III.30 (L IV 500₁₃) ≡ *Fuṣūl* III.30 (T 278₈₋₉ | B 171₁ | L 11v 5). Despite being often equated with lethargy in modern times, this ailment is unambiguously identified as «ληθαργικοί πυρετοί» (ie lethargic fevers) by GALEN in his *In Hippoc. Aphor. comm.* III.30 (K XVIIb 646₁₅) and the contexts in which it appears in the corpus leave no doubt about its being a feverish condition. This was already noted by LITTRÉ 1840: 574, who devoted a few pages to the question and defined λήθαργος as “une variété des fièvres rémittentes et continues des pays chauds”.

⁴ He does so for the substantive λήθαργος in *Ḥaṣāʾiṣ* 2:145 يصل (P 49r 3 | T 209₂₂) ≡ *Mat. med.* 2:151 κρόμμον (W I 217₆), 3:36 نام (P 63r 4–5 | T 257₂₁₋₂₂) ≡ 3:38 ἔρπουλλος (W II 51₉), and 5:66* ليس افيطس (P 130r 11 | T 437₂₁) ≡ 5:143 λιθος όφίτης (W III 101₆); for also for the adjective in *Ḥaṣ* 2:148 خردل (P 49r 33 – 49v 1 | T 211₉₋₂₀) ≡ *MM* 2:154 σίνηπι ἢ νάπυ (W I 220₁₂) and 3:76 فوقادان (P 69r 29 | T 275₈) ≡ 3:78 πευκέδανον (W II 91₁₀). For the patients (ληθαργικοί) IŞTIFAN resorts also to the periphrasis «من كان به المرض الذي يقال له ليثرغس» in *Ḥaṣ* 1:106 اغنس (P 24r 19 | T 99₉₋₁₀) ≡ *MM* 1:103 ἄγνος ἢ λύγος (W I 96₂) and once simply to the phrase «من به ليثرغس» in 2:25 فاسطر (P 32r 28 | T 136₃) ≡ 2:24 ó τοῦ κάστορος όρχις (W I 129₁₁₋₁₂). An additional instance of ληθαργικοί in *MM* 5:107 θεϊον (W III 78₁₄) is missing from the Arabic translation due to homoeoteleuton at *Ḥaṣ* 5:33* كبريت (P 125v 6 | T 423₃₀), where «الطرس» must be corrected as «الطرش». Let it be noted that the ductus of the word

loci as many different marginal glosses have been added on MS P, three of them providing exceedingly precise definitions of the sickness, the last one simply equating it with oblivion:

P 24r left margin, to *Ḥašāʾiṣ* 1:106 اغس

ليثرغش هو مرض يعرض فيه ذهاب العقل من برد عارض للدماغ، ونسيان وسبات وحتى بلغمية؛ وإنما اشتق ليثرغش من النسيان
البرسام البرد صح

P 49r left margin, to *Ḥašāʾiṣ* 2:145 يصل

ليثرغش حتى بلغمية يعرض منها إسهال واختلاط عقل وفساد الحفظ، وربما دام بهم فساد الحفظ بعد أن ينتهوا

P 63r right margin, to *Ḥašāʾiṣ* 3:36 نام

ليثرغش وجع سببه البرد والرطوبة يعرض في الدماغ ويعرض معه سبات وفساد ذكر وحتى بلغمية

P 130r right margin, to *Ḥašāʾiṣ* 5:66* لبس افطس

وهو النسيان

In his monograph on the qualities and properties of simple drugs GALEN omits all specific mentions of *λήθαργος* in all but one entry, namely on the lemma on castoreum, in which ḤUNAYN identifies it twice with نسيان rather than providing a transliteration of the Greek nosonym:

Simpl. med. XI.1.15 Περὶ καστορίου

K XII 340³⁻⁴, 341³⁻⁴

πυρετόν, οἷος ἐν καταφοραῖς μάλιστα
καὶ ληθάργοις γίγνεται [...]
τά γε μὴν ληθαργικά καὶ καταφορικά
πάντα πάθη μετὰ πυρετῶν

Mufradah XI.10 ذكر الأنثيين

E 174v 13–14, 174v 24–25

الحمى التي تكون مع السبات
ومع العلة المعروفة بالنسيان [...]
وأما في جميع علل النسيان أو في السبات
الكاثر مع الحمى

is often mispointed in P (cf. especially «لتبرغش» 32r 28 and the correction «لتبرغش» over the line at 49v 1), but the original spelling ليثرغش (sic, with a ش) is nonetheless occasionally preserved (as for instance at P 49r 3, 63r 5, and 69r 29, which are again all pseudocorrected as «لتبرغش»).

equated by some authors with oblivion.¹

On the other hand, amongst those physicians that make an unambiguous identification of λήθαργος with نسيان in the Islamicate tradition one can count particularly IBN ALĠAZZĀR,² who may represent an intermediary stage previous to the substitution completed already in AZZAHRAWĪ.³

Needless to say, the matter deserves further analysis of a much broader spectrum of witnesses, but at least with regard to the text of ^αHawāṣṣ as echoed by IBN ALHAYTAM's *Iktifāʿ* the inference is clear that the original passage from *Materia medica* had at some point in its transmission been “updated” by an author who identified λήθαργος as oblivion and who projected this knowledge onto his text by substituting نسيان for the original transliteration—a process that can be compared to an identical substitution in a parallel quotation of the same passage by ALMAĠŪSĪ (for which see below)⁴ and which may have in such quota-

presently verify this point, although the same ascription is shared by IBN ALĠAZZĀR too in *Zād* I.14 (B-K 134.10 | T 99.2-3). Persian سرسام was oftentimes mistransmitted as برسام (which refers rather to ‘pleurisy’), cf. the almost even distribution of the two forms amongst the manuscripts in the critical apparatus to *Zād* B-K 148.1. On the hyperonym سرسام (of which the “hot” variety corresponds to φρενίτις and the “cold” one to λήθαργος), cf. IBN ALḤAŠŠĀʿ' explanation in *Mufīd* [154], where he affirms that the original Persian *bur-* was Arabicised as *bar-* and that the Arabs extended this denomination «على اختلاط الذهن من أي سبب كان» (C-R 188.10).

¹ Cf. «العلّة المعروفة بالنسيان (وهو السراسم البارد)» in ARRĀZĪ, *Mudḥal* 83.1-2; also ALMAĠŪSĪ, *Kāmil* I.IX.5 (S I 390.14). The triangle of synonyms is complete in IBN SĪNĀ, *Qānūn* III.I.2, where سرسام بارد is called ليثرغس and glossed as نسيان (B II 26.23-24). The case of IBN SĪNĀ is quite telling of the inconsistency that sometimes obtains from the compilation and synthesis of heterogenous materials: in *Qānūn* III.I.3, where the same treble synonymy نسيان/سراسم بلغي/ليثرغس is reiterated, forgetfulness (نسيان) is considered a *symptom* of the disease and such physicians are criticised as took it to be the sickness itself (B II 50.27-51.5); however, in *Qānūn* III.I.4 (B II 62.13) نسيان is affirmed to be different from ليثرغس and it is further equated, as a symptom, to فساد الذكر—which has been previously distinguished from نسيان and granted a separate epigraph in *Qānūn* III.I.4 (B II 62.3-63.8).

² Cf. «(وهو النسيان)» in IBN ALĠAZZĀR, *Zād* I.14 (B-K 134.4-140.7 | T 98.7-101.2). The same synonymy was also known in the east, cf. «(أي النسيان)» in ALKAŠKARĪ, *Kunnāṣ* XXIV (S 274.9-10); and also «(وهو النسيان)» in PSEUDO-ARRĀZĪ, *Fāḥir* 68.19-70.1.

³ Cf. *Taṣrif* II.II.13 في النسيان (S I 73.2-74.4), where no mention at all is made of the Greek term.

⁴ It is possible that he may have drawn his quote from a text that read already «نسيان» given that elsewhere in the same book he apparently glosses ليثرغس otherwise, cf. ALMAĠŪSĪ, *Kāmil* II.V.14 (وهو السبات البارد) في مداواة العلّة المعروفة بليثرغس (وهو السبات البارد) (S II.1 356.10-358.18; but this gloss is missing from the rubric in P² 261v 12). However, the existence of a specific chapter on oblivion (*nisyān*) in *Kāmil* I.IX.5 وعلته وأسبابه في دلائل النسيان (S I 390.13-392.15) and the fact that ليثرغس is nowhere mentioned in the theoretical sections of the book suggest that ALMAĠŪSĪ may have actually equated these two nosological concepts. Mark that both CONSTANTINE and STEPHEN OF ANTIOCHY translate نسيان here as *lethargus* / *lethargia* just as they do with ليثرغس in the *Practica*, cf. Pantegni I.IX.5 *De lethargia* (L 41va 70 – 42ra 5) and *Regalis dispositio* I.IX.5 *De lethargia et ei similibus* (V 60ra 10 – 60rb 40), respectively, as well as the loci indicated below with regard to the snakestone.

tions as ALĠĀFIQĪ's an intermediary precedent.¹

Active elements

With the sole exception of the opening passage on the snakestone, all ingredients in the original section in ^α*Hawāṣṣ* appear to have been of animal origin and in the selection implemented in *Natā'iġ* all four passages involve two different flying creatures, namely the hoopoe and the bat. Such a use of birds—or rather bird parts—against oblivion either amuletised or as main ingredients of recipes is documented since postclassical times. Thus, in one of the appended passages to THEODORUS PRISCIANUS' *Euporiston* an anti-amnesic power is attributed to kite eyes when worn as an amulet:²

Additamenta L to II.2 [15] (R 308₂₃₋₂₄)

Obliviosum emendabis, si oculos milvi ligatos in foenicio portet in collo.

The Islamicate tradition inherited quite a rich stock of different birds credited with the same beneficial virtue. The power to avail against obliviousness and to improve memory was reported to have its locus in the brains and gall in the case of cranes,³ as attested already by ŠIMḤŪN and going back, no doubt, to Graeco-Byzantine sources:⁴

ARRĀZĪ, *Fāḥir* (وهو النسيان) في ليثرغس (M 69₂₁)

قال شمعون: «ينفع من الذِّكْر أن يُسْعَط دماغ الكركي ومرارته ودهن زنبق».

¹ Cf. حجر الحية. «مَنْ أَلْرَضَ أَلَّذِي يُقَالُ لَهُ لِيْرَغْس (وَهُوَ أَلْنَسِيَان مَعَ أَلْضَدَاعِ)» in ALĠĀFIQĪ, *Mufradah* –II s.v. الحية (M 204v 20–21, original vocalisation). As for previous *Ġāmi'* compilers in Andalus, IBN SAMAGŪN does not cite *Materia medica* but exclusively the text from *Simpl. med.*, cf. *Ġāmi'* –44 حجر الحية (S I 230₄₋₉).

² For *phoenicium* in the Late Latin medical technolect see DU CANGE's definition: «*Pannus coccinus, seu scarlatinus, in quo remedia quaedam topica includebant, convolvebant, et conligabant medici*» (GML VI 306b s.v. *phænicium*).

³ Outside the realm of medical and ḥawāṣṣic literature, a few hints to this connection between birds and memory can be retrieved from Arabian folklore. According to ALĠĀḤID, for instance, a strong capacity to memorise and remember («وثبات الحفظ والذكر») was attributed to doves (*Ḥayawān* III 214₁₀₋₁₁). Nevertheless, as in general for the bulk of ḥawāṣṣic materials, the origin of the passages under scrutiny ought to be searched for in non-Arabian pre-Islamicate traditions.

⁴ Mark that this is the exact same recipe, with only a different wording, as transmitted in the locus excerpted above from *Almuġnī*. Its inclusion in ^α*Hawāṣṣ* is not assured, however. On the other hand, IBN ṢALĪ, *Ḥayawān* [65.2] (R 412) only knows a remarkably similar preparation based on the gall (but not the brains) of a crane and used against palsy.

The same tradition reappears in a much more formulaic wording in ZUHR's anthology of properties:

Ḥawāṣṣ ك ككي (H 180₁₈–181₁ | P 86v 3–5 | T 337_{24–25})

ومراته دماغه، إذا خلطاً بزنيق وأسعط بها الذي به نسيان، ذكر ما قد نسيه.

بزنيق [زنيق PT | بهما] منها T | الذي [من H | قد] - T.

Hoopoe

Amongst all birds, the hoopoe holds a special place in the Helleno-Islamicate medical tradition. If ἔποψ is all but a stranger in classical Graeco-Hellenistic medical texts,¹ this absence contrasts strongly with the plethora of ḥawāṣṣic uses documented in the Islamicate period. Given the quite straightforward correspondence between Greek ἔποψ / κούκουφα(ς) and Arabic هدهد a misidentification or mistranslation seems rather unlikely and one must probably assume that much (if not all) of this material is of non-Greek origin. An Egyptian connection springs to mind given the relevance of this bird from Pharaonic down to Coptic times (κακογπατ is in fact its name in Coptic texts) and in view of its alleged presence in the primitive source that *Cyranides* calls “the Archaic book”. In the latter text an engraving is mentioned and a recipe is provided for the confection for a special kind of honey that is credited with a virtue to enhance memory and to confer prognostic powers to whoever ingests it:

¹ It is nowhere to be found in HIPPOCRATES, DIOSCORIDES, or GALEN, nor is it granted entry into the great Byzantine compilations. That the hoopoe was not unheard of in (para-)medical literature, however, is proved by such scarce passages as PLINY, *NH* XXX.6.[18]: «*Upupae cor lateris doloribus laudatur*» (J–M IV 439₆). In any case, it is rather late that it gains some prominence (maybe through its inclusion in the different versions of the *Physiologus*) especially in *Cyranides*; in addition to the passages quoted below, cf. *Cyranides* II.39 Περί ταύρου 14–18 (K 174) ≡ *Cyranides* II.31 *De tauro* (D 127₁₈–128₃). Besides Classical ἔποψ (which “probably cannot be called Indo-European” according to BEEKES–VAN BEEK, *EDG* 448), several synonyms for ‘hoopoe’ are recorded by HESYCHIUS (6h c.), among which κούκουφα(ς) and ποῦπας/ποῦπος (to be compared to Latin *upupa*), cf. THOMPSON 1895: 102; ARNOTT 2007: 71–72 s.v. *eopos*. An onomatopoeic origin can be assumed for the Arabic reduplicative *hudhud* too.

Kyranides I.vii H 64–70 (K 51)

ἔχε δὲ καὶ ἕτερον μαγνήτην εἰς ὃν τὸ ὄρνεον γέγλυπται τοῦτο, ὃν δεῖ ἐν τῷ τοῦ μέλιτος συνθέματι ἐμβρέχεσθαι. [...]. ἑτέραν καρδίαν καὶ ἦπαρ ἔποπος βάλλης ἐν τῷ συνθέματι, κρεῖττον ἔσται καὶ ἔτι μνημονικότερον ποιεῖ.

Cyranides I.vii H (D 48₄₋₁₀)

Habeas et alium magnetem in quo sculptus sit cucufas (id est upupa), quem oportet in mellis compositione intingi. [...]. Si autem et aliud cor et iecur cucufae mittes in confectione, melius erit quoniam memorabiliorem te faciet.

It is worth noting that there is no separate epigraph on hoopoes in Book III of the *Cyranides*, which is entirely devoted to birds. But the same specific property against oblivion is echoed there in a tangential report within the entry on moles. In this case it is the skin of a hoopoe (an element that is in fact attributed an anticephalgic property in *Nat* II.vi.6) and its eyes that possess this virtue, which can be utilised when they are worn as a periapt in combination with a mole's heart:

Kyranides II.3 Περὶ ἀσφάλακος 9–13
K 117

ἐν δέρματι δὲ ἔποπος τοῦ ὄρνέου σὺν τοῖς δυσιν τοῦ ὄρνέου ὀφθαλμοῖς περιεπιτομένη προγνώσκειν ποιεῖ τὸν φοροῦντα πάντα τὰ ἐπερχόμενα, ἐφ' ὅσον χρόνον φορεῖ αὐτὸ ἀγνός. ἐὰν δὲ καὶ τὴν καρδίαν φορῇ τοῦ τοιοῦτου ἀσφάλακος, μείζονα καὶ κρεῖττονα ποιεῖ τὸν φοροῦντα.

Cyranides II.42 *De talpa*
D 141₁₇₋₂₀

In pelle autem upupae avis cum duobus oculis avis (scilicet upupae), si quis suspenderit vel ligaverit cor asphalagi, omnia praesciet quanto tempore gestaverit ea castus. Si autem cor avis gestaverit interiorius, magnus et potens erit.

These instructions are essentially identical to the ones transmitted by ALMADĀʿINĪ in the dislocated remnants of what must have been an originally larger epigraph on the hoopoe:

Hawāṣṣ II.6 (M 320₉₋₁₀)

وقال: «عينا الهدهد وقلب الخلد يُرطان في خرقه نظيفة ويحملها الإنسان طاهراً: يُسرع في العلم ويُذهب النسيان».

Whatever the ultimate origin of the hoopoe-related traditions, it is in a Hellenistic milieu that they take their characteristic shape and it must have been through Byzantine channels that they entered the Islamicate corpus. Amongst

the various traditions on the tongue and the eye of the hoopoe related to *Nat*-1|2 and which are surveyed below, the heart of the hoopoe is also attested in early Islamic texts, as for example in a passage that ADDAMĪRĪ attributes to ĠĀBIR B. ḤAYYĀN:

Hayawān [998] هدهد (S IV 148₁₅-149₁, 150₂₀₋₂₂)

وعينه، إذا غلقت على صاحب النسيان، ذكر ما نسيه. وكذلك يفعل قلبه إذا شوي وأكل مع سذاب — وهو نافع للحفظ والذكاء، ولا ينسى شيئاً، وهو أنفع من حب الفهم وأسلم. [...].
وقال جابر (رحمه الله) إن قلب الهدهد، إذا شوي وأكل مع السذاب، فإنه ينفع للحفظ جداً.

Snakestone

With regard to the only mineral included in the source text, the snakestone, special mention must be made of ALMAĠŪSĪ's entry thereon in *Kāmil*. The Iranian physician follows closely DIOSCORIDES' description of the three varieties of حجر الحية, the third of which («المخبط» ≡ «ὁ δὲ τὰς γραμμὰς ἔχω») he affirms to avail against forgetfulness («ينفع أصحاب النسيان»¹).

Now, the interest of this passage goes well beyond the identification of λήθαργος as نسيان and may be not completely unrelated to the reading attested by *Iktifāʿ*, for ALMAĠŪSĪ still adds that when burnt and drunk, this stripped variety of snakestone crumbles stones in the kidneys and calculi in the bladder. Thus, not only does ALMAĠŪSĪ show «أصحاب النسيان» where the versions of *Materia medica* available to him offered a simple transliteration but he also includes a segment that is absent from the original lemma on the ophite. Whether he does so by contamination with precisely the Judaic stone or, more probably, with GALEN's ὀφίτης+ὀμφοτίτης,² or still following some alternative version of *Ḥašāʾiṣ*³—that only a systematic analysis of his sources could reveal.

¹ Cf. *Kāmil* II.ii.45.3 حجر الحية (S II.1 185₄₋₇ | P² 135v 2-6 | P³ 186v 11-15) ≡ *Pantegni* II.ii.48 *Alchageral chaya i. petra serpentina* (L 74ra 44-49, to be read thus rather than «chapa» as printed) ≡ *Regalis dispositio* II.ii.45 [462] *lapis serpentis* (V 103va 65-68). The two copies of *Kāmil* preserved in Paris show an enigmatic rubric «الحجر المعروف بحجر دا الحية» P³ / «حجر دا الحية» P². On the other hand, as mentioned above, both CONSTANTINE's and STEPHEN OF ANTIOCH's Latin translations read «*ualet lethargicis*» and «*litargicis prodest*» respectively.

² Cf. *Mufradah* XI.3 الحجارات ذكر الحيات twice *sub lemma* الحجر المعروف بحجر الحية (E 149v 6-8|14-15) ≡ *Simpl. med.* IX.ii.18-19 (K XII 206₁₄₋₁₇+207₁₂₋₁₅).

³ Cf. MIHRĀN's aforementioned translation in Istanbul, Ahmet III Kütüphanesi MS 2127, in which the lemma حجر الحية that corresponds to *Mat. med.* 5:143 (and in which, incidentally, λήθαργος is simply transliterated as «ليترغس» on fol. 273v 12) is immediately followed on fol. 273v 13 by a

The snakestone was not, in any case, the only stone attributed with such a virtue. Amongst the suffumigations (ὑποθυμιώμενα) against λήθαργος handed down by AETIUS OF AMIDA from ARCHIGENES and POSIDONIUS there is the λίθος γαγάτης, for which DIOSCORIDES registers rather an antiepileptic benefit.¹

second entry on a homonymous stone that is said to show four strips and which was censured to crumble calculi when taken with some wine.

¹ Cf. AETIUS, *Iatrica* VI.3 Περὶ ληθάργου (O I 129₂₀) and DIOSCORIDES, *Mat. med.* 5:128 γαγάτης (W III 96₃₋₄) ≡ *Haš* 5:52* غاغاتيس (P 129v 17 | T 434₁₃₋₁₄), where «صدع», twice, is a misreading). A note on the left margin of *Hašāʿiṣ* P 129r identifies this γαγάτης as the 'epilepsy stone' (حجر الصرع) and reports its presence in Andalus in the region of Saraquṣṭah. A largely identical explanation (with a further reference probably to mount Šulayr [«جبل شنير» in the Būlāq edition]) is ascribed to IBN ḤASSĀN (ie IBN ĠULĠUL) by IBN ALBAYṬĀR in *Ġāmiʿ* 64-حجر غاغاتيس (B II 9₁₁₋₁₄). This fragment is all the more interesting because it quite probably stems from the no longer extant end of his *Tafsīr*.

 Commentary

II.IV.1 Aṭṭabarī said: «If one takes the tongue of a hoopoe, dries it, and drinks it with boiled grape-syrup, it shall remove one's obliviousness and increase one's memory.»

Cognates

This quotation has no parallel in the Hebrew reflections of *Iktifāʾ* but it is transmitted in the Tashkent manuscript as the second passage of the chapter, following the cognate to *Nat-2*.¹ Moreover, ALMADĀʿINĪ too transmits it precisely in the same order as IBN ALHAYTAM:

Hawāṣṣ II.6 (M 320₁₅₋₁₆)

وقال: «عين الهدهد ولسانه، إذا عُلِّقا على الإنسان، نفعا من النسيان.
وإذا شرب لسان الهدهد محرقًا بطلاء، أذهب النسيان وأجاد الحفظ.»

Given the sketchy transmission of ALMADĀʿINĪ's treatise one should not read too much into the implicit ascription of this passage to AṬṬABARĪ there, since after all he is the only source mentioned for the whole sequence, including the cognates to *Nat-3|4*, which are ascribed to ARRĀZĪ in our text. However, the combined testimony of all three texts suggests strongly that this minimal sequence was already attributed to AṬṬABARĪ in ^α*Hawāṣṣ* and that its original order may have been altered only by ALʿILBĪRĪ.

Source

No such passage can be found in the extant texts of *Firdaws* or *Hifḍ*,² and several hypothesis of unequal value can be proposed with regard to the correctness of this ascription. At the weaker end of the spectrum, a homoeoteleutic leap might have obtained in the manuscripts of *Firdaws* at the word لسان (conflating, that is, *Nat-1|2*) at so early a stage in the transmission of the text as to affect all the witnesses consulted for ṢIDDĪQĪ's critical edition but not the copy used by

¹ Cf. HASANI 1999: 24. This is one paradigmatic example of the drastic reformulation of all previous hypotheses that has been necessitated by the availability of this additional witness. I have no doubt that the Arabic copy of *Iktifāʾ* will prove me wrong in many of my assumptions throughout this commentary.

² Nor in their indirect transmission: most—if not all—of AṬṬABARĪ's *ḥawāṣṣ* passages on the hoopoe are conveniently gathered by the latest Andalusī *Ġāmiʿ*-compiler, yet there is no echo of this one in particular, cf. IBN ALBAYṬĀR, *Ġāmiʿ* هـ-6 هـهد (B IV 194₃₂-195₇); the sequence is reproduced in its entirety by ALṢUMARĪ, *Masālik* XX 106₁₁₋₂₀ s.v. ههد.

^α*Hawāṣṣ* or by its source—a rather weak hypothesis given the fact that there is absolutely no additional support for such an assumption. Otherwise, the quotation might stem from a different text by AṬṬABARĪ (or one ascribed to him) other than *Firdaws* and *Ḥifā* but, again, evidential support is lacking. Finally there is the plausibility of a wrong ascription that obtained probably already in the process of selection and compilation by the author of ^α*Hawāṣṣ*—for obvious reasons this one is the simplest (but not necessarily true) scenario and the fact that the first passage (= *Nat*-2) is a genuine quotation from *Firdaws* provides further evidence for the simplest hypothesis.

Despite this uncertainty regarding its original attribution, *Nat*-1 has several sound precedents and parallels in the eastern Islamicate tradition. Already in the 9th century, when dealing with the virtues and benefits of the hoopoe IBN ʿALĪ includes a recipe positively related to our text but different enough in its wording (especially in the lack of any boiled wine) as to discard it as a direct source:

Ḥayawān [49.17] هدهد (R 324)

A

C

لسان الهدهد اذا سحق وستی لانسان، يؤخذ لسان الهدهد، يُجفّف وُسحق ناعماً،
 اذهب عنه سرعة النسيان. وُسقی لمن يعتریه النسيان — فَإِنَّهُ يَذْكَرُ كُلَّ
 ما نسيه، ويُعين على الحفظ، والله أعلم.

Then a passage almost identical to the one in *Natāʾiḡ* is found in the constellation of IBN BUḤTĪŠŪʿ-*related* texts as the second of two properties attributed to a hoopoe's tongue:¹

Ḥayawān VI.9 هدهد (G 168₁₁-169₂ | Q 88r 6-8)

≡ *Naṣt*¹ s.l. منافع الهدهد (L 49r 7-9) ≡ ALMAWṢILĪ, *Manāfiḥ* 105r 13 - 105v 2

لسان الهدهد — إذا علّقته في عضدك، لم يُخاصمك أحد. وإن جفّف وُسحق وشرب بطلاء،
 أذهب بالنسيان.

لسان الهدهد [لسانه Q | علّقته ... يُخاصمك] علقه انسان على عضده لم يخاصمه EQ | بطلاء [بطلی L،

G - بالنسيان] النسيان L.

¹ This benefit is absent from the strict *Naṣt* tradition as represented by *Naṣt*^T, in which the bird is not even identified by an Arabic name, cf. *Naṣt*^T II.29 “افيقوس” (T 76r 5-11). The transliterated name reflects the Greek genitive ἔπιπος with Syriac mediation through ܐܦܝܩܘܫܘܫܐ, cf. *Physiologus Syrus* XXII ܐܦܝܩܘܫܘܫܐ ܕܗܕܕ (T 14₉-151₂); distorted in the Syriac *BNG* [45] ܕܗܕܕܐ ܕܗܕܕܐ (A 29₇₋₁₂) ≡ BAR BAHLŪL, *Lexicon* 262₁₅₋₂₂ s.v. ܐܦܝܩܘܫܘܫܐ.

The passage is clearly different from both versions of IBN ʿALĪ’s text (especially in the mention of طلاء that it shares with *Natāʿiğ*) but at the same time it features elements present in them separately: drying the tongue as in *Ḥayawān*^A, removing oblivion as in *Ḥayawān*^C.¹

An even slightly closer match is provided by twelfth-century Iranian author ALMARWAZĪ, who, like *Ḥayawān*^A and *Natāʿiğ*, mentions the double benefit of such a beverage against memory loss and still adds an aphrodisiac virtue:²

Ḥayawān III.40 هدهد (C 191v 7–9 | D 132r 1–2 | L 171r 7–8)

لسان الهدهد — يُجَفِّفُ وَيُسْحِقُ وَيُشْرِبُ بِمِخْتَجٍ، فَإِنَّهُ يَذْهَبُ بِالنِّسْيَانِ وَيُورِثُ الْحِفْظَ،
ويزيد في الباه.

بمِخْتَجٍ [سميح D].

The diversity of forms in which this property must have circulated is further reflected in a passage penned by ALQAZWĪNĪ, who combines three of the best-known virtues of the hoopoe’s tongue. Despite its much simpler protasis (there is no mention of drying and grinding, nor of any wine to be taken with it) and its quite differently worded apodosis, there can be no doubt that the last segment corresponds to the same tradition:³

Ṣağāʿib II KĀʿINĀT II.III.6,54 هدهد (W 426_{13–15} | P² 321r 17–20 | P⁴ 182v 11–13)

لسانه — يأخذ الإنسان معه، لا يظفر به عدوه البتة ما دام اللسان معه. ولو غلَّق على
إنسان مع عينه، يدفع عنه غلبة النسيان؛ وإذا شقي إنساناً، زاد في علمه وفهمه وذكائه.

عدوٌ ... معه [عدوه W | عدوه [عدو P⁴ | عينه [عينه P⁴ | إنساناً [إنسان P²].

¹ Given that the analysis of the *Ḥayawān* genre could not be included in this dissertation, let me point out here that the survey of this tradition shows quite clearly that the relationship between IBN ʿALĪ’s early compilation and IBN BUḤTĪŠŪ’s treatise is certainly not one of descentance, nor even of heavy dependence. The former is one of the sources of the latter (this much is explicitly acknowledged by the author), but judging from the wording of the passages he may not have been even the main contributor to the text.

² The synonymical substitution of مِخْتَجٍ for طلاء might be due to the Persianate origin and transmission of the text.

³ This virtue of the hoopoe tongue against oblivion, either as a periapt or as a beverage, is missing from the Persian translation (cf. *Ṣağāʿib* A 230v 7 | B 249r 4). Henceforth whenever an Arabic fragment from *Ṣağāʿib* is quoted without a parallel Persian text the implication is that the locus is missing from it. On the other hand, IBN ALWARDĪ (or perhaps the version of *Ṣağāʿib* that he perused) appears to have merged both properties in *Ḥarīdah* XXII.III.5 خواص أجزاء الهدهد (Z 362_{13–15}), see also below the commentary on *Nat*–2.

II.IV.2 He said: «If the eye and the tongue of a hoopoe are hung over a patient suffering from severe obliviousness, he shall remember what he has forgotten.»

Cognates

Unlike the preceding *Nat*-1 on the tongue of the hoopoe, this passage is available in both in the Arabic copy of *Iktifāʿ* and in its two Hebrew reflections. It is worth noting that the two texts ascribe it explicitly to AṬṬABARĪ:¹

<p><i>Saḡullōt</i> II.IV.2 (L–M 301₂₄–302₂)</p> <p>ואמ' אלטבר' : «אם יתלה [–] (נ"א עין התרנגול הבר ולשונו) ההוד הוד הוא עוף שיש לו גונים הרבה הנקרא ולשונו עמו על גאל דיאבירטא ולשונו על מי שיעטרהו צוארו. יזכור יותר ממה שכח». השכחה. יזכר יותר ממה שכח».</p>	<p><i>Nisyōnōt</i> II.IV.2 (L–M 162₉–164₁)</p> <p>ואמ' אלטבר' : «אם יתלה עין הרוכיפת עין התרנגול הבר ולשונו) ההוד הוד הוא עוף שיש לו גונים הרבה הנקרא ולשונו עמו על גאל דיאבירטא ולשונו על מי שיעטרהו צוארו. יזכור יותר ממה שכח».</p>
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The word cancelled by the copyist of *Saḡullōt*, which the editors interrogatively read in a footnote as «עייין», might well have been a dual عَيْنَيْن but it is perhaps unlikely that this were the original reading transmitted in ^a*Hawāṣṣ* given that ALMADĀʿINĪ has also a singular:

Hawāṣṣ II.6 (M 320₁₅–16)

وقال: «عين الهدد ولسانه، إذا غُلِّقا على الإنسان، نفعا من النيسان».

¹ The English translation of the passage in the Tashkent manuscript is to be found, again, in HASANI 1999: 24. Regarding the Hebrew translations, *Saḡ* includes a *plene*-vocalised transcription of the Arabic ornithonym «הוד הוד» (ie هُدُود) as well as a Hebrew correspondence «התרנגול» 'wild cock' already attested in Mishnaic Hebrew and also in Judaeo-Aramaic as הרנגולא (cf. JASTROW, *DTM* 188 s.v. בר). This denomination is paralleled by Syriac ܐܘܢܝܥܐܘܢܐ (cf. BAR BAHLŪL, *Lexicon* 2089₁₋₃) and it features in the *Physiologus* alongside Graeco-Syriac ܫܘܠܘܢܐ / ܫܘܠܘܢܐ in BNG [45] ܫܘܠܘܢܐ (A 297₇₋₁₂). An identical name is attested also in Greek, cf. ἀλεατρύσωνα ἄγριον in BEEKES–VAN BEEK, *EDG* 448. As for PSEUDO-ABENEZRA's דוכיפה, it is Tanakhic Hebrew and it is the name used also by the anonymous Hebrew translator of the ARRĀZĪ-ascribed *Sexaginta* in addition to the German borrowing וידהוף *Wiedehopf*. Last but not least, the two texts share a most interesting Romance gloss «גאל דיאבירטא» that must be somehow akin to Occitanic *gallamberta* in Castelnòu d'Arri (cf. VON WARTBURG, *FEW* XXI 223 s.v. *huppe*) and also *poul de lamberto* / Gascon *pollambert*, which seems to extend into northern Catalan as *gall* (also *pull*) *d'ala verta* (cf. FERNÁNDEZ and SALMONS 1993: 34). No vernacular synonym is provided by ŠEM ṬŌB in his translation of AZZAHRAWĪ's *Taṣrif* (cf. BOS, HUSSEIN, MENSCHING, and SAVELSBERG 2011: 177–178). The same ornithonym reappears below in *Saḡ* II.VI.9.

On the other side, it is impossible to decide, on the basis of available evidence, whether it is *Natāʾiġ* or rather *Iktifāʾ* that preserves the better reflection of the archetypal qualification (whether the text read “great oblivion” or “more than he has forgotten”), which is itself an unparalleled innovation in the Arabo-Islamicate tradition. If the reading transmitted by ALMADĀʾINĪ is the original one, then the two Andalusī texts would share (even if in slightly different form) a disjunctive feature that would confirm the overall impression that they are closer to each other than to any other member of this textual family.

Source

In AṬṬABARĪ’s *kunnāš* both organs (namely the tongue and the eyes) are mentioned in a heterogeneous chapter that brings together bats, swallows, bustards, and hoopoes:

Firdaws VI.IV.31 في منافع الحفّاش والحظّاف والحبارى ومنافع الهدهد (§ 436²¹⁻²²)

ومن منافع الهدهد: إن أخذ لسانه وعينه وعلق في عنق صاحب النسيان، ذكر ما قد نسيه، إن شاء الله.

Unlike its echo in *Natāʾiġ* and in ALMADĀʾINĪ’s treatise, the original passage mentions the two eyes of the bird (≙ proto-*Saġullōt*) and it also prescribes hanging the amulet from the *neck* of the oblivious patient (≙ *Nisyōnōt* «על צווארו»). It is possible that these two specifications might have been included by the compiler of *Hawāšš* and that they were later omitted or simplified in some representatives of its indirect transmission. On the other hand, there is nothing in *Firdaws* that may have inspired either *كتر* or *كبير* as attested in its Andalusī reflections, but their shared reading seems to preserve better the original apodosis than ALMADĀʾINĪ’s.

Islamicate tradition

The passage from *Firdaws* was borrowed by ARRĀZĪ with an explicit ascription to its author, and his *Hawāšš* acted as an intermediary link to a number of authors of diverse genres. Now, with the proliferation of copies some apomorphies emerged at an early stage of the transmission of *Hawāšš*. There must have circulated at least three different versions of the quote: *Hawāšš*^α, which was identical to AṬṬABARĪ’s original text in mentioning both the tongue and the eyes of the hoopoe; *Hawāšš*^β, that omitted the tongue probably by a clerical substitution of *لسان* for *انسان* with the consequent semantic and syntactic alteration of the passage; and finally *Hawāšš*^γ, in which only the tongue appeared.

The first two versions are actually attested in the manuscripts of ARRĀZĪ's work:¹

<p>هدهد 2-ه Hawāṣṣ</p> <p>Hawāṣṣ^a</p> <p>Q 12₁₅₋₁₆</p> <p>قال الطبري: «إن أخذ لسان الهدهد وعينه وعلق على صاحب النسيان، ذكره ما قد نسيه.</p>	<p>Hawāṣṣ^b</p> <p>I 81r 18-19 T 105v 17-106r 2 V 5r 14-15</p> <p>قال الطبري: «إن أخذ إنسان الهدهد وعلق عينه على عنق صاحب النسيان، ذكره ما قد نسيه.</p>
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عينه [عنه IV | عنق - TV | قد] كان T.

All these versions were the source of as many parallel subtraditions: if in the case of passages including both elements there may be some doubts whether the immediate source is *Firdaws* itself or rather an unaltered copy of *Hawāṣṣ*^a, the chances are high that those texts that mention only the eye draw from *Hawāṣṣ*^b, while those that refer only to the tongue are dependent from *Hawāṣṣ*^c.²

Tongue and eye

The passage by ALQAZWĪNĪ and its echo by IBN ALWARDĪ that have been mentioned above when commenting on *Nat*-1 bear witness to the fact that primitive readings can survive unaltered through the centuries no matter how many intermediary texts may have been involved in their transmission. In this particular case it may have been the specific wording that protected the passage from deturpation:³

¹ As can be inferred from the critical apparatus, variance as to the singular/dual of “eye” and the specific mention/omission of the patient’s neck gave rise to all kinds of combinations resulting in slight (but not meaningless) variability from text to text. I have not included the reference to Cairo, DKM MS Ṭibb 141, fols. 122v as cited by KĀS 2012: 98 because it is impossible to ascertain from the data reported to which one of these versions it corresponds.

² Needless to say, in some instances things may have been far less simple: an unscribed passage transmitting the original wording might derive, at least theoretically, from AṬṬABARĪ’s unnamed source or from some parallel witness, while spontaneous and independent innovations of this kind (that is essentially palaeographical) are also likely to happen at any point of the manuscript transmission.

³ As indicated above, the passage is missing from Persian, where the periapt (perhaps through homoeoarchton) is described as an aphrodisiac (A 230v 7-8 | B 249r 4-5).

هدهد *ṣaḡāʿib* II KĀʿINĀT II.III.6,54 هدهد *Ḥaridah* XXII.III.5
 W 426₁₃₋₁₅ | P² 321r 17-20 | P⁴ 182v 11-13 Z 362₁₃₋₁₅
 وإذا عُلِّقت عينه مع لسانه على إنسان، يدفع يأخذه الإنسان معه، لا يظفر
 عنه غلبة السَّهْوِ والنسيان، ويزيد في فهمه به عدوّه* البتة ما دام اللسان معه. ولو
 عُلِّق على إنسان مع عينه، يدفع عنه غلبة عُلِّق على إنسان مع عينه، يدفع عنه غلبة
 النسيان؛ وإذا سُقي إنسانًا، زاد في علمه النسيان؛ وإذا سُقي إنسانًا، زاد في علمه
 وفهمه وذكائه.

It would seem that ZUHR too had access to a good copy of either text, although it is hard to explain the interpolation of the heart between the two original organs:

هدهد *Ḥawāṣṣ* ه-1 (H 2046-7)
 إن عُلِّق لسانه وقلبه وعينه على صاحب النسيان، ذكر ما نسيه.

Eye only

Still in ZUHR's compilation an echo is found of ARRĀZĪ's *Ḥawāṣṣ*^β mentioning only the eye:

هدهد *Ḥawāṣṣ* ه-1 (H 2045-6 | T 3416)
 وعينه: إن عُلِّق على صاحب النسيان، ذكر ما نسيه.

نسيه [قد نسيه H.

and it is recorded also by IBN ALBAYṬĀR, who transmits it without ascription under the general epigraph of «خواصه» (referring maybe to ZUHR?) along with some other properties also deriving from AṬṬABARĪ:¹

هدهد *Ġāmiʿ* ه-6 (B IV 194₃₂)
 خواصه: إن عُلِّق عينه على صاحب النسيان، ذكر ما نسيه.

In a more purely ḥawāṣṣic context it is echoed by ALMADĀʿINĪ, who is witness to a duplicated parallel transmission (the combination of the eye and the tongue that he inherits from the subtradition of ^α*Ḥawāṣṣ* has been reproduced above):

هدهد *Ḥawāṣṣ* II.11 (M 324₁₁)
 إذا عُلِّق عين الهدهد على صاحب النسيان، ذكر ما قد نسيه.

¹ Thence ALṢUMARĪ, *Masālik* XX 106₁₂ s.v. هدهد.

This subtradition has a long and wide circulation and reaches ADDAMĪRĪ, who incidentally provides a clue for the presence of the hoopoe's heart in ZUHR's text:

Hayawān [998] هدهد (§ IV 148₁₅-149₁)

وعينه، إذا عُلقت على صاحب النسيان، ذكر ما نسيه. وكذلك يفعل قلبه إذا شوي وأُكل مع السذاب: وهو نافع للحفظ والذكاء، ولا ينسى شيئاً، وهو أنفع من حَبّ الفهم وأسلم.

Even sixteenth-century ALʿANṬĀKĪ contributes an exceptional testimony. He accesses a tradition that mentions the two eyes and a separate use of the heart:

Tadkirah III هدهد 7-هـ (B I 334₃₄-335₂)

وحمل عينيه يُقوي الحفظ ويذهب النسيان. [...] وابتلاع قلبه ساعة ذبحه يُقوي الحافظة جداً.

In addition to the combination of tongue and eye, ALQAZWĪNĪ registers also a passage that features only the eye of the hoopoe, but the wording is substantially divergent and may reflect the author's idiosyncratic quoting style:¹

ʿaǧāʾib II KĀʾINĀT II.III.6,54 هدهد

W 426₁₂

وإذا شددتها على أحد، يذكر جميع ما نسي.

ʿaǧāyeb s.v. هدهد

A 230v 6 | B 249r 2-3

واكر كسى بانمودارند، حرچه فراموش کرده باشد باز خاطرش آید.

كسى - [A | دارند] دآرد B | باشد [A بود | باز خاطرش] بخاطر A.

Tongue only

A tongue-only tradition is documented by (PSEUDO-)MASĪḤ, who ascribes it to a certain PAUL in an otherwise strictly medical section on drugs for aiding memory and against amnesia:²

¹ ALQAZWĪNĪ's passage is borrowed literally by IBN ALWARDĪ, *Ḥaridah* XXII.III.5 (Z 362₁₂).

² The authentic PAUL OF AEGINA is previously cited (under the name البولش الحكيم) in *Hārūniyyah* II.I (G 285₁₁₋₁₂) regarding the diagnose of oblivion as caused by something acid and especially by cold moist phlegm. This is indeed the most commonly accepted aetiology for obliviousness and IBN ALĠAZZĀR resorts to the same reference to PAUL on *nisyān* being caused specifically by cold moist phlegm in *Nisyān* 61-62. However nothing like the virtue of a hoopoe's tongue can be found in *Pragmateia* III.XI.2 Περὶ μνήμης ἀπωλείας καὶ λογισμοῦ καὶ κάρου καὶ μωρώσεως (H I 151₆₋₂₁), nor is there any lemma for ἔποψ in the chapter on simple medicines (*Pragmateia* VII.III). In the search for other candidates to be this PAUL it may be relevant to note that this quotation is followed by a recipe apparently by JOHN THE APOSTLE.

Hārūniyyah II.1.1 (G 287₂₀)

وقال بولس: «مَنْ عَلَّقَ عَلَيْهِ لِسَانَ هَدَّهْدٍ، أَذْهَبَ عَنْهُ النِّسْيَانُ».

Moreover, in *Sexaginta* ARRĀZĪ himself (if the text is authentic) notes down a version of the remedy involving only the tongue of the bird:

Sexaginta XXXVI *De upupa*

A 70ra 20–21 | V 108rb 56–57

Lingua uppupe suspensa super obliuiosum reducit ad memoriam quod oblitus est.

Saḡullōt s.v. דוכיפת

P 26v 27–28

גם אם יתלה איש לשון וידהוף על צואר, יועילנו לשכחה.

quod] ea que V.

Let it be recalled, however, that ARRĀZĪ's *Ḥawāṣṣ* must have been transmitted also in a third version in which only the tongue of the bird was mentioned (*Ḥawāṣṣ*^Y). This may be the one echoed in *Sexaginta* and it certainly is the version followed by IBN ALĠAZZĀR, who additionally also omits the neck of the patient as the locus for the amulet:¹

Ḥawāṣṣ [76] (K 52_{12–13})

وقال الطبري: «إِنْ أَخَذَ لِسَانَ هَدَّهْدٍ وَعَلَّقَهُ عَلَى صَاحِبِ النِّسْيَانِ، ذَكَرَ مَا نَسِيَهُ».

Epistola 105vb 23–25

Et dixit Thabariensis: «Si lingua upupe suspendatur super pacientem multam obliuionem, reddit eum memorem».

In his monograph on oblivion IBN ALĠAZZĀR mentions only the tongue of the hoopoe, indeed, and the Arabic unicum sheds some light on the way in which reinterpretation of the passage must have obtained either through quasi-dittography as proposed by KĀS or by a simple misreading (انسان > لسان). In any case the clerical apomorphy did not make its way into the Hebrew translation:

¹ As do, in fact, three out of the four manuscripts of ARRĀZĪ's *Ḥawāṣṣ* consulted for this research. Regarding IBN ALĠAZZĀR's text, mark the presence of a quasi-duplicate at the end of the Latin text, after the Arabic version has already broken off: «*Et qui suspenderit linguam upupe ad colulum, confert ei obliuionem et subtiliat intellectum eius*» in *Epistola* 106rb 14–16. This passage is commented upon by KĀS, who also adduces the testimony of IBN ALĠAZZĀR's *Nisyan* (for which see below) and its Hebrew translation. In view of the different versions in which the passage is transmitted he proposes a reconstruction in the line of «إِذَا أَخَذَ إِنْسَانٌ (لِسَانَ) الْهَدَّهْدِ» (cf. KĀS 2012: 98, where further reference is made to ALMADĀʿINĪ's *Ḥawāṣṣ* and IBN BUḤTĪŠŪʿI's *Ḥayawān*).

Nisyān 129–130 (B 25–26)

وقد قال الطبري: «إذا أخذ إنسان الهدهد وعلقه على صاحب النسيان، ذكر ما قد نسيه».

M 106–107

P 101–102

ואמר כי אם יקה אדם לשון דוכיפת ואמר החכם אנשקן שלקיחת לשון הנקרא הודהוד בערבי ויתלה אותו על הדפוכיפת ויתלה בצואר בעל השכחה בעל השכחה. יזכור מזה שכחה כבר. ויזכור מזה שכבר שכח.

The tongue-only subtradition is attested also by AZZAHRĀWĪ within an epigraph dealing with oblivion caused by black bile. The remedy in question comes last in a sequence of unasccribed specific properties and is followed by an Indian recipe explicitly borrowed from AṬṬABARĪ. Let it be noted that here the organ must be hung from the patient's arm:

Taṣrīf II.II.12 (SI 7330–33) القول في النسيان

ويستعمل هذه الأدوية التي تنفع بخواصها، مثل أن يؤخذ دماغ الكركي ومرارته، فيخلطها بزئبق خلاص ويُسقط به، فإنه مجرب. أو يؤخذ أسنان ضبع فتربط على العضد. أو يؤخذ أظفار) يد الضبع ورجلها اليسرى ويُجعل في خرقه كتان ويُربط على العضد الأيمن، فإن صاحبه لا ينسى ما يسمع وما يعلم. وإن أخذ لسان الهدهد وعلقه على عضده، نفعه.

There are still additional variations of the same passage, such as the aforementioned passage in ZUHR, *Hawāṣṣ* H 205₁₄ (tongue and heart) or the omission of any specific part of the bird's body (and therefore apparently applying to the whole bird) as in ADDAHABĪ (d. 1348):¹

Tibb nabawī II.I.2 هدهد (B 202₂₋₃)

في كتاب الخواص: «الهدهد خواصه أنه، إذا علق على من به نسيان، ذكره ما نسيه».

¹ In view of the Arabic text of IBN ALĠAZZĀR's *Nisyān*, one may assume a similar parablepsis for this text rather than the existence of a fourth apomorphy *Hawāṣṣ*³.

II.IV.3 Arrāzī said: «If an oblivious patient is smoked with human hair, this shall benefit him.»

Cognates

The direct Hebrew translation of IBN ALHAYTAM's text (but not the Tashkent manuscript) transmits a parallel (and more complete) passage on this property of human hair, which it combines with a mention of an analogous use of castoreum (קשטור):

Saḡullōt II.IV.3 (L–M 302₂₋₃)

ואמר כשיקוטור בעל השכחה בשיער האדם. יועילהו. וכן כשיקוטור בקשטור.

The two texts disagree, nevertheless, as to the ascription of the quote: in the Hebrew text the passage follows the quotation from AṬṬABARĪ on the hoopoe's eye and tongue, ARRĀZĪ's authority being introduced only *later* at *Saḡ*-4 on the hyena. Moreover, IBN ALHAYTAM's treatise attributes an analogous benefit to castoreum, which is indeed the only one selected by PSEUDO-ABENEZRA, who yet places it immediately after the passage on the hyena also explicitly ascribed to ARRĀZĪ.

A cognate passage is found also in ALMADĀʿINĪ's treatise with no ascription:

Hawāṣṣ II.6 (M 320₆)

قال: «ومن تدخن بشعر من يعتره النسيان، أذهبه.»

Source

As far as its contents are concerned, the passage can be derived from AṬṬABARĪ as long as one admits that the original text has been completely reworded to fit the formulaic pattern of the genre:

Firdaws VI.IV.1 في الإنسان (§ 420₄₋₆)

وقال أطرومينس الفيلسوف إنَّ شعر الإنسان، إذا بُلَّ بالخلِّ ووضِعَ على عَضَّة الكلب، برأ من ساعته. وإذا تبخَّرت المرأة بالشعر، نفع من وجع الرحم. وينفع التدخين به من النسيان.

وإذا] واذ §.

Probably the most obvious conjecture is to read AṬṬABARĪ's «أطرومينس» as one of the multifarious corruptions of the name of the well-attested yet scarcely-known AṬHŪRUSFUS (for whom see above Chapter 3).¹ As a matter of fact, ARRĀZĪ's colossal collection of quotes contains an AṬHŪRUSFUS-ascribed fragment on human hair that is unmistakably cognate to the one in *Firdaws*:

<p><i>Alḥāwī</i> XX [35] شعر-§ إنسان H XX 33* B 29228-12</p> <p>وقال أطهرسفس إنَّ شعر الإنسان، إذا بَلَّ بِخَلِّ وَوُضِعَ عَلَى عَضَّةِ الْكَلْبِ، أَبْرَأَ مِنْ سَاعَتِهِ.</p> <p>وإذا بَلَّ بِشْرَابٍ صَرَفٍ وَوُضِعَ عَلَى الْجِرَاحَاتِ الْعَارِضَةِ فِي الرَّأْسِ، مَنَعَهَا مِنَ الْوَرْمِ.</p> <p>ومتى دُخِّنَ بِهِ وَاشْتَمَّ رِيحَهُ، نَفَعَ مِنْ خَنَاقِ الْأَرْحَامِ وَالنَّسْيَانِ.</p>	<p><i>Continens</i> XXXVII.1 [363] <i>De homine</i> V 530ra 61-66</p> <p>Dixit Athuriscus: «Pili homines madefacti in aceto et positi supra morsum canis sanant ipsum.</p> <p>Et madefacti in vino puro et oleo, positi supra vulnera capitis, non permittunt ipsa apostemari.</p> <p>Et suffumigatio ex eis et odorare eius fumum confert obliuionis et suffocationi matricis».</p>
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The inclusion in *Alḥāwī* of a property against the swelling of wounds in the head as well as the radical divergence in the wording of the final segment (womb *suffocation* / womb *ache*) strongly suggest an independent access by the two authors to a common tradition rather than another instance of ARRĀZĪ paraphrasing *Firdaws*.²

At the moment there is little basis on which to decide whether the primitive ascription in ^α*Hawāṣṣ* featured AṬṬABARĪ as might be inferred from *Saḡullōt* or rather ARRĀZĪ as explicitly stated in *Natāriḡ*. In any case, whichever the source, the original text had been once again reworded into a more *ḥawāṣṣ*-like formula.

¹ The name of the sage reads actually «أطرومسس» in MS Arundel Or. 41 fol. 195v 12, while ŞİDDĪQĪ adds in a footnote an alternative reading «أيكزو مينس» without further reference.

² The additional sequence of uses of human hair that follows in *Alḥāwī* but not in AṬṬABARĪ's text might also be interpreted as additional evidence in this sense. This common origin of the excerpts included in the two texts does not necessarily point towards a single shared source but may have rather involved different intermediary texts.

Islamicate tradition

Most instances of this anti-amnesic virtue of burnt human hair in the written corpus appear to echo either of these two versions of the passage. Thus, the whole AṬḤŪRUSFUS-excerpt is borrowed from *Alḥāwī* by ALMARWAZĪ with no alteration of the original wording:

Ḥayawān I إنسان (C 76r 11–15 | D 66r 11–14 | L 13r 1–4)

قال أطهوسقسس: «إِنَّ شَعْرَ الْإِنْسَانِ، إِذَا بُلَّ بِخَلِّ وَوُضِعَ عَلَى عَصَّةِ الْكَلْبِ، أَرَاهُ مِنْ سَاعَتِهِ. وَإِنْ بُلَّ بِشَرَابٍ صَرَفٍ وَزَيْتٍ وَوُضِعَ عَلَى الْجِرَاحَاتِ الْعَارِضَةِ فِي الرَّأْسِ، مَنَعَهَا أَنْ تَرْمَ. وَإِنْ دُخِّنَ بِهِ وَاشْتُمَّ رَائِحَتَهُ، فَإِنَّهُ يَمْنَعُ مِنْ خَنْقِ الْأَرْحَامِ وَالنَّسِيَانِ.»

أطهوسقسس [أطهوسقسس C، اطهوسسس D | تريم] يورم C | وإن | فان C.

In Andalus IBN ALBAYṬĀR, in turn, may have consulted a copy of *Alḥāwī* that read “flux” (سيلان) rather than “oblivion” (نسيان), a change induced perhaps by its collocation next to a condition of the womb:¹

Gāmiṣ شعر 62–ش (B III 63_{22–30} | C 132₁₄–133₉ | P⁸ 34r 8–11)

قال الرانزي في الحاوي: «قال أطهوسقسس: ”وَإِنَّ شَعْرَ الْإِنْسَانِ، إِذَا بُلَّ بِخَلِّ وَوُضِعَ عَلَى عَصَّةِ الْكَلْبِ، أَرَاهُ مِنْ سَاعَتِهِ. وَإِنْ بُلَّ بِشَرَابٍ صَرَفٍ وَزَيْتٍ وَوُضِعَ عَلَى الْجِرَاحَاتِ الْعَارِضَةِ فِي الرَّأْسِ، مَنَعَهَا أَنْ تَرْمَ. وَإِنْ دُخِّنَ بِهِ وَاشْتُمَّ رَائِحَتَهُ، نَفَعَ مِنْ خَنْقِ الْأَرْحَامِ وَالسَّيْلَانِ [...]“».

قال C – [أطهوسقسس] أطهوسقسس BC، اطهوسسس/طهوسسس mss | وإن | أن C | والسيلان والنسيان .P⁸

But in the case of authors with a penchant for paraphrase the possible lines of borrowing become much blurrier. There can be little doubt that a passage in ZUHR’s *Ḥawāṣṣ* on the uses of human hair must be somehow connected to the same tradition independently transmitted by AṬṬABARĪ and ARRĀZĪ, and the mention of womb *pains* suggests that the former may have been his source. Now, transforming the suffumigation into an amulet is well beyond simple paraphrase and given the wide array of sources quoted by the Andalusī physician the

¹ From a synchronical perspective this reading would seem to be a genuine apomorphy since it is shared by a remarkable number of witnesses, cf. London, British Library MS Or 5839 fol. 71v 11; Paris, BnF MS Arabe 2976 fol. 242v 13, Arabe 2984 fol. 11v 15, and Arabe 2985 fol. 30r 9. However, the reading «النسيان» is transmitted at least by Paris, BnF MS Arabe 2983 fol. 34r 11 (= P⁸), which begs the question whether the ubiquitous «والسيلان» might actually be the result of an early misreading in the manuscript transmission of the text.

circulation of parallel passages (ie other than the ones in *Firdaws* and in *Alḥāwī*) cannot be excluded without further research.¹

Ḥawāṣṣ 1-1 إنسان (C 311-14 | H 747-9 | P 6r 6-7 | T 2808-9)

وإن عُلقَ عظم إنسان مَيّتٍ على الضرس الوجع، سَكَنَ وجعه وأبرأه. وإن عُلقَ على من به حمّى الربع، نفعه.
ط: «إن بُخِرت امرأة بشعر إنسان، نفعها من جميع أوجاع الرحم. وإن عُلقَ على إنسان، نفعه من النسيان».

There is furthermore an explicit quotation of (IBN) ZUHR by IBN ALBAYṬĀR that involves inhalation of the smoke produced by burning human hair:²

Almuǧnī I.11 المزينة في الدماغ والعقل، المحمّدة للذهب، النافعة من النسيان

L 26r 5-6 | M 15r 21-22 | P² 24r 16-17

دخان شعر الإنسان — من خواص ابن زهر: «إذا أُدِيمَ استنشاقه، كان نافعاً من النسيان».

One generation later dependence from *Firdaws* seems certain, in turn, for ALḌIRĪSĪ, who appears to quote silently from it. However even in this case the quote apparently reflects some interpolation:

*Ġāmiʿ*³ شعر 23-ش (S III 468₁₃₋₁₆)

شعر الإنسان، إذا بُلَّ بِخَلِّ ووُضِعَ على عَصَةِ الكلب الكلب، برأ من ساعته. وإذا تبخّرت به المرأة، نفعها من وجع الرحم. وإذا عُلقَ شعر الإنسان على صاحب الصداع يُدار تحديد حول الرأس، سَكَنَ الصداع. وإذا تبخّر بالشعر، نفع من النسيان.

¹ According to the table of abbreviations at the beginning of the treatise, the sigla «ط» should stand for ARISTOTLE («أرسطوطالس»), but nothing like this is to be found in either version of *Nat*. On the other hand, as tempting as it might be to suspect that, at least in this instance, the abbreviation may have been used to represent rather Αἰθῦρος, the fact is that he is not included in the list of authorities and he is actually never mentioned in the text. Other possible candidates might be SUQRĀṬIS (= «طس») or RAHMĀṬŪS (= «طو») and perhaps one should not disregard too hastily the obvious AṬṬABARĪ even if the sigla assigned to him there is «بي».

² The same effect is ascribed then to the gall of partridges, the gall and brains of cranes, bear fat, and a hyena's paws (the latter three have been mentioned in the introduction to this section). I could not locate the passage in ZUHR's *Ḥawāṣṣ* and the wording does not suggest that it might also derive from the tradition of ³ *Ḥawāṣṣ*.

With regard to late encyclopaedic compilations, ALQAZWĪNĪ draws the same property probably from *Firdaws*, with a slight reshaping of the passage:

Ṣaḡāʾib II KĀʾINĀT II.3.1.1.6 إنسان (W 365₂₇)

شعر إنسان — [...] ولو تُدخّن به، نفع من النسيان.

تُدخّن [يدخن] W.

On a side note, the absence of this particular anti-amnesic property of human hair from the two main zootherapeutic treatises in the Islamicate tradition (namely IBN ṢALĪ's and IBN BUḤTĪŠŪ'Y's) is all the more remarkable given that both include cognate passages on its other properties.¹ A thorough research of the implications of such absences would be most desirable in order to clarify the relations between *Firdaws* and the *Ḥayawān* tradition, which seem to reflect close cognacy (and therefore the pre-existence of an already quite elaborate zootherapeutic tradition with at least one comprehensive text) rather than actual dependence.

Canonical medicine

Interestingly enough, a parallel use of burnt human hair in an ointment against oblivion is documented also in non-ḥawāṣṣic therapeutical literature. It is found, precisely alongside castoreum, among several remedies commended by PSEUDO-TĀBIT for the treatment of *sirsām bārid-lītarǧis* (which is not explicitly identified as oblivion here):

Dahīrah XXVI.5 (S 156₁₅₋₁₇)

ويطلى على جباههم بجندبيدستر أو بشعر إنسان محروق مديف بشيء من خلّ، ويطلى الشفتين واللسان بعسلٍ مديفٍ بخلّ الاسقال، أو يضمّد أفخاذهم وسوقهم باسقال مسحوقٍ معجونٍ بخلّ.

A combination (أو instead of و) of castoreum and burnt human hair against oblivion (now with an explicitly interpretation of *lītarǧis* as *nisyān* in the title of the chapter) is prescribed by IBN ALĠAZZĀR too:

Zād I.14 (وهو النسيان) في لِيثرغيس (B-K 136₁₂₋₁₃ | T 100₁₋₂)

أو يطلّى بجندبادستر وشعر إنسان محرق بعد أن يُعجن بخلّ.

¹ Cf. hanging human hair against migraine and soaking it in vinegar then placing it on the bite of a rabid dog in IBN ṢALĪ, *Ḥayawān* [1.7–8] (R 8), as well smoking with it for a swollen womb in *Ḥayawān* C [1.15] (R 12).

Origin

It may be worth noting that PLINY transmits several medical benefits of human hair that are remarkably parallel to the sequence documented in the Islamicate tradition. However the passage does not include any mention of oblivion or any other brain malady:

Naturalis historia XXVIII.4.[9] (J–M IV 29⁰¹⁻⁶)

Capillus puero qui primum decisis est, podagrae inpetus dicitur levare circumligatus; et in totum inpubium inpositus, virorum quoque, capillus canis morsibus medetur ex aceto et capitum volneribus ex oleo aut vino; si credimus, e revulso cruci quartanis, combustus utique capillus carcinomati.

The closest thing to an actual precedent for our passage is provided by ALEXANDER OF TRALLES, who prescribes *smearing* on the patient suffering from λήθαργος either some castoreum or burnt human hair beaten up with vinegar. He further explains the healing power of these remedies to some antipathy. The passage is preserved in Arabic in an abridging paraphrase recorded by ARRĀZĪ:

Therapeutica I.XIV Περὶ ληθάργου
P I 529²¹–531³

μάλιστα δὲ τοῦτο ποιεῖ τὸ ὀχυρρό-
δινον ἰσχυροποιοῦν τὴν κεφαλὴν καὶ
μάλιστ' ἀρχομένου τοῦ πάθους [...]
ἐπεὶ οὖν ἡ περιεχομένη περὶ τὸν ἐγ-
κέφαλον ὕλη φλεγματικὴ ἐστὶ καὶ
τὸ πλεονάζον αἷτιον ὑγρὸν ἀπεδείχθη
καὶ ψυχρὸν, μὴ γνῆναι χρὴ καὶ συνέ-
ψιν τῷ ὄξυρροδίνῳ καὶ τῷ λεπτόνῳ
ἄμα δυναμένων, ὅσον ἢ πευκεδάνου
ἢ καστορίου ἢ γλήχωνος ἢ καλαμίν-
θης ἢ θύμου, καὶ ἐπιχρίειν τὸ μέτωπον
ἢ καστορίῳ ἢ τριζὶ κεκαυμέναις ἀν-
θρωπέαις καὶ λειωθείσαις μετ' ὄξους.
πάνυ γὰρ ὀφελεῖ καὶ διεγείρει τὰ τοι-
αῦτα ἴσως δὲ καὶ ἀντιπαθεῖα τινί.

Alḥāwī I.XIX في ليثغس وقرانطس وقاطوخوس
H I 189¹⁶⁻¹⁸

الإسكندر قال: «خيرُ علاج ليثغس
— خلّ خميرٍ ودهن ورد، يُضربان ويوضع
على الرأس.

وإن كان البلغم باردًا،

فليجعل معه طبيخ الفوتنج والجندبادستر،

وليتنطل جبهته بالجندبادستر وبشعر إنسانٍ
محرّق.»

Furthermore, this ingredient features already in the list of substances to be *burnt* for the treatment of λήθαργος by ASCLEPIADES OF BITHYNIA in his first book on the acute diseases:

CAELIUS AURELIANUS, *Cel. pass.* II.IX (B 152₂₀₋₂₂)

iubet etiam ea adhiberi, quae epilepticis uel matrice praefocatis adhibuit odoranda, hoc est lanam uel capillos aut cerui cornu uel galbanum carbonibus imposita, et omnia, quae caput grauare ualent uel iniucunda sunt odoranti.

Incidentally, the use of castoreum against λήθαργος (as in *Sag-3/Nisy-4*) and other conditions of the brain had been indeed already supported by the canonising authority of GALEN,¹ who actually echoed a practice established by previous authors.²

¹ Cf. the long and characteristically verbose passage in *Meth. med.* XIII.XXI (K X 931₈–932₃), an abridging paraphrase of which is found in ARRĀZĪ, *Alhāwī* I.IX (H I 192₆₋₁₇). The same treatment is adhered to, with diverse expansions (none of which includes, however, the use of burnt hair) by PAUL OF AEGINA in *Pragmateia* III.IX Θεραπεία ληθάργου (H I 147₂₅–148₃₃), whereas AETIUS OF AMIDA draws his therapy rather from ARCHIGENES and POSIDONIUS, cf. *Iatrica* VI.3 Περὶ ληθάργου (O I 129₁₆–131₁₅).

² Especially by HERACLIDES OF TARENTUM (*fl.* probably during the 3rd or 2nd c. BCE), who already prescribed shaving the head and anointing it with castoreum and hogweed (σφονδύλιον / σπονδύλιον, probably *Heracleum sphondylium* L., also known as ‘cow-parsnip’) mixed with vinegar and old oil, as well as perfuming the patient with the same ingredients, cf. CAELIUS AURELIANUS, *Cel. pass.* II.IX (B 162₁₈₋₁₉|26–27). A virtually identical recommendation is made, with a few additions, by ASCLEPIADES OF BITHYNIA in *Accut. pass.* I as transmitted, not without some harsh criticism, by CAELIUS himself a few paragraphs before in the same chapter (B 152₁₆₋₂₀).

II.IV.4 He said: «If he who that suffers from oblivion eats bats regularly, he shall go back to remembering, his forgetfulness shall diminish, and his memory shall grow stronger.»

Cognates

There is no parallel quote in *Saḡullōt–Nisyōnōt*, nor have I been able to link this passage either directly or indirectly to ARRĀZĪ's output.¹ The most evident conclusion would be that the quotation is merely an implicit ghost-quote (not even a genuine ghost-quote, as the name of the source does not precede the utterance). However, in his quasi-ḥawāṣṣic compendium IBN ALBAYṬĀR transmits a passage that he also ascribes to ARRĀZĪ and which is virtually identical to the one under consideration here:

Almuḡnī I.11 المزیة فی الدماغ والعقل، المخذة للذهن، النافعة من النسيان

L 25v 9–10 | M 15r 12–13 | P² 24r 4–5

الحفّاش — من خواص الرانري: «إن أدمن آكله، كان حافظًا وقلّ نسيانه وجاد حفظه.»

The most plausible inference to draw from these two peripheral and quite likely related quotations is not, of course, that ARRĀZĪ's original *Ḥawāṣṣ* must have included such an otherwise unattested passage in its entry for bats. It is far more plausible to suppose rather that IBN ALBAYṬĀR borrowed the passage, together with its (mis)ascription, from the original *Iktifāʾ*? or from some other member of this family. In fact, ALMADĀʿINĪ also includes this passage and perhaps the original unabridged version of his treatise transmitted an explicit ascription:

Ḥawāṣṣ II.6 (M 320_{17–18})

قال: «ومن آكل حفّاشًا، عاد حافظًا وقلّ نسيانه وجاد حفظه.»

¹ It certainly does not stem from *Ḥawāṣṣ* as transmitted by any of the manuscripts consulted: the three passages collected in *Ḥawāṣṣ* 4–خفّاش (I 87r 13–17) describe the bat as an antihypnotic (from the *Roman Physica*), an antihypnotic and an aphrodisiac (from ATHURUSFUS), and a locust repellent (from QUSṬUS' *Filāḥah*). On the other hand, nothing resembling an anti-amnesic effect is attributed to bats in the whole *Alḥāwī*, either in the pharmacognostical section XX [290] خفّاش (H XX 377–378* | B 3046_{2–8}) or elsewhere. The Latin *Sexaginta*, in turn, does not even contain a lemma **De vespertilione*.

Source

Regardless of the problematic attribution of the quote (which in this regard is reminiscent of *Nat-1*), the virtue of bat flesh against oblivion is actually well documented in the zootherapeutic genre since at least the 9th c.:¹

IBN ʿALĪ, *Ḥayawān* [53.27] خَفَاش (R 352)

A	C
<p>مَنْ أَرَادَ أَنْ يَحْفَظَ وَيَقْلَ نَسْيَانَهُ، فَيَأْكُلِ الْخَفَاشَ مَطْبُوعًا — فَإِنَّهُ يُقْوِي الْحَفْظَ، وَيَقْلَ نَسْيَانَهُ بِإِذْنِ اللَّهِ تَعَالَى.</p>	<p>من اراد ان يجود الحفظ ويقل نسيانه فاليكل خفافيشا مشوية. C^c</p>
<p>يُقْوِي ... [تعالى] يزيد في الذهن ويُقْوِي الحفظ ويذكر ويطرده النسيان .B</p>	<p>من أكل خفاشا مشويا جاد حفظه لكل شيء ونقل نسيانه.</p>

Despite a quite different syntactic structure and some significant divergences in their elements (*Ḥayawān* explicitly prescribes the bats to be cooked or roasted while making no recommendation to eat them regularly), some level of genetic affiliation between ^α*Ḥawāṣṣ* and IBN ʿALĪ's text is most evident in the shared collocation «وَقْلَ نَسْيَانَهُ وَجَادَ حَفْظَهُ» (cf. «أَنْ يَجُودَ الْحَفْظَ وَيَقْلَ نَسْيَانَهُ» in *Natāʿiḡ*).

Essentially the same contents are transmitted in an abridged version also in IBN BUḤTĪŠŪʿ with three minimal variations in the individual manuscripts that illustrate quite well the protean nature of this kind of texts. On the one hand, manuscript G of *Ḥayawān* aligns with the anonymous *Naṣīʿ* against manuscript Q, whereas the passage copied by ALMAWṢILĪ shows elements from both versions. All witnesses leave unmentioned whether the bat must be boiled or roasted (and in this they coincide with ^α*Ḥawāṣṣ*) while they all contain a one-verb apodosis (unlike both ^α*Ḥawāṣṣ* and IBN ʿALĪ):²

¹ Let it be recalled that the text of version C of *Ḥayawān* is given here exactly as edited by RAGGETTI, with all its idiosyncratic features, both linguistic (eg the non-diptotic use of خفافيش here) and clerical.

² The Persian translation appears to have reinterpreted the apodosis by substituting “intelligence” or “ingenuity” (as reflected in the choice of the adjective *zirak* for “memory”, unless its Vorlage was closer to manuscript B of IBN ʿALĪ, *Ḥayawān* A (which includes «يزيد في الذهن»)). On the other hand and with regard to *Naṣīʿ*, this virtue is not included amongst the several medical benefits mentioned in *Naṣīʿ* II.51 نعت الخفّاش (T 91r 3-10) and therefore it seems that it should be considered “IBN BUḤTĪŠŪʿ material”.

Ḥayawān VI.12 (وهو الخفّاش) الوطواط

G 183₆₋₇

Q 91v 8-9

≡ *Naft* s.l. منافع الخفّاش (L 59v 5-6)

وإن أكل لحم خفّاش، زاد حفظه. وَمَنْ أَكَلَ خَفَّاشًا، جَادَ حِفْظُهُ.

ALMAWŞILĪ, *Manāfiḥ* VI.11 (وهو الخفّاش) الوطواط (E 110v 10-11)

ومن أكل لحم خفّاش، جاد حفظه.

Manāfeḥ-e ḥayawān II.74 منافعه و خواصه و منافع الخفّاش و القول في ذكر الخفّاش و خواصه و منافعه (R 157₆₋₇)

واگر تمامی شپیرک را بچت کردانند و بخورند، زیرک گردند.

A closer parallel to our passage is however provided by ALMARWAZĪ, whose text includes a two-verb apodosis and features the verb *أدمن* in the protasis:¹

Ḥayawān III.52 خفّاش (C 198r 13 | D 176v 21 | L 139r 2)

مَنْ أَدْمَنَ أَكَلَ الْخَفَّاشَ، جَادَ حِفْظُهُ وَقَلَّ نَسْيَانُهُ.

الخفّاش [الحشاف | D جاد] حاد، D، حادّ CL.

All in all, this ARRĀZĪ-ascribed passage represents quite typically the kind of complex interconnectedness that obtains between any two given texts within the network of *Ḥayawān* and *Ḥayawān*-related treatises. Most—if not all—of the elements of the quote can be found in several other texts, but only separately, so that none of the witnesses offers an exact match for *Natāʾiġ-Ḥawāṣṣ*. By the principles of stemmatics and cladistics, these conjunctive and disjunctive traits (synapomorphies and autapomorphies) are enough evidence to class those texts into separate taxa.

¹ The epigraph in manuscripts CL includes a Persian gloss «وهو شپیرک» (that is شپیرک *šabparak* 'night-wing', which still coexists in modern Persian with a younger form شبیره), for which see above شپیرک in *Manāfeḥ-e ḥayawān*. It is to be found perhaps also in ALMAĠŪSĪ, *Kāmil* II.11.52₇: «بول الحشاف (وهو السررق)» (S II.1 19₁₀, unpointed in the manuscript), where the gloss refers probably to the animal rather than to the product. The word is of transparent etymology (cf. Arabic طير الليل), although the compound as such is not attested in Pahlavi; cf. VULLERS, *LPLE* 403a (and an apomorphic reading or otherwise genuine alternative denomination in VULLERS, *LPLE* 402a s.v. شب بازه). Curiously enough the copy made by the author's anonymous pupil (that is MS D) lacks the Persian synonym and reads rather «الحشاف», this fairly widespread metathetical form being actually the dominant one there throughout the entry. Incidentally, ALBĪRŪNĪ, who also knows the Arabic methatetical form, does not mention any Persian name for this animal in *Šaydanah* 46 (S 183₃₋₅).

Origin

It seems that no help can be gathered from the Hellenistic tradition. The report on this virtue is assuredly not Dioscoridean (there is no lemma for bats in his *Materia medica*), nor does it come from GALEN, who only mentions in a critical vein XENOCRATES' praise of bat blood as a psilothric. Further non-medical uses of bats are noted down in *Cyranides* II.28 (see below *Nat* II.v) but nowhere is memory mentioned.

Remarks

Although in *Natāʿiğ* (and quite plausibly already in ^a*Hawāṣṣ*) the bat is referred to invariably as خَفَّاش *ḥuffāš*,¹ this mammal was also widely known in Arabic as وَطَوَاط *waṭwāṭ*, which some held to be its "literary name".² In Andalus both names were known to physicians.³ The knowledge of its Persian name (*šabparak* / *šab-parah*), on the other hand, was probably limited to the eastern region, while some local synonyms are impressionistic and may reflect non-Arabic linguistic influences.⁴

On a side note, a prohibition to kill bats (as well as frogs) is established in the Islamic tradition, since bats were said to have been commissioned to take water from the sea with which to quench the fire in Jerusalem.⁵ This legal tradition

¹ The name has its origin in the defect of vision designed as *ḥafš* by the Arabs and from which this flying creature was said to suffer (cf. IBN MANDŪR, *Lisān* VI 299a 6–7 s.r. خَفَش √); for the pattern, compare it with خَطَّاف *ḥuṭṭāf* 'swallow'. Incidentally, it is unclear whether the partial confusion of *ḥuffāš* and *ḥuṭṭāf* in the written tradition goes back in all cases to a misidentification of Syriac ܚܘܦܦܫ (as suggested for the Arabic translation of PSEUDO-GALEN's *Ad Pis.* IX.9 by RICHTER-BERNBURG 1969: 15; cf. also PAYNE SMITH, *Thesaurus* 2668 s.v. ܚܘܦܦܫ). A quite common metathetical variant *ḥuṣṣāf* has been mentioned above.

² Cf. ATTAWḤĪDĪ, *Imtāʿ* 10 (A–Z I 160₉), but he also uses الخَفَّاش in *Imtāʿ* 10–12 (A–Z I 177₈, 191). According to ALBĪRŪNĪ, however, the *waṭwāṭ* is either a species of *ḥuffāš* or, as some claimed, a black long-winged swallow living on the mountains, cf. *Šaydanah* 46 خَفَّاش (S 183_{3–4}).

³ For example ALHĀŠIMĪ, when reproducing a dialogue with his master ATTAYMĪ, refers to bat blood as «دم الوطواط» in *Mağālis* I.1.18 (K 37₃) and IBN ALBAYṬĀR enters the bat as خَفَّاش then glosses it as «وهو الوطواط» in *Ġāmiʿ* 79 (B II 65₉). As for lexicography, both the *Vocabulista in Arabico* and the Leiden Glossary record وَطَوَاط as the name of the bat (cf. CORRIENTE, *DAA* 567a *{WṬWṬ}) but only the former includes a lemma for خَفَّاش (whereas PEDRO OF ALCALÁ omits both names).

⁴ Names such as 'night-mouse' (فَأر الليل) and 'air-mouse' (فَأر الجو) are recorded by ALBĪRŪNĪ in *Šaydanah* 46 خَفَّاش (S 183₅). A synonym 'sparrow of Paradise' (عصفور الجنة) is used to gloss *ḥuffāš* by ALMADĀʿINĪ, who also affirms to have heard some people in the Mağrib call it «البقطرصة», cf. *Hawāṣṣ* II.12 (M 325_{10–11}). A possible explanation for this western synonym has been proposed above in Chapter 1.

⁵ Both ADDASTAWĀNĪ and IBN SALMAH transmitted this story from the same *isnād* (namely from

does not seem, however, to have had any actual effect on the inclusion of bats in the inherited materia medica all over the Islamicate world.¹

QATĀDAH from ZURĀRAH B. AWFĀ from ṢABDULLĀH B. ṢUMAR) according to ALĠĀḤID, *Ḥayawān* III 537⁸⁻¹⁰ and again 538¹⁻⁴. I could not find any such report in ḥadīṭic sources but ADDAMĪRĪ also echoes a saying from ABULḤUWAYRĪṬ according to which MUḤAMMAD would have prohibited killing bats, as well as an anonymous reference to bats during the destruction of the Temple, cf. *Ḥayawān* [288] الحَفَّاشُ (§ II 288⁶⁻⁹). The above mentioned confusion between bats and swallows seems to show also here to some degree with parallel traditions featuring both animals, cf. ADDAMĪRĪ, *Ḥayawān* [286] الحُطَّافُ (§ II 224¹²–225¹¹; and 229⁶⁻⁷ for a quotation from ALBATĀLYAWSĪ, who considered خَطَّافٌ one of the names of the حَفَّاشُ). In the Islamic exegetical tradition, furthermore, bats are identified as the flying creatures (طَيْرٌ) that JESUS would have created from clay and animated according to Q 3:49 a sign echoed, for example, by ALQAZWĪNĪ in *Ṣaġāʾib* II KĀʾINĀT II.III.6 حَفَّاشٌ (W 411²⁹–412²).

¹ The therapeutic use of bats is indeed shared by many human communities all over the planet, as shown by an ethnomedical survey in RICCUCCI 2012.

4.2 Nat II.v—On sleep and wake

IBN ALHAYṬAM, *Saḡullōt* II.v בשינה ובחטירה (L–M 302_{7–27}) || PSEUDO-ABENEZRA, *Nisyōnōt* II.v בשינה ובחטירה (L–M 164_{6–168₂}) || *Hārūniyyah* II.II.1 (وهو النخير) وللغيط (G 325_{7–10}) || ALMADĀṬINĪ, *Hawāṣṣ* II.6 (M 320_{11–13}, 323_{11–13}).

Nat–1 human tooth or hoopoe wing bone | *Nat*–2 dirt from a donkey’s ear | *Nat*–3 iron filings.

Cognates

The contents of this chapter are remarkably dissimilar in *Iktifāʿ* and *Natāʾiḡ* both in quantity (*Saḡullōt* transmits a total of nine passages, three times as many as our text) and in quality, as there is no coincidence at all in the choice of passages. Despite this divergence, there is probably nothing in IBN ALHAYṬAM’s text that suggests anything else than differential selection: the sources are the ones regularly quoted throughout, and phraseology is essentially identical to that of the remaining sections. The intriguing passage *Saḡ*–8 is nevertheless very much of a crux and requires further scrutiny.

The chapter opens in both *Saḡullōt* and *Nisyōnōt* with (PSEUDO-)ARISTOTLE on the opposite properties of two different stones: *Saḡ*–1 quotes him on the apotropaic virtue of the bezoar stone («ابن بوهار») when set in a ring,¹ then

¹ According to our text, “whoever wears a ring made of a bezoar stone weighting as much as twenty grains of barley shall not see any frightening thing in his sleep”. The passage (which is transmitted also by *Nisyōnōt*^A) does not match anything in PSEUDO-ARISTOTLE, *Aḡḡār*^R [8] حجر البازهر (R 104_{17–105₁₁}) or *Aḡḡār*^T [9] نعت حجر البازهر (I 118_{6–119₁₄}), nor in the two Latin translations published hitherto. In all four texts only the stone’s alexipharmic agency is mentioned from which it derives its name (ie Pahlavi *pād-zahr*, Arabised alternatively as *bād-zahr* or *fād-zahr* with their respective variations). However the text that I have labelled provisionally as *Aḡḡār*^B [8] حجر البازهر mentions a certain stone found in the bellies of cocks that, when hung on a madman, can heal him; when on a youth, it does not only augment his libido and sexual stamina but also «وطرد الشيطان، ودفع الفزع العارض للصبيان في نوم» (W 41_r 12–15). A different version of the same passage is transmitted anonymously by ALQAZWĪNĪ, who mentions epilepsy rather than madness, commends its virtue as an aphrodisiac and as an apotropaic against evil eye when hung from a grown person, and then adds: «ويترك تحت رأس الصبي: لا يفزع في نومه» in *ṣaḡāʾib* II KĀʾINĀT I.2,37 حجر الدجاج (W 218_{5–7}). Nevertheless, despite this partial coincidence, it is quite likely that the stone originally alluded to here may have actually been the garnet (*biḡādi*) as found in *Aḡḡār*^R [4] نعت حجر [5] «من تختم بوزن عشرين شعيرة منه، لم ير في منامه أحلام سوء» = حجر البجادي [...] «أحلاماً رديئة مفزعة — وهذه خاصيته» (I 114_{3–4}), the latter being closer both to our passage and to the versions quoted by ALQAZWĪNĪ, *ṣaḡāʾib* II KĀʾINĀT I.2,13 ييجاذق (W 214₃) and anonymously by ALĠĀFIQĪ, *Mufradah* ب–69 برادي (M 96_r 15–16 | Ṭ 157_{7–8}) and thence by IBN ALBAYṬĀR, *Almuḡni* I.15 المانعة للأحلام الرديئة s.v. حجر البجادي (L 31_r 2–3 «البنادي» | P¹ 15_r 19–20 «البرادي» | P² 28_v 8–9 «البنادي») — where one ought to read –ز– (ie البرادي) as shown by its Latin translation *Simplicia* I–4 *iergoncius–iacinctus–bizedi* (V 74_{rb} 37–41); cf. also «حجر البرادي» in the prologue of IBN WĀFID,

Saġ-2 describes the fearful consequences of wearing (without further specification as to how or where) an onyx stone («אבן אלניע»¹).

There follows *Saġ*-3, which gives instructions for hanging the head of a bat (קפאש, glossed as «עטלף») from someone's neck and is said to have been taken from a certain *Book of Animals* («ספר בי"ח»²). No other authority is mentioned down to *Saġ*-9, subsequent passages being introduced by iterative connectors («ובו גם כן... ובו עוד...»). Within this apparent series, according to *Saġ*-4 placing a human tooth or a burnt human bone under a pillow prevents the sleeping person from awaking for as long as it lies there.³ In a similar vein, in *Saġ*-5 monkey hair is placed under the head of sleeping persons with the result that they shall not wake and that they shall see horrible and frightening things.⁴ Since a mere

Mufradah (A 238), the actual entry being preserved only in translation, cf. *Liber Serapionis* [389] *hager albuzedi-lapis rubeus* (A 263₆₋₇ | P 168rb 4-8) ≡ Catalan *LMP* s.v. *iergunça* (F 165₁₇₋₁₈). For the time being I dare not venture to suggest at which stage of the transmission this apomorphy may have emerged and whether it was introduced by the compiler of ^a*Hawāṣṣ* or rather by the translator of *Iktifāʿ*. As always, cf. KĀS 2010: 299-306 for a thorough concordance and a detailed survey of the bezoar in Arabo-Islamic pharmacognosics; as for garnet-*biġādī*, cf. KĀS 2010: 309-313.

¹ The bearers of such a stone shall feel anguished and see terrible things in their sleep, which certainly echoes *Aḥġār*^R [6] الحجر الحزق = سجر الحزق «وممن تختم به، كثرت همومه ويرى أحلاماً رديئة» (R103₉₋₁₀)—see below the commentary to *Nat* III.vi.2 for an extensive collation and analysis of this pseudo-Aristotelian passage. The Arabo-Hebrew name of the stone is explained in *Nisy*^A as “the stone that clouds drop down at the time of lightning”, at which point Hebrew «ברק» is glossed as «ראיו» in the Sefaradi tongue (ie Castilian *rayo*), «סייטה» in Roman («בלשון רומי»), which would appear to be Italian *saetta*, and also plain Hebrew «חץ» ‘arrow’. The reader shall find the concordance and analysis of the onyx stone in KĀS 2010: 380-383.

² The two Hebrew texts differ slightly in their apodoses: while *Saġ* affirms with *Nisy*^A that doing so prevents from sleeping, *Nisy*^N rather interprets that it heals from lethargy («חולי השינה»), glossed as «אליטארניאה», ie *letargia*, in vernacular). This virtue is well documented, indeed, in the zootherapeutic tradition, cf. IBN ʿALĪ, *Ḥayawān* [53.1] (R 344); also IBN BUḤTĪŠŪṢ, *Ḥayawān* VI.12 (وهو الخفاش) (وهو الخفاش) (G 179₆₋₈), which is quoted below in the typological remarks to this section. Outside the *Ḥayawān* genre, a matching quasi-duplicate passage is transmitted also in ARRĀZĪ, *Hawāṣṣ* 4-خفاش on the antihypnotic virtue of hanging a bat head, separately from both the *Roman Physica* and ATHŪRSUFUS (T 110r 13-15).

³ It is here that *Nisy* introduces the authority of the *Book of animals*, while *Saġ* rather reinstates it («ובו גם כן»). For the possible origin and transmission of this passage, see below *Nat*-1.

⁴ The edited text «קדר» ought to be emended as «קרד» (ie قد), for which *Saġ* gives a Hebrew synonym that should also be read as «קון» rather than as «קון». The passage comes quite close to IBN ʿALĪ, *Ḥayawān* [35.2] in its fuller version C: «إذا أردت أن يستوحش الرجل في منامه مما يهوله، فاجعل تحت» (R 274). It is not included in IBN BUḤTĪŠŪṢ, *Ḥayawān* IV.11 (G 316-312₆), however, nor in the texts associated to it, but it reappears in ALQALĀNĪSĪ, *Aqrabādīn* XLIX s.v. (B 307₁₋₂), which is almost identical to IBN ʿALĪ, *Ḥayawān*^B. Some mistransmission seems to have obtained in its way to *Sexaginta XXII De simia*, where the exact same effect is attributed to a monkey's heart: «Et si cor simie supponatur [supperponatur A] capiti dormientis,

mention is made in *Səġ*-6 of a burial shroud needle or pin («מחט שתופרין בהם»), one must presume that the connector «וכן» implies that the same effect last mentioned should be attributed to it.¹ Then *Səġ*-7 shows how the left eye of a hedgehog can be fried in oil then instilled into the ear with a tube to induce sleep at once.²

On account of its contents *Səġ*-8, which is actually introduced by “Many have said”, does not share the same source since it deals with a certain *herb* of which *Səġullōt* only preserves the determinative «עשב» (followed by a blank) and the gloss «עשב במדריאוש» (ie *كبادريوس* < *χαμαίδρυς*), the Graeco-Arabic name of wall germander (*Teucrium chamaedrys* L.).³ That plant is affirmed here to chase away spirits («יגרש רוחות והשירים וזולתם») when placed in the sleeping room. Now, this passage (which is not included in *Nisyōnōt*) adds a new piece to the puzzle of the identification of *χαμαίδρυς* in the Islamicate west and even if the puzzle cannot be solved here, a few clues can be given for further research.

uidebit in sompniis res metum inferentes siluestres» (A 68rb 24–26 | V 107ra 45–46).

¹ I have been unable to find any match for this passage (which is not included in *Nisy*) in the Islamicate corpus. The same item, referred to by a very similar phrase («מחט שהפרו בו הכריכין»), features twice in a late and heterogeneous collection of Sefaradi origin contained in MS 340 of the First Firkovich Collection (cf. some samples in BLASCO and MAGDALENA 2007 and BLASCO 2009). There such a needle is recommended first at fol. 3v 17–19 to stop a woman from illicit intercourse («לאשה שלא תזנה»), then at fol. 15v 6–9 to induce laughter. On typological grounds, on the other hand, *Səġ*-6 can be compared to a passage recorded by ZUHR in which sprinkling *soil from the tomb* of some man or woman over the face of a sleeping person causes one not to wake “as long as it remains under his head”, which makes little sense and may be the result of a conflation, cf. *Ḥawāṣṣ* 1–1 إنسان (P 6v 5–6), which should probably be emended after “as long as it remains *over him*” in an explicit quote in IBN ALBAYṬĀR, *Almuġnī* I.12 (M 17r 16–17).

² A much longer passage is transmitted by *Hārūniyyah* I.xi.2 amongst the virtues of the common hedgehog: the right eye can be fried with sesame oil (*šuraġ*) and put into a copper vessel from which it may be taken to be used as a collyrium so that the user shall be able to see in the darkest night as if it were by daylight; the left one, in turn, when fried and put into a bottle or flask (*qārūrah*) and its substance is instilled into the ear through a probe, makes the patient sleep instantly (G 215_{18–20}). The recipes for both eyes are given separately (first the left eye, then the right one) by IBN ʿĀLĪ, *Ḥayawān* AC [38.10|13] (R 284), and in version C a bottle (*qārūrah*) is likewise mentioned, yet the preparation there requires rather olive oil (*zayt*). They are combined into a double passage (featuring sesame oil but no bottle) by IBN BUḤṬĪŠŪṢ, *Ḥayawān* IV.12 (G 314_{1–4}) and also by ZUHR, *Ḥawāṣṣ* 2–2 قنفذ (P 79r 4–8), the text of the latter being virtually identical in all details to the one found in the *Hārūniyyah*.

³ This phytonym actually entered Arabic in two different forms: as *كبادريوس* (with a less frequent but etymologically more correct variant *كبادروس*, cf. also Syriac ܟܘܒܪܝܘܫ and ܟܘܒܪܝܘܫ in PAYNE SMITH, *Thesaurus* 1661 and 1752, respectively) and also as *خبادريوس* (which reflects more closely Greek χ-).

First, *Səġ*–8 is a hapax in attributing such a property to the χαμαιδρῦς in the Graeco-Hellenistic (then Syro-Arabic) medical tradition,¹ but IBN SAMAGŪN has preserved an invaluable fragment in which IBN ALHAYTAM himself notes down that كادريوس corresponds to خادريوس in Greek, without any alternative identification nor any local synonym being mentioned.² Then, IBN ĞULĠUL in *Tafsīr* 3:92, after giving a correct interpretation of خادريوس as «بلوط الأرض» (Greek δρῦς was indeed usually understood to mean specifically ‘oak’) and a “Latin” synonym «البأطاله» (a typical hybrid Arabo-Romance diminutive), reports that the people of Saraqustāh called this plant «برتونفا».³ Essentially the same information is found also in the entry on كادريوس in IBN ĞULĠUL’s *Tiryāq*, where a common name «البرتوقه السرقسطية» is added at the end.⁴ This identification of كادريوس with the plant known locally as برتوقه / برتوقه is adhered to almost universally in the Andalusī pharmacognostic tradition.⁵

Now, on the lexical level, the Romance form recorded by Andalusī physicians has been understood to be the result of the mixing and intercontamination of the words *brettanica* (= βρεττανική) and *betonica* (> *bātūniqah* > *baltūniqah*),⁶

¹ Nothing even remotely similar to this is mentioned by DIOSCORIDES, *Mat. med.* 3:98 χαμαιδρῦς-χαμαιδρῦς-λιτόδρῦς (W II 110₇–111₉) ≡ *Haš* 3:95 خامدريس (P 72_v 17 – 73_r 1 | T 284₂₇–285₁₂), nor have I been able to find any other reference to this use of the plant in the corpus under survey.

² Cf. IBN SAMAGŪN, *Ġāmiʿ* كادريوس 33–ك (S II 112₈₋₁₁). The quote does not stem from *Iktifāʿ*? but plausibly from the same pharmacognostic treatise mentioned above in Chapter 1.

³ Cf. IBN ĞULĠUL, *Tafsīr* 3:92 (G 56₈–57₁ | D 101₂₋₃). This gloss was not copied on the margin of *Ḥašāʾiṣ* P 72_v, but there the marginal note for the preceding lemma on τεύκριν includes a synonym «برتوقه ثغرية» that is missing from the text of both editions of *Tafsīr* and which locates the phytonym in the same region.

⁴ Cf. IBN ĞULĠUL, *Tiryāq* 33₂₋₉, where the plant is described specifically as «حشيشة» (cf. *Səġ* «عشبة») rather than as «شجرة صغيرة» (≡ «θαμνίσκος») as in DIOSCORIDES. Two different quotations from IBN ĞULĠUL are collected by IBN SAMAGŪN in *Ġāmiʿ* II 112₁₂₋₂₁, the first of which overlaps for the most part (but not entirely) with *Tiryāq*, whereas the second one seems to reproduce some no longer extant text and actually criticises Andalusī physicians for having held the opinion that كادريوس was برتوقه! It is quite possible that the limitations (and the accidents) of the written transmission have introduced an apparent incoherence where originally maybe there was none: the Arabic bookish descendant of Greek βρεττανική and the Romandalusi reflection(s) of Latin *uettonica* / *betonica* may have been easier to distinguish in speech than they proved to be in writing.

⁵ Cf. particularly IBN ĠANĀḤ, *Talḥiṣ* [451], where the pertinent readings are very poorly transmitted by the unicum. The same identification of كادريوس with «برتوقه» in the Saraqustī dialect is supported by IBN WĀFID, *Mufradah* [176] كادريوس (A 235₄), which is mirrored in its translations, both Catalan *LMP* s.v. *camedarios-vetrònica* (F 98₃₈) and Hebrew *Mupradāt* s.v. כמאדריוס-ברטוניקה (P 35_r 19). Also IBN ŠĀLIḤ remarks that برتوقه refers sometimes to كادريوس (D 120₄). Further details on the diverse forms of this local phytonym (بَرْتُونْفَه / بَرْتُونْفَه / بَرْتُونْفَه) are provided in *ṣumdah* [980–982] (B–C–T 89₁₃–90₁₄), where the same identification with كادريوس is supported only to censor it as a mistake in *ṣumdah* [2586] (B–C–T 297₂₂₋₂₅).

and this contamination may have had a wider and earlier distribution judging from the form «برتوقة» with with MĀSARĠAWAYH apparently explained Arabic كادريوس in the east.¹

On the other hand, the origin of *Sag*-8 must be somehow genetically related to the tradition recorded by PSEUDO-MUSA in his monograph on the plant called in Latin *vettonica* (the betony, traditionally identified as *Betonica officinalis* L., syn. *Stachys officinalis*) and even more closely to the version thereof echoed in the interpolated Dioscorides in an addition precisely to *Materia medica* 4:2 βρεττανική, which in that version is actually entered as βεττονική and assigned a Roman synonym βεττόνικα.²

<i>De herba vettonica</i> 181–184 (H–S 11)	<i>MM</i> 4:2 βρεττανική (W III 170, n. 2)
Haec herba uettonica nascitur in pratis et in montibus, locis mundis et opacis circa frutices; animas hominum et corpora custodit, nocturnas ambulationes et loca sancta et busta, etiam uisus timendos et omnes res sanctas.	βεττονική γιννάται εις χορτοκόπια και όρεινους τόπους (και) καθαρους και ήμέρους περι τά γεννήματα· και ψύχας ανθρώπων και σώματα φυλλάττει, νυκτερινάς τε όδοιπορίας και τόπους επιβλαβείς και ύπνους χαλεπούς άντενεργεί και εις πάσαν ίασίν έστιν εύλογημένη.

It seems, therefore, that at least in Andalus phonetical resemblance, contamination, and defective bookish transmission conspired to bring about a complex homonymy by which DIOSCORIDES' χαμαίδρυς, κέστρον, and βρεττανική came to share an Arabic appellation (namely بنتوقة) and became partially or totally conflated in the mind of some authors.³ The question remains open, anyway, as to

⁶ Cf. CORRIENTE 2001: 123–124 s.v. *BONTÓRQA/O and especially the rich documentation brought together in BOS, KĀS, LÜBKE, and MENSCHING 2020: 619–621 when commenting upon IBN ĠĀNĀH, *Talḥiṣ* [451].

¹ Cf. IBN SAMĀĠŪN *Ġāmiṣ* II 112₂₁–113₂, where the manuscript reads «البروقه».

² This new synonymy would suggest that the contamination (or perhaps rather attraction) may have already obtained in Roman times. For the passage itself, cf. also PLINY, *NH* XXV.8.[46] on the plant called *uettonica* in Gallia, *serratula* in Italia, *cestros* and *psychrotrophon* in Greek, which: «*tantumque gloriae habet, ut domus, in qua sata sit, tuta existimetur a piaculis omnibus*» (J–M IV 144_{12–13}). A botanical description and several medical uses are recorded by DIOSCORIDES for κέστρον, also known indeed as ψυχρότροφον and which he states that Romans called βεττονική (ie *uettonica*), in *Mat. med.* 4:1 (W II 167₇–169₁₁) ≡ *Haṣ* 4:1 قسطن (P 80v 10 – 81r 13 | T 309₈–310₂₀). This plant is glossed by IBN ĠULĠUL in *Tafsīr* 34:1 as both «البتورقة» and «البطباط» (G 67₃, who edits «البتوقه» | D 120₃ has «البتورقة»), while for 4:2 براطينقى he gives a diminutive «برتونواله حلوة» (G 67₄ | D 120₇).

(1) which may have been the intermediary source for the passage, given that there seems not to be any additional Arabic witness to it; and (2) whether the identification of *vettonica* (the plant originally attributed with the apotropaic property) as *كادريوس* (the form in which it is referred to in *Iktifāʿ*) is to be ascribed to IBN ALHAYTAM, to his source the compiler of ^α*Hawāṣṣ*, or rather to an even earlier author.

Back to *Saḡullōt*, the chapter closes with ARRĀZĪ in *Saḡ*-9 on the opposite virtues of the eyes of a goose («אור»): the one that remains open and the one that is closed after being slaughtered.¹

As for the *Harūniyyah*, the brief epigraph in which three different sleep-related remedies are brought together is quite exceptional. It is not only dislocated (as most ḥawāṣṣic materials in that text) but also placed in Part II of the book. Only the mention of iron filings parallels the text of *Nat*-3, but the “stone of yellow alum” that must be periapted to the same effect (namely to prevent snoring) might be one of the idiosyncratic apomorphies of ^α*Hawāṣṣ*. In this particular case it is not a reflection of GALEN’s *χλωρός ἰασπις* (يشب > شب) but rather a misreading of *شبت* ‘dill’ in a quote from the Greek physician in ARRĀZĪ’s *Hawāṣṣ*.² Then the diamond signet that causes its wearer to have

³ On this confusion, cf. particularly the informative remark of IBN ṢĀLIḤ on 3:92 *كادريوس* (D 1014–1024), where he explains that the name *بنترقة* (or is it rather *كادريوس*?) refers to three different drugs. He mentions first *τεύκροισ*, then a similar aromatic plant that is also known also as *كادريوس صندلي* and for which a synonym *بنتوجه* but no Greek equivalent is provided, and finally the remedy called *بنتنقة* in Romance and *μυογάλη* in Greek. Cf. also the notes on the right margin of *Haṣāʾiṣ* P 80v to *Mat. med.* 4:1 *قسطن*: a minimal one (marked with a ح) in which a synonym «*بروتقه*» is added, then a longer one in which GALEN’s entry on *قسطن* is followed by an explanation according to which “it is known amongst us as «*البوطونقة المزة*», which is «*البنترقة*», that is «*العرار*» according to some transmitters. As for «*البنترقة*» and «*البنتنقه*», they are «*الكادريوس*»—all these being quasi-homophones («*أسماء متقاربة في اللفظ*») that refer to different plants as we have explained”.

¹ By an evident analogy the open eye, when worn on, causes to be awake, whereas the closed one brings sleep. Only by plunging the eyes into water can one ascertain which one is which (the hypnotic one is the one that sinks). The passage does quote ARRĀZĪ’s *Hawāṣṣ*, although the animal originally involved is not the goose (there is no entry for *اوز* / *اوز* there) but rather the owl in *Hawāṣṣ* *بومة* 3-ب = *بومة* 3-ب = *بومة* 3-ب: «*إن دُجحت البومة، بقيت إحدى عينيها مفتوحة والأخرى مغمضة: تجعلان تحت خائنين، وإن لبست المفتوحة، أسهرت*» (T 105r 5–7). In fact, the ghost word «*בומון*» that immediately follows «*בומון*» in *Saḡ* would be quite hard to explain if not as a reflection of a variant reading «*בומון*»*—and this is not the only time that the alternative reading in *Saḡ* proves to be the better one (as previously on the Judaic stone / snakestone). The cognate passage in *Sexaginta* XLII *De nocticula* (A 70rb 39–42 | V 108vb 4–6) can be safely ruled out as a source since there, unlike in *Hawāṣṣ*, the sinking test is not included.

² Cf. ARRĀZĪ, *Hawāṣṣ* *شبت* 2-ش (I 86v 6–8). This quote (allegedly from GALEN’s *Euporista*) makes the benefit of this operation extensive to sleep anxiety or fright, which explains why IBN ALHAYTAM selected it rather for the corresponding chapter in Section I, cf. *Saḡ* I.II.2 (L–M 301₂₋₃),

beautiful and clairvoyant dreams is a perfect typological parallel to *Səġ*-1.

It is possible that some of the apotropaic remedies transmitted in discontinuous sequences by ALMADĀʿINĪ might actually stem from two different chapters in the parent compilation, namely I.II on fright and II.v on sleep and wake. In any case and despite its meagreness, the testimony of his *Hawāṣṣ* can be considered instrumental given that it may confirm the identification of the stone in *Səġ*-1 as the cockerel stone (cf. *Hawāṣṣ* 320₁₁₋₁₃), it may actually disprove “alum” as an apomorphy of the parent compilation, for it seems to read rather the historically correct “dill” (شبت, cf. *Hawāṣṣ* 323₁₂₋₁₃),¹ and it could add two additional passages on analogous effects of a wolf’s eye and also of wolf teeth (cf. *Hawāṣṣ* 323₁₀₋₁₁)—if and only if, of course, these passages are to be considered as reflections of ^α*Hawāṣṣ* and not as borrowings from some parallel tradition.

Finally, the testimony of IBN ALBAYṬĀR’s *Almuġnī* is highly inconclusive. There is some reason to suspect that at least some of the passages collected in *Almuġnī* I.12–16 may be genetically related to the textual family of ^α*Hawāṣṣ* but evidence in this regard is much weaker than in other sections.

Remarks on typology

The compiler of *Nat* III appears not to have had much interest in this subject, since he selects just two hypnotics and one anti-snoring device from the wider array of passages available in his source. As seen above, in ^α*Hawāṣṣ* in addition to things that can induce sleep and those that make sleepless a number of other related matters were dealt with too, such as removing fear and nightmares, as well as causing them. This thematic spectrum matches fairly well the diversity of remedies available in the Helleno-Islamic corpus, which is conveniently systematised by IBN ALBAYṬĀR in a series of specific epigraphs in *Almuġnī*:

I.12	في جالبة النوم والسبات	M 16r 1 – 17r 23
I.13	الجالبة للسهر	M 17r 23 – 17v 21
I.14	الجالبة للأحلام الرديئة	M 17v 21 – 18r 9
I.15	المانعة للأحلام الرديئة	M 18r 9–17
I.16	في الفرع في النوم	M 18r 17 – 18v 17

where the reading «الليم» may represent a genuine synapomorphy, although this fairly frequent misreading might well be spontaneous and independent, see below a possible piece of evidence in this regard in ALMADĀʿINĪ. In any case, unlike in the case of *Səġ*, the qualification “yellow” in *Hār* confirms the authorial interpretation as the mineral (either jasper or alum).

¹ On the complex transmission of the original passage, see below at the end of this introduction.

There is, moreover, a non-negligible intersection with strictly medical literature, as sleep and wake are included amongst the *sex res non naturales* in canonical Helleno-Islamic dietetics.¹ Hereunder follows a brief anthology of passages from both the Hellenistic and the Islamicate corpora intended to provide some context for the quotations contained in this chapter.

Sleep

All the somniferous and antihypnotic elements described in *Natāʾiğ* as well as in *Iktifāʾ* are of animal origin, revealing a particular indebtedness to the *Ḥayawān* genre.² In this regard ḥawāṣṣic lore stands overall in strong contrast with the medical tradition, in which substances of plant origin are predominant as sleep aids.³ In *Ḥawāṣṣ*, in turn, a remarkable diversity of mammals and flying creatures (birds and bats) is represented.⁴

¹ A rich collection of quotes on this particular subject is gathered by ARRĀZĪ for *Alḥāwī* XXIII.4 in the form of the *ḥawāṣṣ* (H XXIII.1 119₃–171₅), where the diversity of means to induce sleep reflects a genuine medical interest.

² The sole exception being the needle mentioned in *Sāğ*–5, which is nevertheless an item that can be somehow categorised as “human” (since it is used to sew shrouds and its material is not specified) and as such it is found in the entry إنسان in ZUHR’s *Ḥawāṣṣ*. It is worth noting that there was a conspicuous mineral candidate to be borrowed but appears to have been disregarded by the anonymous compiler: PSEUDO-ARISTOTLE’s ‘hypnotic stone’ (الحجر الجالب للنوم), cf. *Aḥğār*^T [32] (I 139₁₄–140₆) ≡ *Aḥğār*^P [33] (R 114₁₆–115₂), which cannot be dissociated from the immediately following entry on the ‘antihypnotic stone’ (الحجر الذي ينفى النوم).

³ Suffice it to mention here the widely attested use of poppy (*Papaver somniferum* L., particularly in the form of opium), coriander (see the corresponding entry in the trophognostic chapter in *Nat* IV REGIMEN), mandrake, or lettuce, for example. All four feature in the recipes for opiates transmitted in our text in the *Damascus Supplements*. Another typical item of the narcotic stock is the metel nut (*ğawz mātal*, probably of Indian origin), which enters as the first ingredient one of those recipes and was actually known as the ‘narcotic nut’, cf. IBN ĠANĀḤ, *Talḥiṣ* [199] and the commentary thereon by its editors. A convenient catalogue of such sleep-inducing items of plant origin is provided by IBN ALBAYṬĀR in *Almuğnī* I.12 (M 16r 1 – 17r 4).

⁴ Other kinds of animals are also attested since Antiquity. Binding the left eye of a crab to a patient’s head features amongst the remedies commended *ad somnum* in the *Additamenta* to PSEUDO-THEODORUS II.2 (R 307₁₈), whereas an amulet made of stag leather and containing a combination of a crab’s eye and nightingale flesh was affirmed by KĪMĀS (ك) to make one sleepless according to ZUHR, *Ḥawāṣṣ* ببلل 4 (P 15r 8–10)—but the same quote is ascribed to AṬḤŪRUSFUS in ARRĀZĪ, *Ḥawāṣṣ* ببلل 9 (I 80r 10–11), and it is registered by PLINY in *NH* XXXII.10.[38] (J–M V 88_{12–14}) and also by AELIAN, *NA* I.43 (H 24_{14–15} | S I 64_{3–4}). Still another mollusc is referred to in the same locus in the additions to PSEUDO-THEODORUS, where instructions are provided to prepare a lamp made of an African shell to the same effect: «*Cocleam Africanam inanem (id est testam eius vacuum) quaeres et mittes in ea oleum et lychnum, et sic lucernam incendes, et nescienti aegroto sub lectum pones. Quamdiu arserit, ille dormiet*» (R 308_{9–13}). Further illustrations of an antihypnotic use of animal parts can be found collected by IBN ALBAYṬĀR in

The sympathies at work are in many cases obscure and they certainly imply a syncretic background no longer retrievable from the extant corpus.¹

Why is it, for instance, that the cuckoo's whole body but only the egret's beak were amuletised?² What explanation can be found for the persistent resort to the use of bird eyes in order to prevent someone (occasionally oneself) from sleeping? What stories circulated about the nightingale, beyond its universally acknowledged melodiousness, that made its eyes especially requested, as echoed, twice, in the *Cyranides*?

Kyranides I.5 E 21–23 (K 97)

Τῆς δὲ ἀηδόνας οἱ ὀφθαλμοὶ καὶ ἡ
καρδία περιεπτόμενοι ἐν κραβάτῳ
ἀϋπνοὺς ποιοῦσι τοὺς ἀνακειμένους.
ἐὰν δὲ τις λειώσας δώῃ τινὶ πιεῖν λά-
θρα, ἄπνους ἀποθανεῖται· λύσιν δὲ
οὐκ ἔχει.

Cyranides I.v (D 40₁₄–41)

Philomenae autem oculi et cor in
lectulo circumaptata insomnes te-
nent iacentes. Ut quis moriatur
somno: si quis enim ea solverit et
latenter in potu alicui dederit, nun-
quam dormiet sed ita morietur; so-
lutionem vero non habet.

Kyranides III.4 Περὶ ἀηδόνας 7–9 (K 195)

ἐὰν δὲ τοὺς ὀφθαλμοὺς ζώσης ἀφελῇ
τις καὶ περιάψῃ, ὁ φορῶν οὐδ' ἔλως
κοιμηθήσεται οὐδὲ ὕπνου εὖνοιαν
ἔξει, ἕως οὗ φορεῖ αὐτούς.

Cyranides III.4 *De lusciniā* (D 149₁₆–18)

Si quis oculos ei abstulerit eamque
vivam dimiserit eosque portaverit,
nullo modo dormiet neque dormi-
tabit usquequo portaverit eos.

If the bone from a hoopoe's wing was reported to possess a somniferous power (see *Nat*–1), how come its eye was credited with the opposite effect when used very much in the same way?³

Almuġnī I.13 (M 17v 2–12|20–221), including periapts made of or containing deer skin, wolf hair, the eyes of hoopoes crabs (twice) and bats, a bat's head, a bustard's heart, and a raven's gall.

¹ An explicit connection to the Magi is made explicit in the aforementioned passage in *NH* XXXII.10 and also in the report on the use of goat gall, either as a collyrium or placed under the pillow, in *PLINY, NH* XXVIII.19.[79] (J–M IV 365_{3–5}). On the other hand, an explicit analogy can be exceptionally pinpointed in the case of the seal (*vitulus*) in the same author. In a paragraph introduced by its description as «*nullum animal graviore somno premitur*», a sleep-inducing property is then attributed to its flippers: «*praeterea dextrae pinnae vim soporiferam inesse somnosque adlicere subditam capiti*», cf. *PLINY, NH* IX.13.[42] (I–M II 171_{17–18}).

² A hypnotic property of these two birds («*somnos adlicit*») is reported by *PLINY* in *NH* XXX.15.[48]: «*avis cuculus leporina pelle adalligatus, ardiolae rostrum in pelle asinina fronti adalligatum*» (M IV 471_{7–8}).

³ This is apparently the majority reading in the Islamicate tradition, whereas *IBN ʿALĪ, Ḥayawān*^A

IBN ʿALĪ, *Ḥayawān* C [49.2] الهدهد (R 320)

عينان الهدهد اذا علقتا على انسان او على سرير طفل فانه لا ينام حتى يزرعا عنه.

IBN BUḤTĪŠŪṢ, *Ḥayawān* VI.9 هدهد (G 168₄₋₆ | Q 87v 11-13)

≡ ALMAWṢILĪ, *Manāfiʿ* VI.9 هدهد (E 105r 7-8)

عين الهدهد — إذا أخذت العين اليمنى وشدّت في خرقة كتان وربطت الخرقة على سرير، فمن استلقى على ذلك السرير لم يَأْتِهِ النوم.

إذا ... العين] وان اخدت عينه Q | كتان] EQ - | الخرقة] EQ - | ذلك] Q - | يَأْتِيهِ] ياتيه Q، ناتييه E.

ṣaḡāʿib II KĀʿINĀT II.III.6,54 هدهد

W 426₁₁₋₁₂

عينه — تُجْعَلُ تحت رأس من أردت أن يغلب عليه السهر، فإنه لا ينام ما دام تحت رأسه.

ṣaḡāʿib s.v. هدهد

A 230v 5-6 | B 249r 1-2

بليناس كويد كه اكر چشم هدهد را در زير بالين كسي نهد، بيج نخبه مادام كه آن زير سر او باشد.

هدهدرا] هدهد A | نهد] بنهد A | باشد] بود A.

All these questions apply, of course, to much of the ḥawāṣṣic material that has been transmitted for centuries across cultural borders and, as seen above in Chapter 2, any attempt at finding an answer to them will necessitate a much more thorough analysis of the plurality of traditions reflected in the corpus.

The analogical connection between sleep (actually the lack thereof) and bats and owls, on the contrary, can be easily guessed at and it is no wonder that different organs of these two characteristically nocturnal creatures entered the most varied strategies to keep people from falling asleep. This use of bats is particularly well documented since Roman times in more or less standard reports that must be ultimately related to the amulet described in *Saḡ*-3:¹

PLINY, *NH* XXX.15.[48] (J-M IV 471₉₋₁₀)

e diverso somnum arcet vespertilionibus caput aridum adalligatum.

affirms it to avail against insomnia. Let it be noted, on the other hand, that the Persian translation ascribes this passage to BALĪNĀS.

¹ With regard to *Kyranides*, there is a quasi-duplicate of the first segment (ie on the head of the bat worn in a bracelet) that I cannot check against the Greek text but which in the Latin translation in *Cyranides* I.XVII reads: «*Similiter autem et caput nictæridis si abscideris viventis et ligaveris in pelle nigra et apposueris laevo brachio alicuius, nunquam dormiet donec auferatur ab eo*» (D 77₇₋₉). For Greek σκυτίς as the denomination of a leather container for amulets, cf. PANAYIOTOU 1990: 332.

<p><i>Kyranides</i> II.28 Περὶ νυκτερίδος K 160₅₋₈</p> <p>ἐὰν δὲ τὴν κεφαλὴν αὐτῆς ἐνθήσῃ εἰς σκυτίδα μέλαιναν καὶ περιάψῃ ἀριστερῶ βραχίονι, οὐ νυστάξῃ οὐδὲ κοιμάται ἕως οὗ φορεῖ αὐτό. Ἄλλὰ καὶ ἡ καρδία αὐτοῦ φορουμένη μεγίστην ἀγρυπνίαν ποιεῖ.</p>	<p><i>Cyranides</i> II.22 <i>De vesperilione</i> D 121₆₋₉</p> <p>Si quis autem caput eius cum panno nigro ad brachium dextrum ligaverit, non dormitabit neque dormiet usquequo portaverit ipsum; et cor eius gestatum magnam vigilantiam praestat.</p>
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A different version of this passage (one in which the bat head must be tied to the pillow) entered the Islamicate tradition from the Roman *Physica* through ARRĀZĪ's quotation therefrom:¹

Hawāṣṣ خفّاش 4- (I 87r 13-14 | Q 28₁₅₋₁₆ | T 110r 13-14)

قال في الطبيعيات الرومية: «إن شُدَّ رأس الخفّاش في مرفقة من يكثر النوم، سهر».

قال ... الرومية [في الطبيعيات الرومية قال Q | الرومية [الرومي I | في [على T | مرفقة [مرفق T.

Owls feature likewise in several passages of a certain complexity as far as the exact instructions for their use are concerned. To the reference to ARRĀZĪ adduced above regarding *Saḡ-9* one can still add the following one as an illustration of the textual fluidity of the tradition:²

ZUHR, *Hawāṣṣ* بومة 5- (C 9₁₅₋₁₇ | T 287₁₁₋₁₂)

إن البومة والبوم، إذا طُبخ، بقيت إحدى عينيه مفتوحةً والأخرى مغمضةً. فالمفتوحة، إذا جعلت تحت فِص خاتم؛ فمن لبسه، سهر ما دام عليه؛ والمغمضة، إذا جعلت تحت فِص خاتم؛ فمن لبسه، نام.

إن البومة والبوم - [C - | طُبخ] † ذبح | عينيه [عينها C | والأخرى [والآخر T.

¹ In view of *Kyranides* II.28 it is not impossible that the solitary reading «مرفق» 'elbow' (cf. Greek βραχίον 'arm') transmitted by manuscript T be the original one, but references to a pillow in this context are actually far from rare in the corpus. An apparently independent witness to this φυσικόν found in *Ṣaḡāʿib*, where ALQAZWĪNĪ has "If it [ie the bat's head] is left under someone's head, he shall not sleep at all", may actually be an idiosyncratic rewording of *Hawāṣṣ* given that the Persian translation «در زیر بالش» reflects a text that must have read "pillow", cf. *Ṣaḡāʿib* II KĀṢĪNĀT II.III.6.16 خفّاش (W 412₆₋₇) ≡ *Ṣaḡāʿib* s.v. خفّاش (A 221v 15-17 | B 239v 9-11).

² For *Ṣaḡāʿib*, cf. the Persian translation in *Ṣaḡāʿib* s.v. بومة (A 219v 6-8 | B 236v 19 - 237r 5).

ALQAZWĪNĪ, *Ṣaḡāʾib* II KĀʾINĀT II.III.6,8 بوم (W 408₁₇₋₂₁)

وذكروا أيضًا أن إحدى. عينيه منومة والأخرى مسهرة: من أراد أن يعرف ذلك، يلقبها في الماء، فالراسبة منومة والطافية مسهرة. فالمسهرة تجعل تحت خاتم: من تحتم به، لا يغلبه النوم؛ والمنومة تجعل تحت وسادة من أراد أن يغلب عليه النوم، فإنه لا ينتبه ما دامت تحت وسادته.

Ways of use

As for the methods involved, the most frequent way of use of the active elements is certainly as a periapt (usually a necklet, but bracelets are also attested)¹ to be worn by the patient. Even more logical (for there is, after all, a rationale behind all this practices) is the alternative requirement to place the element in the sleeping room,² to tie it to the bed, or to put it directly under the pillow³ or the sleeping person's head.⁴ Even instructions to stuff the patient's pillow are attested in a medicalised context:

ARRĀZĪ, *Alḥāwī* XXIII.4 في النوم واليقظة (H XXIII.1 145₃)

وإن حشيت مخدة بؤبر الأرنب ووُضعت تحت الرأس، أنامت.

The action can (and sometimes even must) be carried out unbeknownst to the patient,⁵ and in most cases the effect is confidently affirmed to last as long as the somniferous agent remains in place, which is also only logical given that its specific property is an intrinsically non-temporal one.

¹ Amulets to be hung from the neck are represented by *Saḡ*-3. In most other cases no part of the body is specified on which to hang the item.

² See *Saḡ*-8, the only plant mentioned in our subcorpus.

³ In addition to *Saḡ*-4, cf. the head and the heart of bats in ZUHR, *Ḥawāṣṣ* 5-خفّاش (P 31r 8-9). Also the hypnotic use of goat gall amongst the Magi according to the passage in *Pliny, NH* XXVIII.19 cited above. Let it be noted that in the Arabo-Islamic tradition some instances of "pillow" (مرفقة) can actually result from a mistransmission of "elbow" (مرفق), as in the passage on the bat quoted above from ARRĀZĪ's *Ḥawāṣṣ*.

⁴ As in *Nat*-1 and *Saḡ*-5|6. Also the burnt horn of a goat put into a linen cloth and placed under a sick person's head, without their knowing, in IBN ṢALĪ, *Ḥayawān* [22.21] الماعز (R 224) and IBN BUḤTĪŠŪṢ, *Ḥayawān* II.2 ماعز (G 29₂₋₄). Still in a medical context, TIYĀDŪQ prescribes placing some lichen or tree moss (أشننة) under an aching head, cf. ARRĀZĪ, *Alḥāwī* XXIII.4 في النوم واليقظة (H XXIII.1 144₉₋₁₀). Cf. likewise the addition of «*Lactucam integram mox uti de horto versaveris, non lotam ignorantī sub cervice pone*» to PSEUDO-THEODORUS II.2 (R 307₁₉₋₂₀), and even earlier the passage on the seal cited above from PLINY, *NH* IX.13.

⁵ As reflected in the adverbial expressions *ἀθροα* / وهو لا يعلم / *ignoranti* in some of the passages adduced here.

It may not be without interest to reproduce here a passage from the geponic genre that illustrates several of the aspects touched upon in the preceding paragraphs. On the one hand it reflects a purely medical(ised) context with an explicit reference to the patient (κάμνον ≡ مريض), on the other hand the instructions for the application of the remedy include certain elements that would perhaps be frowned upon by highbrow would-be rational physicians:

Eclogai XII.13,6|15 Περὶ θρίδακος
B 358₁₁₋₁₅, 359₁₂₋₁₆

ὑπνον ἐπιφέρει τοῖς μὲν ὑγιαίνουσιν
ἐσθιομένη, τοῖς δὲ νοσοῦσιν, ὑποπιθε-
μένη ἀγνοοῦσι, καὶ μάλιστα, εἴ τις τὴν
θρίδακα τῇ ἀριστερᾷ χειρὶ αὐτόρρι-
ζον πρὸ ἀνατολῆς ἡλίου λαβὼν ἐκ τῆς
γῆς θείῃ λάθρα ὑπὸ τὰ στρώματα τοῦ
κάμνοντος. [...]
καὶ αὐτὰ δὲ τὰ φύλλα τῆς θρίδακος ε'
ἢ γ' ἢ ἐν, ὑπνον ἐπάξει τῷ κάμνοντι,
τιθέμενα κρύφα ὑπὸ τὴν τύλην, ὥστε
τὰ μὲν ἀπεσπασμένα ἀπὸ τοῦ καυλοῦ
πρὸς τοὺς πόδας ὄραν, τὰ δὲ ἄνω βλε-
ποντα πρὸς τὴν κεφαλὴν.

Rūmīyyah VII.13 خَسَّ
M 267₅₋₆, 268₂₋₅

وإن وُضِعَ الخَسُّ تحت وسادة المريض
وطُلي وجهه بمائه، نام عن ذلك. [...].
وإذا عمدت إلى ثلاث ورقات أو خمس من
ورق الخس فوضعت تحت وساد المريض
ووضع تحت فراشه من عند رجله مثله، سرًا
لا يشعر به ذلك المريض، ويجعل الذي يوضع
منه تحت وسادة من أسفل الخس وورقه
وفروعه عند رجله — نام ذلك المريض
(بإذن الله نَوْمًا طَيِّبًا).

Snoring

The inclusion in the corpus of a few remedies against snoring is quite telling of the wide functional spectrum of ḥawāṣṣic lore and of its capability to offer not only an alternative (and usually cheaper) remedy to diseases and conditions already covered by conventional medicine but also a solution to everyday problems for which most physicians were of no help at all.¹ According to the corpus reflected by our texts, besides iron filings as prescribed in *Nat*-3 also dill and yellow alum (probably two branches going back to one original node) were reported to avail against snoring. Now, whereas the origin of the former passage

¹ Given that all passages explicitly mention sleep, I assume quite confidently that غطيط here refers indeed to snoring rather than to difficult and stertorous breathing as in HIPPOCRATES' *Fuṣūl* VI.51 (T 58₁₂ | B 18v 10), where it translates the verb ῥέγκω in *Aphor.* VI.51 (L IV 576₇). On a tangential note, the synonym نخير with which the word is glossed in *Hārūmīyyah* is quite a standard one, cf. «وَعَطَّ فِي نَوْمِهِ عَطِيطًا: نَخَرَ» in IBN MANḌŪR, *Lisān* VII 363a 14 s.r. √عطط, and also CORRIENTE, *DAA* 524a *{NXR(T)} for Andalus.

is uncertain,¹ the latter on dill/alum derives from the *Euporista*. To the passages from the *Hārūniyyah* and from ALMADĀZINĪ'S *Ḥawāṣṣ* mentioned before, one must add:

ALBĪRŪNĪ, *Ṣaydanah* شَب 10-ش (S 391₅₋₆)

≡ IBN ALBAYṬĀR, *Ġāmiʿ* شَب 16-ش (B III 54₂₋₃)

وقال في كتاب الأدوية الموجودة إته، إذا وُضع الشب تحت الوسادة، ذهب بالفرع والغطيط الكائن في النوم.

IBN ALBAYṬĀR, *Almuḡni* L16 في الفرع في النوم (L 31r 14 | P¹ 15v 8 | P² 29r 3-4)

الشب اليماني — إن جعل تحت الوسادة، أذهب الفرع والغطيط الكائن في النوم.

الشب [الشَب] السَّبْت | P² والغطيط] - L.

and most importantly the epicentre of the diffusion of this passage, namely AR-RĀZĪ'S *Ḥawāṣṣ*:²

Ḥawāṣṣ شَب 1-ش / شَبْت 2-ش (I 86v 6-8 | Q 26₁₉₋₂₀ | Ṭ 109v 10-11)

قال في كتاب الأدوية الموجودة في كل مكان إته، إن وُضع الشب تحت الوسادة، أذهب بالفرع والغطيط الكائن في النوم.

قال [وقال QṬ | في كل مكان] - Q | إن [إذا QṬ | الشب] [الوسادة] الراس او الوسادة .Ṭ

Moreover, *Ḥayawān* texts also record an identical virtue for horse teeth:

IBN ʿALĪ, *Ḥayawān* [16.15] الفرس (R 166)

B

C

إذا اردت ان تزيل الغطيط عن النائم ضع أسنان الفرس الفحل يُصير تحت رأس من يغطّ أسنان الفرس تحت رأسه. في منامه، فيذهب ذلك عنه.

¹ See below the commentary to *Nat-3*, where the pseudo-Aristotelian *Book of stones* is postulated as a plausible source.

² The two alternative readings are already present in the direct transmission of the text and MSS QṬ even omit the rubric for a new entry, which had become meaningless once the original item was transformed into the one mentioned in the immediately preceding lemma.

IBN BUḤTĪŠŪṢ, *Ḥayawān* II.7 فرس (G 91^s-6 | P 10r 9-10)

≡ ALMAWṢILĪ, *Manāfiṣ* II.7 خيل (E 19r 11-12)

أسنان الفرس — إذا صيرت تحت رأس من يغط في نومه، لم يغط.

الفرس [الفحل P، الفرس الفحل E].

This one is the version known to ALQAZWĪNĪ too:

ṣaġāʾib II KĀʾINĀT II.III.3,1 فرس

W 375³⁰-376¹

ṣaġāʾib s.v. اسپ

A 199v 4 | B 215r 9-11

[سنته] ويترك تحت رأس من يغط في نومته: يزول عنه ذلك. [ذمدان اسپ] واكر دزير سرکسي نمدکه در خواب غلط کند، آن ازوی زایل شود.

اسپ [او B].

But at quite an early date an apomorphy arose from the mistransmission of أسنان 'teeth' as لسان 'tongue'. This new reading seems to have sprung spontaneously more than once:¹

Naṣṭ^L II.7 منافع الخيل (L 143r 4-5)

لسان الفحل — إذا ترك تحت رأس من يغط في النوم، لم يغط.

ALMARWAZĪ, *Ḥayawān* II.10 في ذكر الخيل (C 105r 1 | D 93v 7-8 | L 43r 3-4)

لسان الفرس الفحل — يُجعل تحت رأس من يغط في منامه: يذهب عنه ذلك.

¹ Although the rubric is unreadable in the digital copy through which I have checked manuscript Q, the feminine concordance of the verb («وضعت») suggests that it may align with GP in reading Q rather than لسان (masculine). That the copyist of Q appears to have misread the word «يغط» and he ingenuously alters the apodosis trying to make some sense of the text, which in this new version reads: «تحت رأس من يخط، لم يفعل ذلك» (Q 21v 6-7). With regard to ALMARWAZĪ's text, the unanimity of the manuscripts confirms that he must have already found this alternative reading in his source, which most probably was a representative of branch C of IBN ʿALĪ's *Ḥayawān*, even if none of the extant witnesses shows it.

 Commentary

II.V.1 According to the books of animals: «If a man's tooth or a hoopoe's wing bone is put under a sleeping man's head, he shall not cease from his sleep until such things be taken off from under his head.»

Cognates

Leaving aside the fact that the text of *Nat*-1 should probably be emended to read a singular (that is *كتاب الحيوان*),¹ this passage must be originally related to the aforementioned sequence of quotations ascribed to a homonymous book in *Iktifāʿ* even if no exact match is to be found there. In IBN ALHAYTAM's text the choice of elements is between a human tooth or a *human* bone:

Saḡullōt II.V.4 (L-M 302₁₃₋₁₅)

ובספר ב"ח אמר שאם ישים שן אדם מת
או עצם תחת ראש הישן. לא יעור משנתו
עד שיוסר. לא יקוף עד שיוסר ממנו זה».

Nisyōnōt^N II.V.3 (L-M 164₉₋₁₁)

ובספר ב"ח אמר שאם ישים שן אדם מת
או עצם תחת ראש הישן. לא יעור משנתו
עד שיוסר.

Nisyōnōt^A

ובספר ב"ח אמר שאם יושם שן האדם או
עצם איש שרוף תחת ראש האיש הישן.
לא יסור שלא ישן עד שיוסר ממנו.

Let it be noted that only *Nisy*^N does specify that the tooth must be taken from a *dead* person, yet it omits that the human bone must be burnt. Besides, there may be a non-trivial difference in the apodoses between «לא יקוף» *Saḡ* ≅ «לא יעור» *Nisy*^N and «לא יסור שלא ישן» *Nisy*^A. I shall try to demonstrate below that at least some of these differences, as well as the missing link between these quasi-parallel passages in *Natāʿiḡ* and *Iktifāʿ*, may go back to their common source, which must have included two different and probably contiguous quotations from the *Book of animals* involving both a human tooth. Thence a single passage was retained in each text either by authorial selection or by a not unlikely

¹ The same plural appears in *Nat* VIII.VIII.2 too and also there the parallel passage in *Saḡullōt* shows a singular («ספר»). Although the specific (albeit diachronically vague) reference to *the* (rather than *a*) *Book of animals* is far better documented in the corpus, one should not disregard the possibility of an intentionally generic allusion on the part of the author comparable, perhaps, to «في كتب الفلاحة» in the series of passages that follows ḤAWĀṢṢ in manuscript P of *Natāʿiḡ* (= *Nat* III.2).

homoeoarchton during their compilation or later in their manuscript transmission.

Moreover, *Nat*-1 is identical in its protasis to a passage in *Almuġnī* that IBN ALBAYṬĀR ascribes likewise to the *Book of animals*:

Almuġnī I.14 الجالبة للأحلام الرديّة (L 30v 14 – 31r 1 | M 18r 7–9 | P² 28v 5–7)

من خواصّ كتاب الحيوان — إن جعل سنّ إنسان أو عظم جناح هدهد تحت رأس إنسان،
زاد في نومه ورأى أشياء هائلة مفرعة.

من ... الحيوان [من كتاب خواصّ الحيوان .P

Despite the totally different (in fact, quite opposite) apodosis, the coincidences between the two text are highly suggestive of close cognacy, and the specific phrase «من خواصّ كتاب الحيوان» is actually pretty much a shibboleth in this context.¹

Origin

The hypothesis of a parablepsis with diverging outcomes is compellingly suggested by the circulation of two different traditions in *Ḥayawān* literature in which the above elements are transmitted separately while being both attributed the same hypnotic effect. On the one side there is the combination of a dead person's tooth and a hoopoe's right wing (= *Natāʾiġ*); on the other side the collocation of a dead person's tooth and left arm bone (= *Iktifāʾ*).

Tooth and wing

The conjoint use of a human tooth *and* a hoopoe's wing bone is documented since the earliest Islamicate representative of the zooḥawāṣṣic genre, IBN ʿALĪ, in the 9th c. His text shows, in all three branches of transmission, a form that is essentially identical to the quote found in *Natāʾiġ*:²

¹ As shall be seen below, nowhere else is this remedy explicitly linked to any *Book of animals* (except, of course, intrinsically in *Ḥayawān* texts themselves), the “tooth” (سنّ) is mostly rather a “molar” (ضرس), and the two elements are universally put together or added to each other rather than used separately (copulative – و rather than disjunctive أو). With respect to the apodosis of the quote in *Almuġnī*, it does not echo anything in IBN ʿALĪ's or in IBN BUḤTĪŠŪʿs treatises and maybe it should be considered an additional apomorphy derived from a different conflation of originally separate passages.

² According to RAGGETTI's critical apparatus to *Ḥayawān* [1.5], version C of *Ḥayawān* shows an additional passage in which just a human tooth is censured to have a similar effect and which seems to be echoed by ZUHR as shown below.

Ḥayawān [1.6] إنسان (R 8)

A	B	C
يؤخذ ضرس مَيِّتٍ وعظم الجناح الأيمن من الهدهد فجعل تحت رأس النائم، فلا يزال نائمًا حتى ينزعها من تحت رأسه.	يؤخذ ضرس الإنسان وعظم جناح الهدهد الأيمن فيجعل تحت رأس الإنسان، فل يزال نائمًا حتى ينزع ذلك من تحت رأسه.	إذا أخذ ضرس إنسان وعظم الجناح الأيمن من الهدهد ووضع تحت رأس النائم، لم ينتبه ما دام تحته.

Only one of the three versions features the qualification “dead” («مَيِّتٍ»), which parallel transmission shows nonetheless to be original. In fact, in IBN BUḤTĪŠŪṢ’s treatise the passage is unambiguously transmitted under the rubric «ضرس الإنسان المَيِّت». It further includes a specific mention of the *right* wing of the hoopoe:¹

Ḥayawān I إنسان (G 55-7 | P 2v 6-8 | Q 2v 6-9)

≡ *Naṣt* I منافع الإنسان (L 104r 8 - 104v 2)

وإن أخذ ضرس الإنسان وعظم جناح الهدهد الأيمن وجُعلا تحت رأس إنسان نائم، لم يزل مستغرقًا في نومه حتى يؤخذ من تحت رأسه.

الإنسان [إنسان L | الأيمن - PQ | وجُعلا] وجعل LQ | إنسان نائم [النائم L | مستغرقًا في نومه] نايمًا
L | في نومه [في النوم G | يؤخذ] يؤخذ LP.

Manāfiʿ-e ḥayawān I خاصيت مرد و زن (R 513-14)

< > دندان مردم با اسطوان بال راست هدهد در زیر سر مرد نخته نهند از خواب بیدار کند و مادام که زیر سر او باشد.

¹ The corresponding fragment is missing from the acephalous copy of ALMAWŞILĪ, *Manāfiʿ*, nor does it appear in the passages rendered into Latin by David COLVILLE from the missing folios of the Escorial manuscript and reproduced in RUIZ 1980: XXX-XXXI.

None of this is to be found in ARRĀZĪ's *Ḥawāṣṣ*,¹ but *Sexaginta* does include the passage amongst the properties of the hoopoe:²

<p><i>Sexaginta</i> XXXVI <i>De upupa</i> A 70ra 25–27 V 108rb 63–65</p> <p>Dixerunt: «Si suspendatur dens hominis mortui et ala dextra upupe, et suspendatur capiti hominis dormientis: non excitabitur donec auferatur».</p> <hr/> <p>suspendatur dens] sumat dexter oculus A mortui] – V et ala] ala A suspendatur] superponatur A.</p>	<p><i>Saḡullōt</i> s.v. דוכיפת P 26v 29–30</p> <p>גם אמרו: «אם יוקח שן אדם מת וכנף הוידהוף הימני וישימו שניה יחדיו תחת מראשות הישן. ישן לעולם כל ימי היותם לעולם».</p>
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Mark that the wording of *Sexaginta* is virtually identical to *Ḥayawān*^C with its specific mention of the right wing and the apodosis “he shall not wake up” («*non excitabitur*» ≡ «لم ينتبه»). This is also the passage that ZUHR found in his source and which he apparently ascribes to AṬṬABARĪ (or perhaps to PAUL OF AEGINA):³

<p><i>Ḥawāṣṣ</i> 1–1 إنسان (C 35–6 H 754–5 P 6v 3–5 T 280_{18–19})</p> <p>ي: «إن أخذ ضرس إنسان وعظم الجناح الأيمن من هدهد وجعل تحت رأس نائم، لم ينتبه ما دام تحت رأسه».</p> <hr/> <p>ی [فو الجناح] جناح H الأيمن] C– دام] دامت H.</p>

¹ Which may account for its absence from IBN ALĠAZZĀR's homonymous treatise too.

² The divergent reading “If the *right eye* of a dead person is *taken*” transmitted in the Vatican manuscript may derive from a copyist having wrongly interpreted an abbreviation and it was apparently inconsequential for the transmission of the text (as shown by the correct «שן» in the Hebrew version).

³ Given that I could find no direct or indirect confirmation for the presence of this passage in either author, I provisionally follow the majority reading «ي» rather than the isolate (and yet *difficilior*) «فو» in P. An additional witness for ZUHR's passage is provided by an explicit quotation («خواص ابن زهره») in IBN ALBAYṬĀR, *Ġāmiʿ* 5–54 عظام (B III 126_{29–127}₁). Let it be recalled here that IBN ALBAYṬĀR selected a different version of this remedy from a different source for *Almuḡnī* (see above).

An echo of this remedy in *ṣağāʾib* serves as a perfect illustration of ALQAZWĪNĪ's stylish paraphrasing technique.¹ Here the somniferous effect is attributed to the right wing of the hoopoe alone (the passage is entered under the lemma on the bird, indeed), to which a tooth (one that has been plucked as a cure for toothache) can be added in order to make the sleep last longer:²

ṣağāʾib II KĀʾINĀT II.III.6,54 هدهد

W 426₁₈₋₂₀

جناحه اليمنى — تُجعل تحت رأس
النائم: يُثقل نومه؛ وإن أردت أن يبتغي نائمًا
زمانًا، فضم إليه سنًا قُلعت بسبب الآلام.

ṣağāʾib s.v. هدهد

A 230v 9–10 | B 249r 9–14

و اگر جناح راست او را در زیر بالین کسی نهند، نوم بروی
غالب شود. و اگر نخواهند که زمانی بسیار بخند، دندانهای که از درد
کنده باشند با شنج ** هدهد ضم کنند.

و اگر [اگر] B | اورا [او] B | و ... کنند] - A.

A second and substantially different version is included, in turn, in the entry on the human being. There a tooth fallen off without any pain shall prevent a sleeping person from waking up if it is put together with some hoopoe feathers under their pillow:³

ṣağāʾib II KĀʾINĀT II.3.I.1,6 إنسان (W 366₁₁₋₁₂)

السنّ الذي سقط من غير ألم: يوضع مع ريش الهدهد تحت وسادة النائم، لا ينتبه حتى
يؤخذ من تحت وسادته.

¹ To be sure, he might have excerpted the passage without alteration from a source that already transmitted a reworded version of it. However, being as this is just one from a myriad of examples of textual (both lexical and syntactical) divergence with regard to the more or less standard readings of the majority of the corpus, the conclusion seems unavoidable that stylistic rewording and particularly lexical substitution, often in the form of sophistication, are the trademark of this Iranian encyclopaedist.

² Only the initial segment of the passage is borrowed from there by IBN ALWARDĪ, *Ḥarīdah* XXII.II.9 (Z 363₄). «جناحه الأيمن يجعل تحت رأس النائم، يثقل في نومه» = خواص أجزاء الهدهد

³ In this case authorial rewording does not seem to account for all the dissimilarities between the two passages and it is quite plausible that they stem from (or perhaps rather combine) different sources.

Tooth and bone

On the other hand, the circulation of the passage selected from the same authority by IBN ALHAYTAM finds external support in the zootherapeutical treatise that the Latinate tradition ascribes to ARRĀZĪ, within the entry on the properties and medical uses of human organs:

<i>Sexaginta LV De homine</i>	<i>Saġullōt</i> s.v. אינסאן
A 71ra 39–41 V 109rb 64–65	P 52v 33–33
Dens hominis mortui et os brachii sinistri, si posueris subtus caput dormientis, dormiet donec auferatur.	שן אדם המת ועצם זרוע שמאל: אם תשים תחת מראשות הישן, לא יקץ עד שתסירהו.
<hr/>	
subtus] super A dormientis] hominis dormientis V.	

There does not appear to exist any other witness to this combination and the two remedies are so similar to each other as to arise the suspicion of an ultimate common origin.¹ Analogy, however, was always an active player in the genesis and development of ḥawāṣṣic lore, and this would be not the only instance of the use of human bones in a (para)medical context.²

Tooth

Incidentally, a third related tradition is documented in the corpus that shows a simpler (maybe simplified?) remedy requiring exclusively a dead person's tooth. The peripheral and apparently only western distribution of the witnesses might suggest, once more, a secondary development. As far as IBN ALBAYṬĀR's passage

¹ A bird's wing bone being the smaller element, it would not be unreasonable to postulate "the bone of the left arm" as an apomorphic derivation, through either misreading of dropping of the word for "hoopoe" (clerical confusion of the adjectives "right" and "left" being not altogether uncommon in Arabic, especially in their respective masculine forms). A human forearm bone (let alone the humerus) is certainly a difficult thing to put under someone's head without their knowing.

² See *Nat* III.v.8 (a bone from a corpse periapted against aching molars) or ARRĀZĪ, *Ḥawāṣṣ* 1–1 إنسان (I 78v 13–14), where AṬHŪRUSFUS recommends amuletising a dead person's bone against quartan fever; see also, albeit typologically different, *Nat* VII.11.2 on an antiarthritic beverage made of burnt human bones (from GALEN). Let it be noted that the exact identity of these bones is never made explicit, but one may assume that in the case of periapts small ones were intended.

is concerned, it can (but need not) be interpreted as either borrowed directly from the tradition represented by *Ḥayawān*^C or stemming from the sequence reconstructed above for ^α*Hawāṣṣ*, having dropped in either case the second element of the combination. As for the *Hārūniyyah*, a text akin to *Ḥayawān*^{AB} appears as the most likely source of the passage given that it is found not in the from-top-to-toe series of epigraphs affiliated to ^α*Hawāṣṣ* but rather in the section that follows the canonical arrangement of *Ḥayawān* texts—in which the thematic focus lies on the individual animals, not on the human diseases.¹ In any case, the two texts are independent from each other:

Hārūniyyah I.XI.1 المنافع من الإنسان وما فيه من النافع (G 205₁₆₋₁₇)

ومَن عَلَّقَ شَعْرَةً مِنْ رَأْسِ إِنْسَانٍ عَلَى خَفَّاشٍ وَتَرَكَهُ يَطِيرُ، لَمْ يَتَمَّ ذَلِكَ الْإِنْسَانُ أَبَدًا مَا دَامَتْ عَلَيْهِ. وَمَنْ وَضَعَ سِنَّ إِنْسَانٍ تَحْتَ رَأْسِ إِنْسَانٍ، لَمْ يَزَلْ نَائِمًا مَا دَامَ تَحْتَ رَأْسِهِ.

Almuḡnī I.12 في جالبة النوم والسبات (L 29r 14–15 | M 17r 15–16 | P² 27r 12–13)

ضرس الميت — إذا وُضِعَ تَحْتَ رَأْسِ رَجُلٍ نَائِمٍ مِنْ حَيْثُ لَا يَعْلَمُ، فَإِنَّهُ لَا يَنْتَبِهُ مِنْ نَوْمِهِ مَا دَامَ تَحْتَ رَأْسِهِ.

رجل [جل] L.

The testimony of ZUHR, in turn, is perhaps less cogent, as not only is its protasis abridged in the context of coordination with the preceding passage (which actually corresponds to *Nat* III.v.8 below) but the wording of the apodosis too differs from all other versions but matches remarkably a locus in IBN ḤALĪ' s *Ḥayawān* that is transmitted only in version C and which is to be found in RAGGETTI's critical apparatus:

Ḥawāṣṣ 1-1 إنسان (C 2₃₋₄ | H 72₁₁₋₁₂ | P 4v 14–15 | T 279₁₀₋₁₁)

وإذا عَلَّقَ سِنَّ الْمَيِّتِ عَلَى سِنَّ وَجَعَةٍ، سَكَنَ وَجَعَهَا. وَإِنْ وُضِعَ بِرَأْسِ نَائِمٍ، زَادَ فِي نَوْمِهِ.

Ḥayawān C [1.5/6] إنسان (R 8)

سِنَّ الْإِنْسَانِ — إِذَا عَلَّقَ عَلَى السِّنِّ الْوَجْعَ، أَسْكَنَهُ. وَإِنْ وُضِعَ تَحْتَ رَأْسِ إِنْسَانٍ نَائِمٍ، زَادَ نَوْمَهُ.

¹ Let it be recalled that the basic assumption in my analysis is that the differential distribution of the passages in two well-characterised series in the edited *Hārūniyyah* is to be considered reflective of the use of at least two different sources (one of them being either ^α*Hawāṣṣ* or a text closely related to it) by its author.

II.v.2 He said: «If a weepy (child) is given to drink some dirt from a donkey's ear or from his own ear in his mother's milk, he shall calm down and fall asleep.»

Source

The two extant manuscripts of *Natāʾiġ* share a misreading «البطاء» that certainly makes no sense at all and can be easily emended in view of the fairly common palaeographical confusion between ك and ط in older and particularly western writing style. The syntactic and semantic contexts suggest, furthermore, that a substantive may have been inadvertently dropped.

The emendation proposed here finds confirmation in an anonymous passage that IBN ALBAYṬĀR appends in *Ġāmiʿ* to a quote from AṬHŪRUSFUS that he has borrowed from ARRĀZĪ bypassing the mention of the intermediate source. He uses the same passage with a slightly different wording in *Almuġnī* too:¹

Ġāmiʿ 164-164 حار أهلي (B II 3526-28)

أطهورسفس في خواصه: «إن غُلِقَ جلد جبهة الحمار على الصبيان، منعهم أن يفزعوا». ويتقال إن وسخ أذن الحمار، إذا سُقي منه الصبي البكاء وزن ثمن درهم، لم ييك.

Almuġnī I.16 النوم في الفزع (L 31v 5-6 | M 18v 4 | P¹ 15v 13-14 | P² 29r 10-11)

وسخ أذن الحمار — زعم قوم أنه، إن سُقي منه ثمن درهم للصبي البكاء، لم ييك.

أذن [اذن] P¹ | ثمن ... البكاء [الصبي البكاء] وزن درهم P².

The formal difference between the text transmitted in *Nat*-2 and the one handed down by IBN ALBAYṬĀR is sufficient to class them as representatives of two different taxa within the tradition. As a far relative, the latter is helpful to back an emendation of the locus, but it is uninformative about the parent compilation.

Now, IBN ʿALĪ provides not only a better match for the exact phrase reconstructed for *Natāʾiġ* but also a convenient link with the zootherapeutic genre from which the quote appears to have been borrowed. The passage is transmitted only in version B of *Ḥayawān*, under the lemma on the onager (حار الوحش),

¹ From IBN ALBAYṬĀR, with omission of the ultimate source, ALʿUMARĪ, *Masālik* XX 297-8 s.v. حار. For the quotation from AṬHŪRUSFUS, cf. ARRĀZĪ, *Ḥawāṣṣ* 3-3 حار (I 81v 3). Incidentally, the above locus in *Ġāmiʿ* proves that there as well as in *Almuġnī* IBN ALBAYṬĀR resorts to the expressions «من خواص» and «في خواصه» as a generic reference and does not necessarily imply the existence of a text with such a title (this feature has been discussed above in Chapter 1).

in a more complete form but yet with significant lexical coincidences with our text:¹

Hayawān B [19.3] (R 188)

وإذا كان الصبي كثير البكاء، يؤخذ من أذن الحمار اليسرى ومن شحم أي حمار، فيسقي
الصبي أياماً بلبن أمه، فيبرأ وينام ويهدي بإذن الله تعالى.

Apparently ignored by later authors in the *Hayawān* genre, the passage surfaces again in the 13th c. in the encyclopaedic work of ALQAZWĪNĪ in a reshaped but still recognisable form:

Ṣağāʾib II KĀʾINĀT II.III.3.3 حمار (W 377²³⁻²⁴)

لمنه يُسقى الصبي الذي يبكي كثيراً ويسوء خلقه: يزول ذلك عنه.

In view of all the above testimonies, the disjunctive “or from his own ear” and the consequent change in the referentiality of “his mother’s milk” may be described as a particular innovation introduced by the author of *Ḥawāṣṣ* (or much less likely by ALʿILBĪRĪ himself).

Parallel traditions

On the other hand and oddly enough, IBN ʿALĪ’s instructions seem to require an actual *piece* of the donkey’s ear to be ingested (all three manuscripts share the same reading at this point), but there is good reason to suspect that this may not have been the ingredient originally intended. As a matter of fact, the remedy under consideration looks very much like a paediatric adaptation of a better documented prescription to drink a somniferous preparation in which the *dirt* of a donkey’s ear (probably referring to earwax) has been mixed with wine or some other beverage.² This “adult” version is attested also by IBN ʿALĪ, in this case only in branch C of his treatise, within the entry on the donkey (حمار):

Hayawān C [18.5] (R 180)

مَنْ أَخَذَ مِنْ وَسَخِ أُذُنِهِ سَقَى إِنْسَانًا فِي شَرَابٍ وَغَيْرِهِ، نَامَ وَلَمْ يَفْعَلْ شَيْئًا.

¹ Even within the branch B not all the witnesses include the mention to weeping: according to the Gotha manuscript, indeed, the remedy is addressed to a child that does not sleep.

² Unlike the ear itself, the earwax of a several animals (particularly mules) is abundantly represented as a *ḥawāṣṣic* ingredient both in zootherapeutics and in *Ḥawāṣṣ* proper. Cf. just in IBN ʿALĪ’s *Hayawān*, especially [8.30] dirt from a dog’s ear as an antihypnotic and [17.3] dirt from a mule’s ear preventing inebriation (R 88 and 174 respectively), as well [30.12] as the dirt from the ear of a cat inducing oblivion of their art to sorcerers (R 258). A mule’s ear dirt has also as a contraceptive virtue according *Hayawān* [17.1|5] (R 174–176).

Although this tradition seems to have had as little success in the genre as the previous one, it also found its way into Andalus through its inclusion in ZUHR's collection, where it is perhaps ascribed to HERMES and shows a different—and apparently apomorphic—reading “understand” rather than “do” (»يفعل/يعقل»):¹

حار 1 Hawāṣṣ

A 22²⁻⁴ | B 10r 2-5 | C 14¹⁴⁻¹⁵ | H 100⁶⁻⁷ | P 23r 12-13 | T 293¹⁶⁻¹⁷

ه: مَن أَخَذَ مِنْ وَسَخِ أذُنِ الْحِمَارِ وَسُقِيَ إِنْسَانٌ فِي شَرَابٍ أَوْ غَيْرِهِ، سَبَتَ وَنَامَ وَلَمْ يَعْقِلْ
أَصْلًا.

ه H¹، - ABCPT | أذن الحمار [أذن حمار] B، اذنه AH | وشقى إنسان [وسقى انسانا H، وسقى منه انسانا A | سبت] سكر H.

From ZUHR's compilation it must have been borrowed, without explicit attribution, by IBN ALBAYṬĀR:

في جالبة النوم والسبات 1.12 *Almuǧnī*

L 28r 11-12 | M 16v 11-12 | P¹ 14r 4-5 | P² 26r 16 - 26v 1

وسخ أذن الحمار — إذا سقى إنسان منه شيئًا في شراب أو غيره، أسبته وأنامه، ولم يعقل
أصلاً.

أذن [اذن L | شيئًا] شيء LP¹.

Mark, once again, the parallel transmission of the same passage in different forms that are reflective of the particular ways of transmission through which they reached the author. As a colossal and multi-source compilation, *Almuǧnī* is probably one of the best available texts on which to conduct a study of heterogenetic cotransmission.

¹ The evidence for a Hermetic attribution by ZUHR is slight at best: of all six witnesses consulted, only the Hamburg manuscript includes this abbreviation (a sort of β symbol), which cannot be a period mark (usually also marked as h / β), since this is the very first passage after the rubric.

II.v.3 He said: «If iron filings are hung from him who snores in his sleep, he shall snore no more.»

Cognates

As shown in the introduction, amongst the texts most closely related to *Natāʾiḡ* it appears that *Iktifāʾ* did not even mention snoring but both ALMADĀʾINĪ and PSEUDO-MASĪḤ do, and the latter includes a parallel passage in typically abridged form:

Hārūniyyah II.II.1 (وهو النخير) وللغيط (G 3258)

مَنْ عَلَّقَ عَلَيْهِ حَجْرَ الشَّبِّ الْأَصْفَرِ، ذَهَبَ عَنْهُ الْغَيْطُ؛ وَكَذَلِكَ بَرَادَةُ الْحَدِيدِ.

Source

On a purely contentual basis it is hard to admit that this passage should have been taken from any *Book of animals*, since it involves a mineral and such elements are not regularly dealt with in that genre.¹ One must surmise that the name of some author featured originally after the *Book of Animals* but it was dropped in the process of selection of quotes. This alleged property of iron might have been borrowed from AṬṬABARĪ, who records it in a generic all-ḥawāṣṣic chapter on the virtues of things that vanquish fire and snow, as well as on things that are effected upon by other things:

Firdaws VII.II.2 (§ 526₃₋₄)

وإن عَلَّقَ بَرَادَةَ الْحَدِيدِ عَلَى مَنْ يَغِطُّ فِي النَّوْمِ، لَمْ يَغِطُّ.

¹ Minerals (mostly stones) are present, indeed, and appear frequently combined with substances and organs of animal origin, but they are never the primary, let alone the only, ingredient involved—an obvious exception being, of course, zooliths.

However, given that *Saḡullōt*–9 cites ARRĀZĪ by name and that the author of *Ḥawāṣṣ* also included (anonymously, with no explicit authority) an identical passage in his own collection, he is perhaps a more plausible source for the quote in ^a*Ḥawāṣṣ*:¹

ARRĀZĪ, <i>Ḥawāṣṣ</i> >–13 حديد	ABENQUICH, <i>Lapidario</i> IV 115r 40–43
I 83r 1–2 Q 17 ₁ V 7r 1–2 K 124r 12	<i>hadit</i> (D–W 142a R 219)
إن عُلق برادة الحديد على من يغط في النوم، لم يغط.	Et dixo Mahomath Arraze en el libro de las propiedades de las cosas que quien colgar la limadura del fierro sobre el oio del qui devaneare durmiendo, que non devaneará mientras la toviere.
برادة [شى من برادة S يغط + وقال مجزب Ğ.	

A further explicit ascription to ARRĀZĪ is provided by ZUHR too, but his text is different enough to be reproduced in full form. Mark particularly the additions “in a linen cloth” (a sensible one, given that metal filings are not an obvious thing to be periapted) and “as long as it hangs from him” (quite conventional and typical of many amulets):

<i>Ḥawāṣṣ</i> >–16 حديد (A 26 ₂ C 16 ₁ H 103 _{12–13} P 26r 6–7 T 295 ₁₉)
م: «برادة الحديد، إذا جعلت في صرة كتان وعُلق على من يغط في نومه، لم يغط ما دام عليه».
م – [AP – [جعلت [عمل C كتان – [ACPT – [عُلق [وجعلت AP على – [C فى نومه، لم يغط – [A نومه، لم يغط نوم يغلط C.

¹ Indirect transmission of the passage includes IBN SAMAGŪN, *Ġāmiʿ* >–39 حديد (S I 222_{10–11}) [= S]; and IBN ALBAYṬĀR, *Ġāmiʿ* >–100 حديد (B II 13_{27–28}). Amongst silent ones, IBN ALĠAZZĀR, *Ḥawāṣṣ* [104a] (K 58_{11–12}, commented by KĀS 2012: 107) [= Ġ]; and ALQALĀNISĪ, who omits the word «برادة» in *Aqrabāḍin* XLIX s.v. حديد (B 302₁₉). The text of the Alphonsine stonebook is given here as an exceptional non-Islamicate—yet explicit and verbatim—reflection of ARRĀZĪ’s words. With regard to this translation, the Castilian text does not only specify (against all other witnesses) that the iron must be hung from *the eye* (no doubt as the result of misreading عین for عتق), but it also happens to mistranslate Arabic غط ‘to snore’, since the meaning of *devaneare* is rather ‘to rave, to talk foolishly’.

Origin

A word on the relationship between AṬṬABARĪ's passage and ARRĀZĪ's. The un-referenced utterer in *Ḥawāṣṣ* (the agent of «قال») cannot possibly be the last authority mentioned in the preceding lemma, namely GALEN on asafœtida; yet in IBN ALĠAZZĀR's reworked version the Galenic quotation is missing and the passage on iron filings is thus coordinated to the preceding one by AṬṬABARĪ also on hanging asafœtida against quinsy. In the absence of a critical edition and in-depth analysis of ARRĀZĪ's treatise it is currently impossible to ascertain whether IBN ALĠAZZĀR's Vorlage may have reflected a version (an early one?) of *Ḥawāṣṣ* in which the original sequence from *Firdaws* was not interrupted by the quote from *Simpl. med.* As tempting as it may be, however, the stability of the text (at least with regard to this locus) in all the witnesses consulted does not seem to lend support to this hypothesis—yet the word-by-word identity of the passages still arises the suspicion that ARRĀZĪ is actually quoting from *Firdaws* and that somehow, despite the intervening authority of GALEN, the quotation on iron filings shares an origin with the one in the preceding entry on asafœtida.

On the other hand, in view of the nature of the thematic element (a mineral) it seems only logical to search for a possible further (or at least parallel) origin in the pseudo-Aristotelian *Book of Stones*. Unfortunately neither the direct nor the indirect transmission of the text in its various versions include this porperty¹—with at least two exceptions. If in the main Arabic version of ALQAZWĪNĪ's *Ṣaġāʾib* ARISTOTLE is cited as having attributed to iron filings a benefit against sleep fright (which may actually be related to *Aḥġār*^p), the Vorlage used for the Persian translation seems to have mentioned also snoring («غطيط»):

Ṣaġāʾib II KĀʾINĀT I,1,4 حديد

W 207¹²⁻¹³

ومن خواصه العجيبة: ما ذكره أرسطاطاليس
أن برادة الحديد، إذا علقت على إنسان يفرغ
في نومه، يزول عنه ذلك.

Ṣaġāʾib s.v. حديد

A 94r 1-2 | B 94r 7-8

خاصیت او — ارسطاطالین گوید که اگر براده صیدرا بر کسی
بندی که نشتت باشد و غطیط کند، آن از وی برود.

خاصیت او [خواصه B | اگر] A - | براده حديد را [

پاره حديد A.

¹ Iron filings («برادته») are mentioned, indeed, in the entry on iron in *Aḥġār*^p [62] نعت حجر الحديد [62] (R 123¹⁴⁻¹⁵), but they are affirmed to crumble the liver («تفتت الكبد») and to avail greatly against fevers («حمى الصنخ») when put under the patient. No medical use is mentioned, in turn, in *Aḥġār*^t [61] نعت حجر الحديد [61] (I 162³⁻⁹). Cf. further KĀS 2010: 533-534 for a concordance and analysis of this element in the Islamicate tradition.

The existence of an Arabic version of the passage is confirmed, one generation later, by ALḤUMARĪ:

Masālik XXII 104₁₇₋₁₈ S.V. حديد

ومن خواصه العجيبة ما ذكر أرسطو إن برادة الحديد، إذا غُلقت على أنسان يغطّ في نومه،
فإنّه يزول عنه ذلك.

4.3 Nat II.vi—On headache

IBN ALHAYTAM, *Saḡullōt* II.vi בכאב הראש (L–M 303_{1–16}) || PSEUDO-ABENEZRA, *Nisyōnōt* II.vi בכאב הראש (L–M 168_{3–1706}) || IBN ALBAYṬĀR, *Almuḡnī* I.1|2 (M 6v 4–7, 8r 22 – 8v 1).

Nat–1 hen brains | *Nat*–2 leaf of a laurel tree | *Nat*–3 sprays of rue | *Nat*–4 hoopoe skin | *Nat*–5 human hair | *Nat*–6 hoopoe skin.

Cognates

Like the preceding one, this chapter is also noticeably longer in *Iktifāʾ* than in *Natāʾiq*, and IBN ALHAYTAM’s compilation must have included at least four quotations that were not selected by ALʿILBĪRĪ. The reconstruction of the original text of *Iktifāʾ* is, however, complex, as the Tashkent manuscript and the Hebrew translation differ remarkably from each other. Thus, according to the English translation provided by HASANI, the Arabic text includes cognate passages to *Nat*–4|6 (involving both a hoopoe’s skin) that are not transmitted in *Saḡullōt*. An additional passage explicitly from AṬṬABARĪ would prescribe rubbing “[the head] with sodium chloride mixed with olive oil”, which may be interpreted as an impressionistic rendering of *bawraq*.¹ No such element is mentioned in either Hebrew text but the fact that “caused by a cold” features twice in two adjacent loci suggests that *Saḡullōt* (either its extant copies or the original translation) has skipped the corresponding passage by homoeoteleuton. Otherwise it might correspond to *Saḡ*–6|7 on castoreum, which is the only ingredient that features in a mixture with oil for an embrocation to be applied on the head.

The Arabic and the Hebrew texts coincide in the initial two quotes from DIOSCORIDES on the anticephalalgic benefit of mummy (מומיה ≡ מומיא). In the opening passage *Ikt*|*Saḡ*–1 drinking mummy alone is prescribed against blows or strikes from tremor or convulsions in the head («ההכאה מן ההודרעזעות אשר» «בראש *Saḡ*, which may translate *ترعزع* in the original Arabic;² «ההכאה והנניפה»

¹ Cf. HASANI 1999: 24. One may guess the reasons behind such a bombastic use of modern chemical and medical terminology in the translation of a tenth-century text but, ideological debates aside, such a practice may become a hinderance to a reader wishing to access the text itself rather than an anachronistic interpretation of its contents. On the other hand, that the second remedy borrowed from AṬṬABARĪ “prevents epilepsy” may reflect an original misreading in the manuscript (√صدع / √صرع being quite frequently confused in the written tradition) or one introduced by the modern scholar. In any case it can hardly be original given that the passage is included in a chapter entirely devoted to headaches and far removed from the one on epilepsy.

² As, for instance, in the passage in *Almuḡnī* I.4 that IBN ALBAYṬĀR excerpts from ARRĀZĪ’s *Alḥāwī* and which is quoted below in the analysis of *Nat*–1.

«בראש» *Nisy*);¹ then in *Ikt|Səḡ-2* the remedy consists on an intranasal administration of mummy mixed with jasmine oil («שמון זנבן») in *Niys*, but *Səḡ* reads «חובה» against a headache caused by cold.² The Tashkent manuscript does not seem to preserve the passage on hen brains shared by *Natāʔiḡ* and *Səḡullōt*.

In the Hebrew text *Səḡ-4* to *Səḡ-8* are all five apparently borrowed from AṬṬABARĪ, and only the first one on rue and the last one on human hair are shared with *Natāʔiḡ*. The remedy described in *Səḡ-5* against inebriation is a mixture of vinegar, water, and the roots and twigs of a certain herb transmitted as «כרבנא» by *Səḡ* and as «כרב נא» by *Nisy* (the editors translate the latter as “cabbage” with no further comment) or otherwise bitter almonds. This passage is not included in the Arabic copy of *Iktifāʔ*.³ The following passages *Səḡ-6*

¹ There is no mention of such a use of *πιττάσφαλτος* in *Mat. med.* 1:73 ἄσφαλτος (W I 72₂₁–73₂) ≡ *Haš* 1: 73 موميائي (P 19r 12–15 | T 77₇₋₁₁). A general anticephalalgic virtue of mummy quite similar to the one referred to here is stated by MASĪḤ: «نافع من الصدمة والضربة والصداع» according to IBN SAMAGŪN, *Ġāmiʔ* مومياء 6–م (S II 295₁₆₋₁₇), and then in pretty much the same words by AL-BAŠRĪ too: «نافع من الصدم والضرب والاحتراق في الرأس» (cf. IBN SAMAGŪN, *Ġāmiʔ* II 296₂₋₄), who adds that GALEN had mentioned mummy in his *Ten Books* when dealing with headache. GALEN’S *Mayāmīr* IV on headache is referred to also by IBN MĀSAWAYH as quoted by IBN WĀFID, *Liber Serapionis* [283] *munie–mumia* (A 191₂₀₋₂₄), but the fragment cited corresponds rather to «ἡ τῶν διμέων ὀπῶν, οἷον τοῦ τε Κυρηναίου καὶ Μηδικοῦ καὶ σαγαπηνοῦ καὶ εὐφορβίου» amongst eye medicines, cf. *Sec. loc.* IV.1 (K XII 701₁₋₃). This is one of several passages explicitly ascribed to DIOSCORIDES in ^a*Hawāšš* that seem to reflect a mediated access, probably through a pre-existing compilation prior to IŠṬIFAN’S translation.

² The combination with jasmine oil (which was unknown to DIOSCORIDES) betrays a later source and is widely attested in Islamicate canonical therapeutics as an apophlegmatism. One of the earliest witnesses to it is MĀSARĠAWAYH, to whom a literally identical passage was ascribed by ARRĀZĪ: «الصداع والشقيقة في الرأس إذا شغط من الموميائي بقليل مع الزنق، نفع من الصداع البارد» (H I 254₁₋₂) and also IBN WĀFID, *Liber Serapionis* [283] (A 191₁₈₋₂₀). The compiler of ^a*Hawāšš* may have found his passage also in AṬṬABARĪ’S *Firdaws* as excerpted by IBN SAMAGŪN, *Ġāmiʔ* II 296₄₋₈, where a segment «وهو نافع أيضًا من الصداع البارد إذا شغط به مع دهن زنق» is included that is missing from the edited text, cf. *Firdaws* VI.II.2 (§ 405_{21-406₁}). It is worth noting that the same prescription was commended also in Qayrawān by IBN ʿIMRĀN in an essentially identical linguistic form: «وإذا أسغط منه بقليل زنق، نفع من الصداع العارض من البرد والرياح» (cf. IBN SAMAGŪN, *Ġāmiʔ* II 297₂₋₃), which is in turn almost identical to a passage transmitted from ARRĀZĪ’S *Ġāmiʔ* too: «وينفع من البرد والرياح التي في الدماغ إذا أسغط منه بشيء قليل، وينفع أيضًا من الصداع الكائن من البرد والرياح» (cf. IBN SAMAGŪN, *Ġāmiʔ* II 296₉₋₁₂).

³ This must be related to an anonymous prescription in *Firdaws* VII.II.3 that attributes the same effect to the lung or the roasted fat of a goat, to stems of white cabbage, and to seven bitter almonds if eaten before meals, all of which are said to cause the eater to «قوي على شرب النبيذ» (cf. § 529₂₋₄). Still from AṬṬABARĪ but in *Ġawharah*: «قوى على الشراب» (S I 418₁₀). This power against inebriation is explicitly connected to the antipathy (عداوة) reported to exist between the cabbage and the vine in the geponic tradition: «ولذلك يُعطى السكر على من أكل منه ورفات على ريق النفس ثم شرب» (cf. IBN

and *Saġ*-7, both on castoreum to be beaten up with oil then bandaged on the head against headache, must reflect two alternative versions of the same quotation and, as suggested above, it might correspond to the first explicitly from AṬṬABARĪ in the Tashkent manuscript.¹

Neither the *Hārūniyyah* nor ALMADĀʿINĪ's *Ḥawāṣṣ* transmit any headache-related passages that may stem from the textual tradition of ^α*Ḥawāṣṣ*. As for IBN ALBAYṬĀR's *Almuġnī*, the plausibility that it contains at least a cognate to *Nat*-5 suggests that the immediately following passage on a hyena's rib may have the same origin. Moreover, the characteristic phrase «من خواص الطبري» marks two previous passages on the anticephalalgic power of a fox's penis and an Egyptian vulture's temple bone as plausible reflections of the same textual family. The intuition seems to be confirmed by the fact that none of the latter three passages can be located in *Firdaws* but at least the latter two have a matching precedent in zootherapeutic texts.² As a matter of fact, a distinct pattern appears to emerge according to which one or more explicit quotes from IBN ZUHR are followed by passages related to ^α*Ḥawāṣṣ* and then by explicit quotation from ALʿIDRĪSĪ. This is perhaps a clue to be explored in the future.

General remarks

It is worth noting that in the Islamicate medical tradition even less canonical texts such as the pseudepigraphic *Hārūniyyah* and IBN ALĠAZZĀR's *Fuqarāʾ* approach the treatment of headaches with explicit reference to the aetiology of their several types and mostly through conventional means.³ In this respect

SAMAĠŪN, *Ġamiʿ* I 38₁₄₋₁₇), for which cf. CASSIANUS, *Geoponica* V.11.3 on cabbage: «ἀντιπάθειαν ἔχουσαν φυσικὴν πρὸς τὴν ἄμπελον» (B 136₂₃₋₂₄). An early attestation of the benefit of both cabbage and bitter almonds against intoxication can be found in DIOSCORIDES, *Mat. med.* 2.120 κράμβη ἡμερος: «καὶ τὰς ἐκ κραιπάλης δὲ καὶ οἴνων κακίας σβέννουσιν ἐπιλαμβανομένη» (W I 193₅₋₆) ≡ *Ḥaš* 2:114 «كزب بستاني» «سكن خاره» «وإذا أكله الخمور، سكن خاره» (P 45r 21-22 | T 193₁₆₋₁₇) and also *Mat. med.* 1:23 ἀμυγδαλίη πίκρα: «ἔστι δὲ καὶ ἀμέθυστα προλαμβανόμενα ὅσον πέντε» (W I 113₈₋₉) ≡ *Ḥaš* 1:130 «وزن لوز = مز» «وإذا تَقَدَّمَ في الأخذ منه قدر خمس لوزات، منع السكر» (P 28v 7-8 | T 117₁₀₋₁₁)—mark that there they are censured to be five in number rather than seven, just like in PLINY, *NH* XXIII.8.[75]: «aiunt quinis fere praesumptis ebrietatem non sentire potores» (J-M IV 47₁₋₂). For complementary evidence from the geoponic tradition, see the passage from QUSṬŪS, *Rūmīyyah* IV.75 quoted below.

¹ In *Saġ* in the first instance the name of the substance is «קשטור», then a corrupted form «נדרבידסתין»[†] (ie «גנדידסטר ≡ נדרבידסתין»). In *Nisy*, in turn, only one passage is found, with a wording that resembles partially *Saġ*-6 in the use of «קשטור» and partially *Saġ*-7 in featuring the verb «חבש» rather than «הלביש». For the source of the quote, see *Firdaws* VI.iv.33 on the benefits of castoreum: «وإذا شحق مع الزيت ووضِع على الرأس، نفع من الصداع الذي سببه البرد والريح الغليظة» (§ 438₉₋₁₀).

² For the fox and Egyptian vulture, cf. identical passages in IBN ʿALĪ, *Ḥayawān* [13.13] and [56.6] (R 128, 364), respectively. I have been unable to find any parallel for the use of a hyena's right rib against migraine as transmitted in *Almuġnī*.

^a*Hawāṣṣ* appears to have fit the traditional pattern since, in addition to unqualified headache, it also included headaches caused by a shock or by cold, migraine,¹ and inebriation. Then there is the somewhat odd inclusion of a passage on brain haemorrhage, which is in fact reiterated below in identical form in *Nat|Ikt* III.III.2 on the treatment of the nose.

Being as it is universal and ever-present, headache has certainly been a main concern for the population—rich and poor alike—and has received due attention by scholarly physicians as well as by more modest practitioners and market- and road-healers, all of which have offered (and still do) to their clientele the means by which to get rid of this vexing ailment. On the other hand and as far as the Islamicate tradition is concerned, one should note particularly the active selection and careful transmission of amethystic remedies by Muslim authors in all times and in all longitudes—a fact that can only shock those that still insist on misrepresenting the complex Islamicate polyhedron as a flat Islamic plane. Our author decided to include one of those items in his collection (see *Nat*–2) and his country-man IBN ALHAYTAM did likewise (see the double passage in *Saḡ*–5). The medical treatment of headaches caused by wine consumption was, indeed, a well-established subject by the time GALEN compiled his *Sec. loc.*, where he reports what APOLLONIUS had written on the matter,² as well as the remedies prescribed by ARCHIGENES.³

Typology

Here, as elsewhere, it is perhaps the way of application of the remedies that distinguishes conventional medicine from *ḥawāṣṣic* lore—yet the boundary is not as clear-cut as the traditional dichotomy rational/irrational medicine would imply. While most modern historians of science dismiss traditional anticephalalgic amulets as utter superstition and “magic”, GALEN himself made a distinction

³ Cf. *Hārūniyyah* II.I.3 (G 301₁₇–305₅) and *Fuḡarāʾ* I–III (Ā 41₁–47₁₃ | J–A 82₁–86₉). As for canonical therapeutics, no less than sixty-seven pages in the Hyderabad edition are devoted to this subject by ARRĀZĪ in *Alḥāwī* I.XI في الصداع والشقيقة في الرأس (H I 223₁–290₁₀).

¹ Migraine is implicit in *Nat*–3 by the phrase “next to the aching side” and obvious *Nat*–6, where it is referred to as شق الرأس instead of شقيقة.

² Cf. «Τὰ ὑπὸ Ἀπολλωνίου γραφέντα πρὸς κεφαλαλγίαν τὴν διὰ μέθην καὶ ἀκρατοποσίαν» in *Sec. loc.* II.1 (K XII 514_{4–15}), which is found abridged in ARRĀZĪ, *Alḥāwī* I.XI (H I 225₂₀–226₁₆); thence an almost identical rubric in AETIUS, *Iatrica* VI.43 (O II 185_{15–30}). The presence here of APOLLONIUS is much less promising than it would seem at first glance (none of the remedies ascribed to him bear any significant resemblance to the Islamicate BALĪNĀS tradition) and it sheds little light on the origin of *Nat*–2, yet his unreserved recommendation of rue, walnuts, and laurel bays, all of them used invariably as liniments, points towards some older traditions that may have become medicalised at an early date.

³ Cf. «Ἀρχιγένους περὶ τῶν διὰ μέθην κεφαλαλγούντων» in *Sec. loc.* II.2 (K XII 572_{9–18}).

(a fairly subjective one for that matter) between those periapts that had no basis in his own conception of the medical logic (they acted, according to him, “through some wondrous antipathy unknown to humans”) and those the effect of which he thought that could be explained on logic terms. As a consequence he decided to report only *some* of ARCHIGENES’ hangings against headache:

Sec. loc. II.2 (K XII 573⁵⁻¹³)

Τοῦ αὐτοῦ Ἀρχιγένους περίαπτα πρὸς κεφαλαλγίαν. Ἐπειδὴ δὲ καὶ περίαπτα τοῖς κεφαλαλγοῦσιν ἔγραψεν ὁ Ἀρχιγένης, ὅσα μὲν οὐδένα λόγον ἰατρικὸν ἔχει τοῖς πείρα κεκρικόσι, ταῦτα παραλείπω, κατὰ τινὰ θαυμαστὴν ἀντιπάθειαν ἄγνωστον ἀνθρώπῳ φάσκουσιν ἐνεργεῖν, ὅσα δὲ λόγον ἰατρικὸν ἔχει τῶν ὑπ’ Ἀρχιγένους γεγραμμένων ἐκλέξας ἐρῶ μόνον, κατὰ τὴν ἐκείνου λέξιν αὐτοῦ, καθάπερ ἄκρι δεῦρο περὶ τῶν φαρμάκων ἔπραξα.

If GALEN’s self-righteous attitude has bereft us, in general, of an important part of the ancient traditions, *some* is certainly more than *none*, and the fact that he did not condemn amulets *qua* amulets but rather endorsed the use of some of them quite emphatically ought to be borne in mind in order to understand the rôle played by such devices in the Helleno-Islamicate medical tradition. Rather paradoxically, on the other hand, the allegedly strict medical criterion of the physician from Pergamon and that of a curiosity collector such as PLINY did not result in a widely different choice of items (mainly herbal crowns) in both authors—but then GALEN felt compelled to justify his selection by referring their action to his own pharmacognostic doctrines and to distinguish himself from illogical empiricists (κράσις against ἀντιπάθεια):¹

Sec. loc. II.2 (K XII 573¹²–575¹²)

πολυγόνου πλέξας δύο κλωνία στεφάνωσον. ὅτι τὸ πολύγονον ἀρμόττει ταῖς θερμαῖς καὶ πνευματώδεσι κεφαλαλγίαις αὐτὸς ἔμπροσθεν εἶπεν. οὐδὲν οὖν θαυμαστὸν ἐπὶ τοιούτων αὐτὸ πολλάκις ὠφελῆκεναι. καὶ γὰρ συνεχῶς αὐταὶ συμβαίνουσι δι’ ἔγκασιν τε καὶ μέθην. τὸ δὲ δύο δεῖν εἶναι πάντως τὰ κλωνία

¹ Amongst the plants mentioned in this series of crowns approved by GALEN only three find a parallel in PLINY’s *Naturalis historia*, namely *polygonum* = *sanguinaria*: «*et in capitis dolore coronam ex ea inponunt*» XXVII.12.[91] (J–M IV 26⁵¹⁵⁻¹⁶), black *callitrichon* = *polytrichon*: «*capitis dolores corona ex his sedat*» XXII.21.[30] (J–M III 46⁰⁸), and *philanthropon* = *maste*: «*ex hac corona inposita capitis dolores sedat*» XXIV.19.[116] (J–M IV 112¹²⁻¹³). I could find only three anti-cephalalgic crowns in the whole of *NH* that are not included in ARCHIGENES’ catalogue as filtered by GALEN. They are *milax* = *anthophoros*: «*coronam ex ea factam in pari foliorum numero aiunt capitis doloribus mederi*» XXIV.10.[49] (J–M IV 82³⁻⁴), *spina alba*: «*corona ex ea inposita capitis dolores minuit*» XXIV.12.[66] (J–M IV 89¹⁵), and the one on *hypoglossa* that he shares with DIOSCORIDES and which is quoted below.

προσέβριπται τοῖς βουλομένοις τὴν ὠφέλειαν ἀπὸ τοῦ πολυγόνου κατὰ ἀντιπάθειαν ἄγνωστον, οὐ κατὰ τὴν κρᾶσιν αὐτοῦ γίνεσθαι.

ἢ **κιχώριον**, τὸ Ῥωμαῖστί καλούμενον Ἴντυβον λάχανον, ἐπιτίθει τῇ τοῦ πάσχοντος κεφαλῇ, καὶ μάλιστα ἐὰν ἀπὸ ἐγκαύσεως ἀλλγῆ — ἐγὼ δὲ καὶ προσθήσω, καὶ ἀπὸ μέθης.

οὕτω γὰρ ὠφελοῦσι καὶ οἱ **ρόδινοι στέφανοι** καὶ τούτους οὖν ἕξεισι γράφειν τῷ βουληθέντι καὶ προστιθέντι τὸν ἀριθμὸν οὗ ἂν βουληθῆ καὶ φάσκοντι τὸν ἐκ τοσῶνδε ρόδων πεπλεγμένον στέφανον ἰάσθαι τὴν κεφαλὴν.

ἐφεξῆς **καλλιτρίχω** στέφειν ἀξιοὶ τὴν κεφαλὴν, ὃ τινες ὀνομάζουσι, φησί, τριχομανές. [...].

εἶτα μετ' ὀλίγον τῇ **φιλανθρωπείῳ βοτάνῃ** στέφεσθαι κελεύει καὶ **φοίνικος ἄρβενος σεβενίω**. [...].

παραπλήσια τούτοις ἐφεξῆς γράψας ἐπὶ **χαμαίμηλον** ἤκεν, οὗ πείραν ἔχομεν ὠφελοῦντος κεφαλαλγίαν, ἐὰν αὐτῷ τις, ὡς ἔμπροσθεν ἐρέεθῃ, δύναιτο χρῆσθαι. [...]

ἀπαλλάσσει κεφαλαλγίαν **περιστερῶν βοτάνῃ**, ἣν τινες ἱερὰν καλοῦσι, καὶ στεφομένη καὶ καταχρισμένη μετ' ὄξους καὶ ροδίνου.

The repertoire of crowns and hangings available in Roman times was, as a matter of fact, quite impressive and not a few of them found their way, through translation, into the Arabographic corpus. At least one of them entered it through DIOSCORIDES' characteristically attenuated report:¹

Materia medica 4:129 ὑπόγλωσσον *Ḥašāʿiṣ* 4:124 اوبغلسن
W II 275₃ P 96v 4–5

δοκεῖ δὲ ἡ κόμη περίαμμα εἶναι χρῆσιμον κεφαλαλγοῦσι. وقد يُظنُّ بجمّة هذا النبات أنّها، إذا غلّقت على رأس من به صداع، نفعت منه.

Almuǧnī I.1 في الصداع (L 5r 12–14 | M 3r 14–15 | P¹ 3r 8–9 | P² 6r 10–12)

اوبغلسن — معناه «لسان الفرس» فيما زعم ابن حسان (رحمه الله).
د: «قد يُظنُّ قوم بجمّة هذا النبات أنّها، إذا غلّقت على رأس من به صداع، نفعت منه».

اوبغلسن [اوقلص M].

¹ For ὑπόγλωσσον, cf. also PLINY on *hypoglossa* in *NH* XXVII.11.[67]: «*capitis dolores corona ex iis inposita minuit*» (J–M IV 258_{1–2}). The passage in IBN ALBAYṬĀR' *Almuǧnī* should be added to the reconstruction of IBN ĠULĠUL, *Tafsīr* 4:117 اوبغلسن* (G 85₅ | D 154₄₆ | P 96v); on the transformation of ὑπόγλωσσον into ἰπόγλωσσον (whence the interpretation as لسان الفرس, cf. DIETRICH 1988: II 634 n. 2. This one seems to be the only such crown recorded by DIOSCORIDES.

Others were passed on by GALEN:

<i>Simpl. med</i> VI.1.45 Περὶ ἀνήθου	<i>Mufradah</i> VI.46 ذكر الشبث
K XI 832 ₁₇₋₁₈	E 99r 23-24
διὰ τοῦτό μοι δοκοῦσι καὶ οἱ παλαιοὶ ἐξ αὐτοῦ στεφάνοις χρῆσθαι παρὰ τὰ συμπόσια.	ولهذا السبب أحسب القدماء كانوا يتخذون منه أكليل يضعونها على رؤسهم وقت الشرب.

An informative reflection of this legacy is provided by a couple of remedies against headache transmitted by ΑΤΤΑΒΑΡĪ, the second of which (a crown made of endive or chicory) corresponds to ARCHIGENES' κυχῶριον (= Roman Ἴντυβος) in the fragment quoted above:

<i>Firdaws</i> IV.II.12 علاج الصداع (§ 156 ₁₅₋₁₆)
وإن علقت فوة الصبّاغين على الرأس، سكن الصداع؛ أو وضعت على الرأس إكليلاً من هندباء، نفعه.

On a complementary note to *Saġ-5* (and concerning also tangentially *Nat-2*), geoponic literature proved to be a major doorway to the Islamicate tradition for a few of these remedies, especially those against inebriation. In some cases *Filāḥah* texts provide additional (and occasionally supplementary) evidence for prescriptions already documented in the medical corpus, as for example CASIANUS BASSUS' recommendation regarding bitter almonds and cabbage:¹

<i>Geoponica</i> VII.31.1 (B 211 ₁₃₋₁₅)	<i>Rūmīyyah</i> IV.75 (M 162 ₁₆₋₁₈)
Πνεύμονα αἰγείου ὀπτήσας ἔσθιε. ἢ ἀμύγδαλα πικρὰ νῆστις φάγε ε' ἢ ζ' ἢ κράμβην ὠμὴν προέσθιε, καὶ οὐ με- θυσθήσῃ.	إذا عمد الرجل الذي يُريد الإبهال في الشراب إلى رثة عنز، فاشتواها فأكلها قبل أن يطعم طعاماً غيرها؛ أو عمد إلى لوزاتٍ مزات خمس أو سبع، فأكلها؛ أو إلى عدّة ذلك من ورق البقلة التي تُسمى «الكرنب»، فأكلهنّ نباتات: لم يسكر وإن أكثر من الشراب.

¹ Eating raw cabbage is commended against inebriation also elsewhere in the text, cf. «καὶ οἱ βουλόμενοι πολὺν οἶνον πίνειν, καὶ μὴ μεθύσκεσθαι, προεσθουσιν ὠμὴν κράμβην» in *Geoponica* V.11.3 (B 137₂₋₄). With regard to the Arabic translation, I adopt the historically correct reading «الكرنب» from manuscripts EL against the editor's choice of «لكرم» following manuscripts BO. The passage excerpted by ΑΤΤΑΒΑΡĪ, on the other hand, might ultimately stem from some *Filāḥah* (but not from *Rūmīyyah*) or from some other text in which the original locus had already been reworked, as shown by the additions and alternative readings that it transmits: a goat's lung or its fat, stems of white cabbage, and seven bitter almonds.

ATṬABARĪ, *Firdaws* VII.II.3 (§ 529₂₋₄)

وقال غيره: «من تحسنى بيضاً نياً أو أكل قبل الطعام من رثة العنز أو شحمها مشويّاً، أو قضباناً من الكرنب الأبيض، أو سبع لوزات مّرة، قوي على شرب النبيذ».

The text of *Eclogae* included, moreover, the mention of a crown made of yellow bugle (χαμαίπιτυς, *Ajuga chamaepitys* (L.) Schreb., also known as ‘ground pine’):¹

Geoponica VII.31.1 (B 211₅₋₁₆)

οὐκ ἂν δὲ μεθυσθεῖη ὁ πίνων, εἰ χαμαί-
πίτυος κλάδοις ἐστεμμένος εἴη.

Rūmīyyah IV.75 (M 162₂₀₋₂₁)

ومّا لا يسكر له الشارب أبيضاً: أن يعمد إلى
نبتٍ من الحشيش المستى «كرافيطوس»،
فأخذ منه الشارب إكليلاً حين يجلس على
شاربه فيضع ذلك الإكليل على رأسه.

Back to our text, elements of plant and animal origin are quite evenly represented in *Natāʾiǧ* and probably also in its source. Besides, mummy in *Iktifāʾ* shows that the original compilation included also at least one mineral substance, but apparently no stone. While some of the passages require conventional ways of use of the active elements (ingestion, nasal administration, and also bandaging in *Saḡ-6*), the majority of remedies selected by ALṬILBĪRĪ involve some kind of periapt (see *Nat-2|3|5|6*). As for the typology of the forces at work behind these properties, analogy may be invoked for *Nat-1* and perhaps also for *Nat-5|6*,² but the ultimate connections may be no longer retrievable.³

¹ Cf. a little further an echo of the “ancient stories” and traditional crowns within an epigraph on how to drunk much wine without becoming inebriated in *Geoponica* VII.33 .2: «προσέτι δὲ καὶ ἀρχαίων ἱστοριῶν ζητήματα καὶ διηγήσεις, καὶ στέφανοι ἀπὸ ποικίλων ἀνθῶν ἐπιτιθέμενοι τῇ κεφαλῇ» (B 212₁₁₋₁₃). I reconstruct the form of the phytonym from the reading «كفاوس» provided by the editor in the critical apparatus *ad loc.* As for the gloss added by MS E, سورنجان is a name borrowed from Persian that generally refers to wild saffron or autumn crocus (*Colchicum autumnale* L.) in the Islamicate pharmacognostic tradition (cf. particularly the references gathered in DIETRICH 1988: II 590–591 n. 5), while the Syriac name «رحبا» (probably corrupt) seems hard to assimilate to the glosses «رحبا» and «رحبا» with which ĠIBRĀʾĪL (sc. B. BUḤTĪŠŪʿ) and SERGIOS explained, respectively, رحبا according to BAR BAHLŪL, *Lexicon* 904₁₆₋₁₈.

² The link between human hair and a patient’s head is too obvious to need commenting. In the case of the hoopoe skin the primitive analogy may have become further obscured by the omission of the specification that it must be the skin *from the bird’s head* (or the head itself according to an alternative tradition) that is placed on the aching organ.

³ A remarkable exception being, as seen above, the antipathy between the cabbage and the vine, which suggests that there was indeed a certain rationale (however “irrational” it may seem in another time and place) for some (most?) specific properties in their original context.

 Commentary

II.vi.1 Dioscorides said: «If hen brains are given to drink with wine, they stop bleeding from the brain membrane.»

Cognates

Both the direct Hebrew translation of *Iktifāʾ* and version A of *Nisyōnōt* (but not the Tashkent manuscript) include a parallel quote immediately preceded by the two DIOSCORIDES-ascribed passages on mummy mentioned above:¹

<i>Saḡullōt</i> II.vi.3 (L–M 303 ₄₋₆)	<i>Nisyōnōt</i> ^A II.vi.3* (L–M 168 ₆)
ואמר: «אם תשתה מוחות התרנגולות ביין, יפסיק רעיפת הדם (דם הנחירים) הבאה מקרומות המוח.»	ואמר: «אם ישתה המוח התרנגולת ביין, יועיל ויפסיק רעיפת הדם מהנחירים.»

Saḡullōt shows a plural “membranes” (קרומות) that may not be entirely insignificant for the reconstruction of the original locus in ^α*Hawāṣṣ*.

Source

The passage can be identified quite straightforwardly as an adapted excerpt from IṢṬIFAN’s translation of *Materia medica* 2:49 on hens and cockerels, at the beginning of which it is affirmed that taking hen brains in a drink with wine avails against the bite of venomous beasts and against meningeal haemorrhages. Despite the quite obvious sympathy implied by the ingestion of brains for the brains (an analogy very much in the line of *blood makes blood*), DIOSCORIDES does not transmit this alleged virtue in reported speech or from hearsay but rather as an unattenuated medical statement:²

¹ The standard Hebrew term רעיפת הדם corresponds also to Arabic زف الدم in *Nat* VI.vii.2, where menstrual bleeding is intended. The Arabic phrase has a generic meaning ‘bleeding, haemorrhage’, indeed, and therefore the clarification “nosebleed” (דם הנחירים) is a sensible one. It became integrated into *Nisy*^A, in which no mention at all is made of the cerebral membranes.

² Echoes of this property in the Graeco-Byzantine tradition are extremely rare, cf. PAUL OF AEGINA, *Pragmateia* VII.3 E-2 ἐγκέφαλος: «τὸν δὲ τοῦ ἀλεκτρούνοσ συν οἶνω πινόμενον θηριοδύκτοις φησὶ Διοσκουρίδης βοηθεῖν καὶ τὰς ἐκ μηνίγγων ἐπέχειν αἰμορραγίας.» (H II 208₃₋₅).

Materia medica 2:49 ἀλεκτοριδες
WI 135₁₄–136₁

καὶ ὁ ἐγκέφαλος δὲ αὐτῶν ἐν ποτή-
ματι θηριοδῆκτοις σὺν οἴνω δίδοται
καὶ τὰς ἐκ μῆνιγγος αἰμορραγίας ἐπέ-
χει.

Ḥaṣāʾiṣ 2:40 وهو الدجاج
B 66r 13 – 66v 2 | E 32r 3–5
P 33v 5–6 | T 142_{10–12}

ودماغها، إذا شرب بشراب، نفع أيضًا من
نهش الهوامّ ويقطع نرف الدم العارض من
حجاب الدماغ.

ودماغها [ودماغه E | أيضًا] BE – | ويقطع [وقطع
BE | الدماغ] العين والدماغ BE.

TESTIMONIA

[?]IBN MĀSAWAYH C ARRĀZĪ, *Alḥāwī* III.2 (H III 88_{4–5} | Y 63r 38)
|| [⊗]AZZAHRĀWĪ, *Taṣrīf* II.III.3 الرعاف (S I 88₁₂) || IBN WĀFID, *Liber
Serapionis* [418] *digedi–gallina* (A 280_{46–47} | P 179rb 35–38) || ALMAR-
WAZĪ, *Ḥayawān* III.28 والدجاجة والديك (C 179r 11–13 | D 160v 12–13 | L 119r
5–7) || ALĠĀFIQĪ, *Mufradah* 2–26 دماغ (M 134r 12–14 | R 286_{1–2} | T 231_{13–14})
≡ *Simplicia* C–21 *cerebrum–dimac* (V 30rb 26–30) || IBN ALBAYṬĀR, *Ġāmiʿ*
دجاج (B II 88_{10–12}) | [⊗]*Almuḡnī* IV.1 في الرعاف (L 102v 9–10 | M 60v 16–17 |
P¹ 55v 14 | P² 92v 9–10).

Remarks

With regard to IŞṬIFAN’s translation, شراب has here its more specific meaning ‘wine’ (οἶνος) and μῆνιγγξ has been interpreted, like elsewhere in that text,¹ as ‘brain membrane, meninx’, which seems to be indeed the membrane originally intended.² Now, the direct tradition of this locus reads quite unanimously a singular حجاب just like the text of *Natāʾiḡ*, but its indirect tradition shows almost universally a plural حُجُب that is, in fact, the form attested elsewhere in *Ḥaṣāʾiṣ*

¹ Cf. «αἰμορραγίας τὰς ἐκ μῆνιγγων» ≡ «الدماغ» [«حجاب» T] «الرعاف الذي من حجب» in *Mat. med.* 2:79 αἶμα (W I 161₂) ≡ *Ḥaṣ* 2:70 دم (P 39r 13–14 | T 166_{13–14}) on the healing property of pigeon blood, as well as «τὰς ἐκ μῆνιγγος αἰμορραγίας»—«فوق الدماغ» [P «الدى»] «الحجب التي» in 5:84 στῖβι (W III 56₇) ≡ 5:10* ἰθδ (P 120v 30–31 | T 410_{17–18}). The Greek term μῆνιγγξ was also occasionally transliterated, as in «غشاء الدماغ المستقي بمنجس» in the Arabic version of ALEXANDER OF TRALLES’ *Therapeutica*, cf. ARRĀZĪ, *Alḥāwī* I.X في قرانطس (H I 197₂₀–198), which corresponds to *Therapeutica* I.XIII Περὶ φρενίτιδος (P I 509₁₃).

² The Latin translation reflected in *Diosc*¹ 2:26 *De caponibus*, in turn, seems to have avoided the word: «*Cerebrum eius cum uino acceptum fluxum sanguinis abstinet*» (S 192_{6–7}). Amongst modern translators, BERENDES 1902: 167 interprets without reservation μῆνιγγξ as referring to the brain (“den Blutfluss aus der Hirnhaut”), whereas BECK 2005: 105 is perhaps overcautious in translating “bleeding from a membrane”.

itself and also the one reflected in *Saḡullōt*. Besides, it seems that an identical quote circulated at least in Andalus under the authority of GALEN, which seems to be reflected also elsewhere in *Natāʾiḡ*.¹

The oldest extant literal quote from this locus in the Arabic tradition may be IBN MĀSAWAYH if the passage in the Hyderabad edition of *Alḥāwī* in which his name is made to follow the abbreviation for DIOSCORIDES (د) is authentic.² Let it be noted that the passage, regardless of its immediate source, shows a plural حُجُب against the singular of IṢṬIFAN's translation:³

ARRĀZĪ, *Alḥāwī* III.3 (H III 88₄₋₅ | Y 63r 38)

د — ابن ماسويه: «دماغ الدجاج، إن شُرب بشراب، قطع نرف الدم العارض من حُجُب الدماغ».

د ... بشراب] - Y.

In addition to the aforementioned passage which he apparently quoted from *Materia medica*, IBN MĀSAWAYH had included also an expansive paraphrase of that locus in one of his books:

ARRĀZĪ, *Alḥāwī* III.3

H III 89₄₋₅ | Y 64v 5-6

ابن ماسويه قال: «مما ينفع من الدم الذي يخرج من الدماغ من سَقَطَةٍ أو ضربة: اسقه أدمغة الدجاج، وأكثِر منه مرّاتٍ كثيرةً».

Continens IV.3

P 103ra 26-2 | V 62va 29-31

Binmasuy: «Valet ad sanguinem effluentem de cerebro ex casu aut percussura si dederis in potu patienti de cerebro gallinarum quampluries diuersis horis».

مما] ما Y.

potu] potuz v, potum p | de... de] ex... ex v.

According to IBN ALBAYṬĀR, the author of *Alḥāwī* himself would have commended drinking a great amount of hen brains against head convulsions (تزَعْرُوع)

¹ See *Nat* III.III.2.

² There may be some reason for suspicion, as it is unlikely that IBN MĀSAWAYH should have cited *Materia medica* through IṢṬIFAN's translation and, in fact, his own paraphrase of the locus is admittedly different from this alleged quotation (see below).

³ The passage is apparently missing from the Latin translation (cf. *Continens* V 54va 55), which might imply that FARAĠ B. SĀLIM's Vorlage shared a homoeoteleutic leap similar to the one in manuscript Y of *Alḥāwī*. In any case, the locus corresponding to *Alḥāwī* III.2 in *Liber continens* is remarkably divergent and the sections on the nose (III.3) and the teeth (III.4) in the original Arabic appear to have been elevated there to the rank of separate books (IV and V respectively).

caused by a blow or a strike in a passage that is virtually identical to *Saḡ*-1 on mummy («ההכאה מן ההודעזעות אשר בראש») except for the element to which the benefit is attributed:

IBN ALBAYṬĀR, *Almuḡnī* I.4 في الفلغموني وفي سائر تفترق الاتصال العارض للرأس
(L 16v 3-5 | M 9v 15-17 | P¹ 8v 9-11 | P² 15v 9-11)

أدمغة الدجاج — قال الرانزي في المحاوي إنها نافعة جدًا لمن أصابه تزعزع الرأس من ضربة
أو صدمة، فينبغي أن يسقي منها شيئًا كثيرًا.

فينبغي [وينبغي] P¹² | منها [منه] M | شيئًا - L.

The locus is nowhere to be found in available witnesses (either Arabic or Latin) to that text, but indirect transmission might actually be superior in this case in view of a very similar prescription by ARRĀZĪ in which eating hen, lamb, and kid brains is affirmed to avail against a headache caused by a fall or a blow to the head:

Taqāsīm III في صداع (H 58₂₋₄)

ويُطعم من أدمغة الدجاج أو أدمغة الحملان والجد، ويُجتنب كلّ غذاء حارّ يصعد إلى الرأس.

Diuisioinum III (V 61va 48-50)

Ḥillūq III (P 5r 23 - 5v 2)

Et cibari post istud ex cerebris gal-
linarum et cerebris arietum et edu-
lorum, et euitet omnem cibum ca-
lidum cuius est facere uaporem
ascendentem ad capitem.

ويأكل مموחי התרנוגלות ומוחי השלמים
והדנים. ויזהר מכל דבר חם ויהיה לו
עשן יעלה אל הראש.

The same kind of early integration of DIOSCORIDES' passage within a trophog-
nostic or dietetic context is reflected by ARRĀZĪ's western Jewish contemporary
IBN SULAYMĀN in Qayrawān. Hen blood and brains share this property, he says,
when used as medicines:

Aḡḍiyah IV.11.1 (S IV 116₁₂₋₁₅ | S 576₆₋₈)

القول في الفراريج والدجاج والديوك

ومن منافع الدجاج والديوك على سبيل الدواء: أن دمها، إذا ضمّد به الدماغ والجبين والأصداغ،
نفع من الدم المنبعث من حُجْب الدماغ. وأدمغة الدجاج خاصّة، إذا شُربت، نفعت من مثل
ذلك ومن نهش الهوامّ.

The form in which this last locus entered Andalus through AZZAHRAWĪ is highly illustrative about the accidents of transmission and the spontaneous emergence of new readings destined to have their own independent circulation (ie apomorphies). If in *Aġdiyyah* it is the medical benefits of both blood and brains that are described, in *Taṣrīf* in turn (at least in the facsimiled manuscript) only the brains feature in the two segments:¹

Taṣrīf XXVII.II د II.5 الديوك والدجاج (S II 346₂₀₋₂₁)

الديوك والدجاج — أدمغتهما، إذا ضُمد بهما الدماغ والجبين والأصداع، نفع من الدم المنبعث من حجب الدماغ. وأدمغة الدجاج، خاصته: إذا شُربت، نفعت من ذلك ومن نهش الهوام.

As usually, silent quotations allow for a more free use of paraphrase and synonymic substitution. Thus, in IBN SĪNĀ's punctilious terminology the vague reference to bleeding (نزف الدم) has been substituted for by a more specific nose bleeding (رعاقي or رعاقيّ), which was indeed what most physicians understood to be referred to by DIOSCORIDES' words (cf. «רעיפת הרם» above in *Nisy*-1), while an accurate *nisbah* "meningeal" (حجائيّ) is offered as an alternative to the original prepositional phrase "from the meninges" (من حجب الدماغ). This updated reading of the passage is then either adopted or further modified by his eastern successors:²

Qānūn II.2.II.4.7 دجاج وديك

B I 291₂₅₋₂₆ | R I 158₁₇₋₁₈

دماغ الدجاج يمنع النزف الرعاقيّ العارض
(من حجب الدماغ).

دجاج 15-3 *Minhāj* IBN ĠAZLAH,

L 89r 20

ودماغها تمنع الرعاف الكائن من حُجب
الدماغ، ويصنّي الصوت.

Qānūn II.2.II.4.8 دماغ

B I 292₃ | R I 158₂₈

دماغ الدجاج نافع للرعاف الحجائيّ.

دماغ 35-3 *Minhāj*

L 91r 18-19

وأدمغة الطيور تنفع من الرعاف الحجائيّ.

¹ An alleged property of hen *blood* against meningeal bleeding was critically commented upon by GALEN in *Simpl. med.* and it is thus quite likely the Qayrawānī physician that preserves the better reading (and interpretation) of the original passage. However, since I have accessed to the text of both *Aġdiyyah* and *Taṣrīf* through one single manuscript, caution is required with regard to the authors' understanding of this property. The consideration on the genesis and circulation of apomorphies remains nonetheless valid in any case, as any reader of the passage in the Istanbul manuscripts would have found either no mention of hen and cockerel blood (*Taṣrīf*) or a non-original mention thereof (*Aġdiyyah*).

² For this typically Avicennan coinage (*nisbah* derivation was the trademark of the Iranian polymath, as shown even here by رعاقيّ), cf. also *Qānūn* II.2.II.4.21 دم (B I 195₁₆ | R I 161₄).

Strangely enough, this property is almost universally ignored in *Ḥayawān* literature, with the remarkable (and perhaps significant) exception of *Sexaginta*. It is interesting to note that the text of this apparently pseudepigraphic text confirms the above reading in IBN SULAYMĀN's *Ajḏiyah* (ie blood and brains):

<i>Sexaginta</i> XLIII <i>De gallina</i>	<i>Saḡullōt</i> s.v. תרנגול
A 70ra 37–40 V 108vb 62–64	P 48r 10–11
Sanguis galli uel galline, superponatur super frontem tritus, ualet contra sanguinem fluentem a tela. Cerebrum galline bibitum proprie ualet contra hoc.	אם תשים מדם התרנגול אן התרנגולת על מצח בעל הרעיפה, יעצרה. גם מועיל לזה מוח התרנגול שתוי.
<hr/> superponatur] si ponatur V.	

Origin

Whereas a few precedents and parallels have long been identified for the property of hen brains against poisonous bites in DIOSCORIDES' text,¹ their antihaemorrhagic benefit remains quite isolate in the corpus. On contextual grounds, however, it seems possible that the two passages that both authors share in the same combination and with a very similar wording derive from a common source. It is noteworthy that PLINY (or his source) states that Parthians preferred to apply the bird's brain, rather than their flesh, to wounds (no mention of the meninx is made):

NH XXIX.4.[25] (J–M IV 396₄₋₇)

Carnibus gallinaceorum ita, ut tepebunt avulsae, adpositis uenena serpentium domantur, item cerebro in uino poto. Parthi gallinae malunt cerebrum plagis inponere.

¹ Cf. WELLMANN's apparatus *ad loc.*, where SEXTUS NIGER is signalled as the source for PLINY's similar report.

II.vi.2 Balīnās said: «If one finds a leaf of the tree known as the laurel tree, on the very same tree before falling onto the ground, and puts it behind someone's ear, this person shall suffer neither headache, nor drunkenness.»

Source

The most likely source of this passage is ARRĀZĪ, who ascribes the report to BALĪNĀS' book on φυσικά:

Hawāṣṣ غار 2-غ (I 88v 19 – 89r 2 | Q 32₁₈₋₂₁ | T 112r 4-5 | V 26v 11-13)

قال بليناس في كتاب الطبيعيات إته، إن أخذ ورقة واحدة من ورق الغار التي لم يسقط على الأرض — يؤخذ من الشجرة ويضعها خلف الأذن: لم يسكر ولم يصدع من الشراب واضعها.

بليناس [بلساس I، نلساس T | كتاب [كتابه في I | ورقة... يسقط [ورقه واحدة من ورق الغار التي لم يسقط I، من ورق الغار ورقة واحدة لم تسقط Q، ورق من ورق الغار ولم يسقط T، ورقة واحدة منه لم تسقط V | على الأرض [الي T | يؤخذ من الشجرة [من شجره Q، - T | ويضعها [ووضع QV، ووضعها الانسان T | الأذن [اذنه T | لم ... واضعها [سكن ولم يصرع V | يسكر [يسكن I | يصدع [يصرع IT | واضعها I - .

As usually in passages mediated by ARRĀZĪ, there is little (if any) intentional alteration of the original wording in the quote transmitted by *Natā'iğ*.

From *Hawāṣṣ* the passage is borrowed, in its fullest form and with the usual omission of the intermediary source, by ALQALĀNISĪ:¹

Aqrabādīn XLIX s.v. غار (B 310₁₆₋₁₇)

وقال بليناس في كتابه في الطبيعيات: «إن أخذت ورقة واحدة من ورق الغار لم تسقط على الأرض — تؤخذ من الشجر وتوضع خلف الأذن: لم يسكر ولم يصدع من الشراب واضعها.»

¹ As usually, it is the context (the preceding/following passages) that supports the assumption of silent borrowing.

The same origin must be suspected for an almost identical quote from BALĪNĀS included by ZUHR in his own *Ḥawāṣṣ*, despite slight differences in its wording:¹

Ḥawāṣṣ غار 3-غ (B 108r 4 – 108v 2 | H 160r-3 | P 69r 6-9 | T 326v-6)

بليناس: «مَنْ أَخَذَ وَرْقَةً وَاحِدَةً مِنَ الْغَارِ لَمْ تَسْقُطْ إِلَى الْأَرْضِ مِنْ شَجَرَتِهَا وَجَعَلَهَا خَلْفَ أُذُنِهِ، لَمْ يَسْكُرْ وَلَمْ يَنْصَدِعْ مِنَ الشَّرَابِ».

[بليناس | نلسانس T، نلسانس P، بلسايس H، وقال B | ورقة واحدة] واخذ T، واحد P، ورقة B | تسقط [يسقط HT | ينصدع | ينصدع BHT، ننصوع P.

Origin

There is a parallel tradition on the same amethystic property of laurel leaves that goes back to that cabinet of archaic curiosities that is IBN WAḤṢĪYYAH's treatise on agriculture. There, in the chapter on the laurel (غار) tree, the following experience is reported:²

Nabatīyyah باب ذكر شجرة الغار (F 1506-8)

وقد جربنا نحن في الغار خاصية ظتريفة، وهي: مَنْ أَخَذَ مِنْ وَرْقِهَا وَرْقَةً (يَقْطِفُهَا بِيَدِهِ قَطْلًا، لَيْسَ مِمَّا يَسْقُطُ عَلَى الْأَرْضِ) فْجَعَلَهَا خَلْفَ أُذُنِهِ، ثُمَّ شَرِبَ مِنَ الشَّرَابِ مَا يَقْدِرُ أَنْ يَشْرِبَهُ، لَمْ يَسْكُرِ الْبَتَّةَ وَلَمْ يَنْصَدِعْ مِنَ الْإِكْتَارِ مِنَ الشَّرَابِ — وَإِنَّهُ لَيْسَ ظَرِيفٌ.

IBN WAḤṢĪYYAH's text is both contentually and formally identical to the passage selected by ARRĀZĪ—so much so that the latter might be actually described as a mere simplification of the former.³ The wording of the two passages, however, is different enough as to make it possible to distinguish quite confidently between their echoes even when no explicit source is mentioned. Thus, the

¹ There is no feature in ZUHR's passage that might support independent transmission from a different source and divergences from ARRĀZĪ's text can be all reduced to synonymical substitution and overall simplification, which is a development already shown by some of the copies of his *Ḥawāṣṣ*. Moreover, the quote that follows in ZUHR's compilation is the same one found at the same locus in his model and source.

² Judging from the preceding context, these words may be ascribed to QUTĀMĀ but it also possible that "we" might represent here the author himself.

³ Yet, there is no reason to suspect fraud on the part of ARRĀZĪ, who, despite his apparent tendency to paraphrasing, is extremely scrupulous with regard to the explication of his sources (*Alḥāwī* being in this respect, even more than *Ḥawāṣṣ*, a monument to his punctilious). In fact, the origin of the materials transmitted under BALĪNĀS' name in the *ḥawāṣṣ* tradition (particularly by ARRĀZĪ and by ALQAZWĪNĪ) remains obscure, as do the exact nature of their undeniable relatedness to *Filāḥah* texts.

Nabaṭiyyah version includes a characteristic (and somewhat redundant) verb قطف and the emphatic assertion that the effect will obtain no matter how much wine is drunk.

It is *Nabaṭiyyah* that IBN ALBAYṬĀR quotes (citing its title simply as *Alfilāḥah*) as the source for his slightly abridged form of the passage in *Ġāmiʿ*, and a literally identical quote in his *Almuġnī* not only confirms this ascription but also illustrates how any given passage, written down perhaps on a notebook or on a slip of paper, could be—and actually was—used more than once for different purposes:¹

Ġāmiʿ غار 3-غ (B III 145²⁶⁻²⁷)

الفلاحة: «مَنْ قطف من ورقه واحدة بيده من غير أن يسقط إلى الأرض، ويجعلها خلف أذنه: شرب من الشراب ماء شاء ولم يسكر».

Almuġnī I.19 المبطنة بالسكر (L 33r 14–33v 1 | M 19v 8–10 | P¹ 16v 17–18 | P² 30v 16–31r)

الغامر — من كتاب الفلاحة النبطية: «مَنْ قطف من ورقه واحدة بيده من غير أن يسقط إلى الأرض، وجعلها خلف أذنه: شرب من الشراب ما شاء ولم يسكر».

النبطية] – [P¹2 | واحدة] وأخذه .M

This property featured already, in fact, amongst several anonymous passages collected by ALĠĀFIQĪ in his own compendium, where it is immediately preceded by four properties that seem extracted from a *Filāḥah* text.² The wording of the passage would seem to reflect ARRĀZĪ's version, but this might be a false impression caused by an abridgement in the translation.³

¹ We know virtually nothing about the strategies involved in the compilation of comprehensive anthologies of passages, which must have been similar, at least in the earliest stage of each genre, for *Ḥawāṣṣ*, *Ḥayawān*, and *Ġāmiʿ* texts. Even when the author was working on a pre-existing model (and there seems not to have been any available for *Almuġnī*), the material piecing together of the received text and the new additions and observations is a subject unfortunately understudied as far as the Islamicate written tradition is concerned.

² It is rather unlikely that IBN ALBAYṬĀR should have borrowed his passage from here given that he actually cites ALĠĀFIQĪ at the end of his entry as the source for three other remedies that are indeed taken from the same series in *Mufradah*. On the other hand, ALĠĀFIQĪ's unsourced sequence does not derive from ZUHR's *Ḥawāṣṣ*, let alone from ARRĀZĪ's.

³ I have no access to the only extant manuscript of *Mufradah* containing the whole text (except for letter ش), namely Tunis, Dār al kutub al waṭaniyyah, Fonds Ḥasan Ḥusni ʿAbdulwahhāb MS 18177. For further reference to this manuscript and to its recent identification by DEGEN (it had long been miscatalogued and therefore ignored by most scholars), cf. KĀS 2010: 110 n. 2. All quotes from *Mufradah* ل to ي are thus referenced here through its Latin translation as transmitted in the Munich and Vatican manuscripts.

Simplicia L-42 *laurus-guar*
M 50rb 29-37 | V 92rb 35 - 93va 2

IBN ALBAYṬĀR, *Ġāmif* غار-3
B III 145²⁶⁻²⁹|31-32

ALIVS:

«¹ Si poterit granum pondus II argenti trito et sicco, mitigat dolorem.

² Et quando remollitur in aqua et de illa aqua aspergitur uel roratur domus, expellit muscaliones de domo.

³ Et de folio suo quando fit decoctio cum aceto, ualet dolori dencium.

⁴ Et dicunt quidam quod, si accipiat aliquod lignum de arbore lauri et suspendatur in domo et in loco unde puer timidus dormit, ualet eius multum quia postea non timebit.

⁵ Et qui accipit unum folium lauri et ponat retro uel post aurem, non postea inebriabitur».

sicco] succo V.

الفلاحة:

«⁵ من قطف [...]».

⁴ وزعم قوم أنه، إن أخذ عود من عود شجر الغار وعلّق على الموضع الذي ينام الطفل فيه الذي يفزع دائمًا، نفعه منفعة كبيرة.

[...]

العاقبي: «¹ إن شرب منه مقدار ملعقتين يابسًا مسحوقًا، سكن المغص من ساعته.

² فإن رُشّ نقيعه في البيت، طرد عنه الذباب.

³ وورقه، إذا طبخ بالخل، نفع من وجع الأسنان».

Remarks

A conventional non-ḥawāṣṣic medical benefit of laurel oil against generic headache (κεφαλαλγία ≡ صداع¹) is documented since at least Dioscorides,¹ but it seems that only at a much later date was this property made extensive to the whole plant.²

On the linguistic level, غار is the Arabic name of the laurel or bay tree (*Laurus nobilis* L.), also known in the Islamicate tradition by its Persian names رند and,

¹ Cf. *Mat. med.* 1:40 δάφνινον (W I 416) ≡ *Haš* 1:32 دهن الغار (P 10v 9 | T 42₁₇); also the same therapeutical use of *oleum laurinum* in PLINY, *NH* XXIII.4.[43] (J-M IV 27₂₄).

² Cf. IBN ALĠAZZĀR, *Istimād* III.23 غار (S 104₁₁₋₁₃ | M 43v 16-18) ≡ *Fiducia* III.23 *laurus-gar-rant* (B 114rb 44 - 114va 2 | V 222va 1-6), where its alleviating effect is described against headaches caused by phlegm and thick pneumata. The power of laurel to “dissolve” a headache is also recorded by IBN SĪNĀ, *Qānūn* II.2.11.18,3 غار (B I 468₁₉).

less frequently, *دهمست/دهمشت* (both forms are attested in Arabic),¹ corresponding quite unequivocally to Greek *δάφνη*, and with a fairly well documented local name in Andalus.² Now, according to the compiler of the *Burhān-i qāṭiṣ*, namely seventeenth-century Tabrīzī, the name *دهمست* would be compound of *ده* and *مست* and would mean «ده نقر مست»³ and, depending on the actual etymology of the word, the ending *-mast* may either reflect or have inspired (by Volksetymologie) a connection to drunkenness, which is otherwise unattested in the Graeco-Hellenistic tradition.⁴

¹ Cf. VULLERS, *LPLE* I 943b s.vv. *دَهْم* and *دَهْمَسْت*; STEINGASS, *CPED* 549 s.v. *دهمست dahmast / dahamast*. It is worth noting here that the Persian form *دهمست* (which is quite widely transmitted with a *-ش* and is not so “rare” as stated in BOS, KÄS, LÜBKE, and MENSCHING 2020: 440) is particularly linked in the Arabic corpus to *Filāḥah* texts, cf. both *دهمشت* and *دهمشت* in IBN WAḤṢĪYYAH, *Nabaṭīyyah* 151_n (where the editor prefers «دهشت» over «دهمشت» on manuscripts FL) and «دهمشت» in QUSṬŪS, *Rūmīyyah* IV.86 (M 166₁₃–167₂), where it is the only form used throughout. This Persian name is not limited to geoponic texts and it may have entered the pharmacognostic tradition also through AHRUN’s authority, as in IBN ĠANĀḤ, *Talḥiṣ* [251|347]; cf. also «دهمشت» in IBN ALĠAZZĀR, *Iṣtimād* III.23 (S 104₇ | M 43v 12) and «دهمشت» (but manuscript A reads «دهمشت») in *Zād* IV.18 (T 374₁₀); «دهمشت (وهو حب الغار)» in MASĪḤ, *Hārūnīyyah* II.I.3 (G 303₁₀); ALĠĀFIQĪ, *Mufradah* 3–II s.v. *دهمست* (M 137v 23 | R 296₁₃ | Ṭ 238₁₈); IBN ALBAYṬĀR, *Ġāmīf* 3–126 *دهمست* (B II 117_{31–32}).

² For a detailed analysis of the Romandalusi name of the laurel tree as reflected by local scholars and going back to Late Latin *lauribacca* ‘laurel bay’, cf. CORRIENTE 2001: 166 s.v. *ORBĀQA and the most recent, and exhaustive, update in BOS, KÄS, LÜBKE, and MENSCHING 2020: 1197–1199.

³ Cf. VULLERS, *LPLE* I 943b s.v. *دَهْمَسْت*.

⁴ Already Pahlavi *mast* ‘bemused, intoxicated’, cf. MACKENZIE, *CPD* 54; also STEINGASS, *CPED* 1227 s.v. *دهمست mast*.

II.vi.3 **Atṭabārī** said: «If sprays of rue are hung from someone with a headache next to the aching side, this shall alleviate it.»

Cognates

The Hebrew translation of IBN ALHAYTAM's text includes a parallel quotation ascribed to the same source:¹

Səḡullōt II.vi.4 (L–M 3036–7)

ואמו אל טברי: «אם תלית מין עלי
הסראב [[רודא ב"ל]]
על בעל כאב הראש
בצד הצואר בצד בכואב.
ישקיטהו».

Nisyōnōt II.vi.3 (L–M 1686–7)

ואמר אל טברי: «אם יתלה ענף הרודא
על מי שיש לו כאב חצי הראש.
ישקיטהו».

Mark that *Səḡullōt* is quite explicit in mentioning that these sprays must be hung “from the neck side next to the aching side” (essentially like in *Natāʔiḡ*), whereas *Nisyōnōt* appears to have either interpreted the passage in a different sense or dropped that specification altogether.

Source

The origin of the passage is found in *Firdaws*, where the compiler of *Ḥawāṣṣ* (or, once again, his source) found it already with the same standard formulaic structure and did not need to introduce any other change than synonymical substitution (شَقٌّ for جانب) and perhaps also an omission or reinterpretation of the original place for the hanging:

Firdaws VII.II.3 (S 5289–11) في خواص أشياء من النبات

وإن عُثِّقَتْ طاقات من سذاب على أُذُنٍ من به الصداع تما يلي الشَّقَّ المتصدِّع، سَكَنَهُ
بِإِذْنِ اللَّهِ.

طاقات [طاقات] | سذاب [سذاب]. §

¹ A gloss in *Səḡ* gives the vernacular name for rue, namely «רודא», ie *ruda* (from Latin *ruta*), a denomination shared by all Iberian and Occitanic Romance languages. As usually throughout the text, the Romance name is the only one that appears (probably through substitution) in *Nisy*, but Arabo-Hebrew סראב was nevertheless not unheard of, as proved by two of the three extant Hebrew translations of IBN MAYMŪN's *On asthma*, cf. BOS and McVAUGH 2008: 549.

AṬṬABARĪ's remedy does not seem to have found the favour of later authors,¹ with the exception of an anonymous echo in ALQAZWĪNĪ's encyclopaedia, where the original passage is copied almost word by word:

<p>سذاب <i>ṣaḡāʾib</i> II KĀʿINĀT II.2.63 W 28⁵²⁷⁻²⁹</p> <p>ورأخته تنفع المصروع والصداع الشديد في الحال، سببًا إذا كان رطبًا — حتى قالوا: «إن وُضعت طاقات من السذاب على أذن مَنْ به الصداع مما يلي الشق المصدع، سكن وجعه».</p>	<p>سذاب <i>ṣaḡāyeb</i> s.v. A 126v 14-16 B 135r 12-15</p> <p>ورأيت سذاب مصروع را سود دارد، و در دریا بشناید، خصوص چون تر بود تا — غلیظی که اگر شامی از سذاب در گوش او نهند از آن جانب که درد بود، در حال صداع بشیند.</p> <hr/> <p>مصروع را [مصاروع را B درد را A در حال صداع] صداع در حال B.</p>
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Origin

Like *Nat*-2 above, this remedy is strongly reminiscent of Graeco-Byzantine prescriptions against headache that often involved, as seen in the introduction, such ἐπιθήματα as crowns and amulets. In this case, one of the possible sources for AṬṬABARĪ may be a *Filāḥah* that circulated under the name of DĪMUQRĀṬĪS. There, within the chapter on rue (سذاب), the same remedy is commended in quite similar words:²

Filāḥah, s.v. سذاب

إذا غلق طرف السذاب رطبًا على أذن مَنْ به صداع، سكن عنه بإذن الله تعالى.

Let it be noted that طرف here may be either a Syriacism (cf. ورق ≡ ܩܪܦܐ 'leaf') or a reference to a different part of the plant. As a matter of fact, in the Byzantine summa compiled from CASSIANUS BASSUS' geoponic encyclopaedia the same benefit is said to obtain when the ears are stopped or stuffed with the *soft pith* of rue (ἐγκάρδια, which is reflected by فروع in the indirect Arabic translation of the text):

¹ In what concerns the *Ḥawāṣṣ* genre, its absence from ARRĀZĪ's compilation (in which there is not even an entry on rue) may be partially responsible for this lack of fortunes.

² The manuscript on which I checked this text is Teheran, Maḡlis MS o.Sign., which (like so many others on which this survey is built) I consulted somewhat hastily some years ago at the Institut für Geschichte der Arabisch-Islamischen Wissenschaften in Frankfurt. The reproduction had not foliation at all, thence the less accurate reference to chapters whenever the text is cited.

Geoponica XII.25.3 (B 373₁₁₋₁₃)

Περὶ πηγάνου καὶ
ἡμέρου καὶ ἀγρίου

τοῖς δὲ ἀπαλοῖς ἐγκαρδίοις τοῦ πηγά-
νου εἴ τις τὰ ὄψα βύσειεν, ἰαθήσεται
κεφαλῆς πόνος.

Rūmiyyah VII.24 (M 282₄₋₆)

أن تعلم ما الذي يُستعان به بشذاب
البساتين والصحاري من الدواء

وإن صدع إنسان عن ريح تُصيب رأسه،
فعمد إلى فروع من فروع الشذاب فقطعها،
ثم ضم بعضها إلى بعض فعلقها من أذنه إلى
ما تلي شق رأسه المصدع، أو من أذنيه إن
صدع رأسه جميعًا — برأ لذلك بإذن الله
تعالى.

Moreover, judging from the wording of the Arabic version (which, incidentally, shows how much of the original *Eclogae* was lost in the Byzantine abridgement), *Rūmiyyah* makes for a much better candidate than DĪMUQRĀṬĪS' *Filāḥiḥ* to be, if not the direct source, at least a close cognate to the source quoted from by AṬṬABARĪ.

The abridged passage included in the *Geoponica* finds an intriguing parallel in the pseudo-Galenic Εὐπόριστα,¹ while a conventional use of rue mixed with rose oil and vinegar and anointed on the head was actually documented in pre-Byzantine medical literature.² It is however in the realm of ancient geoponic literature that further evidence is found for the ḥawāṣṣic use of rue against headaches. In IBN WAḤṢĪYYAH's treatise on agriculture a number of benefits are attributed to this plant. According to YANBŪṢĀD, rue has an unequalled specific property (خاصية) against epilepsy, yet he tested a periapt of rue on a patient with no success until the whole plant, having been plucked from its roots, was hung from the patient's neck so that he was able to smell it. There follows a report from a mysterious sorcerer:

¹ Cf. *Rem. parab.* III «πόνον δὲ κεφαλῆς ἰάται, εἴ τις τοῖς ἀπαλοῖς τῆς κεφαλῆς τὰ ὄψα ἐμφράσσει» (K XIV 543₃₋₄). However, while ἐμφράσσω may be considered a synonym of βύω, PSEUDO-GALEN instructs to apply the remedy to the cranium rather than to the ears.

² Cf. for instance DIOSCORIDES, *Mat. med.* 3:45 πηγανον (W II 58₁₁) ≡ *Haš* 3:43 سذاب (P 64v 6-7 | T 260₁₈₋₁₉).

Nabaṭiyyah باب ذكر السذاب (F 793¹³⁻¹⁷)

قال: وقد وصف أطو نانا[†] الساحر للصداع، قال: «إذا خرج المصدع صداعاً عظيماً إلى منبت السذاب في ليلة يكون كوكب المريخ فيها طالعاً، فضرب بيده اليمنى إلى أصل فقطعه أغصاناً بورقها، ثم قال وهو ينظر إلى المريخ: "يا إله، هذا السذاب قد قطعته لأسكن صداعي به" أو "لأسكن به صداع فلان الذي صفتة كذا"؛ ثم انصرف فسد أذنيه ودس فيها من ذلك السذاب — فإن الصداع يسكن عنه ولا يكاد يرجع إليه مثل ذلك الصداع أبداً».

أطو نانا [اطوايا با H، راطوما I].

The astrological context of the procedure is as obvious as unparalleled in the corpus under survey, yet *Nabaṭiyyah* aligns closest to *Geoponica* in the specific detail of stuffing the ears (دس \cong βύω) rather than hanging the plant from them.

II.vi.4 He also said: «When the skin of a hoopoe is dried and ground, then diluted in water and administered nasally with this water, it avails against headache.»

Cognates

As seen in the introduction to this chapter, the Arabic copy of IBN ALHAYTAM's *Iktifāʾ*? includes a cognate to this passage that shares the same implicit ascription, namely AṬṬABARĪ. The Hebrew translation, on the contrary, does not transmit it even fragmentarily and it is hard to guess where an eyeskip may have obtained.

Source

The text of the quote is essentially identical in its contents to the second segment of a double passage in which AṬṬABARĪ describes two different therapeutic uses of the skin of a hoopoe:

Firdaws VI.IV.31 منافع الهدهد (§ 437¹³⁻¹⁵)

وللصداع — أن تأخذ جلد الهدهد فتضعه على رأسه، أو تأخذ من جلده فتثيبسه وتدقه وتسعط به بعد أن تديفه بالماء — فإنه ينفع من ذلك.

Lexical differences are remarkable, however, as two of the three verbs of the protasis have been apparently substituted for by synonyms (سحق for يثيبس and جفف for دق) with no change at all in the overall meaning of the instructions.

Parallel traditions

An almost contemporary and slightly different parallel for the first segment of the double passage in *Firdaws* can be found in IBN ʿALĪ's *Ḥayawān* and shall be analysed below in the commentary to *Nat*-6. The whole sequence, in turn, is documented only at a later date in IBN BUḤTĪŠŪS, yet it is found there in a form that suggests that, despite chronological considerations, there is no direct dependence from *Firdaws* and that the two texts may actually be independent reflections of an ultimate common source:¹

¹ The mention of aching *teeth* (rather than *headache*) in the corresponding, and otherwise identical, passage in *Nat*^L must be the outcome of some misreading—and there are indeed a few of these apomorphies in that text.

Ḥayawān VI.9 هدهد (G 167₁₀–168₁)

≡ ALMAWŠILĪ, *Manāfiḥ* 105r 2–4

مرأس الهدهد — إن أخذت جلده وعلقت
على من يشتكى وجع رأسه، سكن عنه —
ويجب أن يسعط بقليل زبد.

≡ *Nat* s.l. منافع الهدهد (L 48v 2–5)

مراس الهدهد — إذا أخذت جلده وعلقت
علي من يشتكى وجع أسنانه سكن
ويجب أن تستعط بقليل زبداً.

إن [اذا | E | عنه] - E .

There is a noticeable divergence between *Firdaws* and *Ḥayawān*: the former describes *two* different remedies (placing an item on the patient's head and an errhine) based on the same main ingredient (namely hoopoe skin), whereas in the latter there is *one* single prescription involving two operations (periapting the skin and snuffing or administering intranasally some butter) that must be combined for the effect to obtain.¹

The picture becomes more entangled when an additional piece of evidence is produced from a third witness, ALMARWAZĪ, who aligns with IBN BUḤTĪŠŪḤ against *Firdaws* while providing new details as to the way in which the skin must be placed. It must be wrapped first in a cloth before fastening it on the patient's body (no specific part is mentioned).² The syntax of the passage is much less incompatible with AṬṬABARĪ's version as to the skin being complementarily (but not alternatively) used as an errhine:

Ḥayawān III.40 هدهد (C 191v 13–15 | D 171r 11–12 | L 132r 6–7)

جلد رأس الهدهد — يجعل في خرقه ويشد على من يشتكى رأسه، ويسعط بشيء من
زبد، فيسكن الوجع.

¹ This divergence cannot be solved, moreover, by postulating a simple different transmission of the conjunction *و* / *أو* because *Firdaws* is quite specific in providing the details for the preparation of the errhine (the skin must be dried and diluted in water) and *Ḥayawān*, in turn, prescribes “a little of butter” that can hardly be interpreted as a misreading of anything in AṬṬABARĪ's locus. Even if the last segment in *Ḥayawān*, which may be considered somewhat ambiguous, were to be interpreted as meaning that it is *the skin* that must be snuffed *with* some butter (which is admittedly possible on syntactical grounds), assuming dependence from *Firdaws* would imply both abridgement and unmotivated expansion on the part of IBN BUḤTĪŠŪḤ. Furthermore, the first segment describes clearly a hanging (علق vs جعل in *Firdaws*), which links *Ḥayawān* to the same tradition reflected by IBN ʿALĪ and distinguishes both from AṬṬABARĪ.

² The same instructions to put the skin in a cloth are found also elsewhere, yet not in the same combination with a nasal administration (see below *Nat*–6).

Origin

In the search of even earlier precedents for this tradition a paragraph from PLINY's encyclopaedia may be of some help. Amongst remedies for headache he transmits a lengthy sequence that includes several elements remarkably reminiscent of AṬṬABARĪ's passage, such as the skull and brains of several birds that must be tied to the patient, or smeared on the head, or still applied as an intranasal liniment, as well as their feathers or combs to be worn as a necklet:

NH XXIX.6.[36] (J–M IV 408_{5–19})

Capitis doloribus remedio sunt coclearum, quae nudae inveniuntur nondum peractae, ablata capita et his duritia lapidea exempta —est autem calculi latitudine, eaque adalligantur, set minutae fronti inlinuntur trietae, item oesypum—, ossa e capite vulturis adalligata aut cerebrum cum oleo et cedria, peruncto capite et intus naribus inlitis, cornicis cerebrum coctum in cibo sumptum vel noctuae, gallinaceus, si inclusus abstineatur die ac nocte, pari inedia eius, cuius doleat, evulsis collo plumis circumligatisque vel cristis, mustelae cinis inlitis, surculus ex nido milui pulvino subiectus, murina pellis cremata ex aceto inlito cinere, limacis inter duas orbitas inventae ossiculum per aurum, argentum, ebur traiectum in pellicula canina adalligatum, quod remedium pluribus semperque prodest.

This series is furthermore a faithful—albeit fragmentary—reflection of what must have been the pre-Islamicate precedents of ailment-centred *Ḥawāṣṣ* texts, as the medical benefits attributed to a great variety of animals are already conveniently gathered under a nosonomical rubric “Remedies for headaches”.¹

¹ The extent to which such Roman and especially later Byzantine texts may have served as inspiration for the first *Ḥawāṣṣ* compilers of the Islamicate period remains to be studied. As far as *Ḥawāṣṣ* is concerned, given that his author chooses his passages exclusively from an Arabic corpus and since the overall architecture of the treatise mirrors quite closely the standard structure of therapeutic texts, this influence can only be an indirect one.

II.vi.5 He also said: «A human hair, if hung from him who suffers from migraine, relieves his pain.»

Cognates

The same implicit authority (ie AṬṬABARĪ) might be assumed for the parallel and identical quotation in *Iktifāʿ*, which is not however preserved in the Tashkent manuscript:¹

Sāḡullōt II.vi.8 (L–M 303_{12–14})

ואמר: «אם תלית שיער הראש האיש
על המתרעם ממקראנשיה
(נ"א שידמה אליו שתבקע גולגולתו).
ישקיט כאבה.»

Nisyōnōt II.vi.7 (L–M 170_{1–2})

ואמר: «מי שיתלה שער האדם
על מי שיתרעם מכאב חצי הראש.
ישקיטה.»

Given that the ascription apparently implied by ^α*Hawāṣṣ* is, as shall be shown below, rather suspect (and therefore highly significant), a word-by-word identical quote reported by IBN ALBAYṬĀR “from Aṭṭabarī’s specific properties” ought to be considered an additional witness to this tradition, probably through *Iktifāʿ*:

Almuḡnī I.2 الشقيقة في وجع الشقيقة (L 14r 6–8 | M 8r 22 – 8v 1 | P¹ 7v 2–3 | P² 13v 6–9)

شعر الإنسان — من خواص الطبري: «إن عُلِقَ على من يشتكي شقّ رأسه، سكن وجعه.»
ضلع الضبعة الأيمن — إذا عُلِقَ على صاحب الشقيقة في الجانب الأيمن، نفعه فيما زعموا.

¹ If genuine, the form «ממקראנשיה» transmitted in *Sāḡ* might reflect Romance **micransia*, an apparently unattested descendant Graeco-Latin *hemicrania* (< ἡμικράνια) that may show contamination with parallel secondary developments such as *epilensia* (from *epilepsia* < ἐπιληψία). But all this is pure speculation on a dubious reading and western Romance languages share for the most part forms in (e)*migr-* (particularly Mediaeval Catalan *migranea* / *migranya* and Old Occitanian *emigranea*), for which cf. below «המיגרניאה» translating Mediaeval Latin «*emigranea*» in the passage cited from *Sexaginta*. As for the second reading reported in the same text, it looks like a gloss inspired by the etymology of Arabic شقيقة (from √شقق ≅ √בקع), while *Nisy* substitutes the standard medical definition of migraine for the original nosonym. Incidentally, this would not be the only instance of a syntactically wrong annexation («שיער הראש האיש») in *Sāḡullōt* (cf. «התרנגול הבר» above in *Sāḡ* II.iv.2), but it is not impossible that the two words actually represent two originally alternative readings («שיער האיש» / «שיער הראש»).

Source and origin

Despite the apparent attribution to AṬṬABARĪ shared by all the aforementioned witnesses, such a property of human hair is not mentioned in the extant text of *Firdaws*.¹ There is, however, an isolate piece of evidence that may bear testimony of a better text than the one accessed by the editor of *Firdaws*:

ALḤIDRĪSĪ, <i>Ġāmiʿ</i> ^F	<i>Firdaws</i> VI.IV.1	<i>Alḥāwī</i> XX [35]
شعر 23-ش S III 468 ₁₃₋₁₆	في الإنسان § 420 ₄₋₆	شعر-§ إنسان H XX 33* B 29228-12
شعر الإنسان، إذا بُلَّ بخلّ وُوضِعَ على عَضَّةِ الكلب، برأ من ساعته. وإذا تبيّخرت به المرأة، نفعها من وجع الرحم. وإذا غَلَّقَ شعر الإنسان على صاحب الصداع يُدار بمجديد حول الرأس، سكّن الصداع. وإذا تبيّخّر بالشعر، نفع من النسيان.	وقال أطروميتس الفيلسوف إنّ شعر الإنسان، إذا بُلَّ بالخلّ وُوضِعَ على عَضَّةِ الكلب، برأ من ساعته. وإذا تبيّخرت المرأة بالشعر، نفع من وجع الرحم. وينفع التدخين به من النسيان.	وقال أطهورسفس إنّ شعر الإنسان، إذا بُلَّ بخلّ وُوضِعَ على عَضَّةِ الكلب، أبرأه من ساعته. وإذا بُلَّ بشرابٍ صرف وزيت وُوضِعَ على الجراحات العارضة في الرأس، منعها من الورم. ومتى دُخِّنَ به واشتُمَّ ريحُه، نفع من خناق الأرحام والنسيان.

With regard to our text, in any case, even if ALḤIDRĪSĪ's unsourced excerpt could be used to infer the presence in the original text of *Firdaws* of this otherwise unattested passage, the fact remains that its wording is remarkably different from the one unanimously transmitted by the descendants of ^o*Hawāṣṣ*, especially concerning the ailment (headache against migraine) and the additional instructions provided in *Ġāmiʿ*.

On the other hand, in contrast with the overall silence of the major *Hawāṣṣ* texts about this property of human hair,² the anticephalalgic use of a periaipt

¹ Neither in *Firdaws* IV.I.13 في الشقيقة وعلاجها (or in the preceding chapter on general headache), nor in VI.IV.1 on the benefits of human bodily parts (where, nevertheless, human hair is actually mentioned in a sequence borrowed from AṬḤŪRUSFUS that has been previously quoted and analysed in the commentary to *Nat* II.IV.3).

² It is missing not only from ARRĀZĪ's *Hawāṣṣ*, but also from ZUHR's much more comprehensive compilation, in which no less than nine different uses of human hair are collected.

made of human hair is abundantly documented in the zootherapeutic genre. The earliest attestation is found in IBN ʿALĪ's treatise, one of the branches of which (namely *Ḥayawān*^B) transmits indeed a wording virtually identical to our passage:

Ḥayawān [1.7] إنسان (R 8)

A	B	C
شعر ابن آدم، إذا عُلّق على من يشتكى الشقيقة، برئ. شعر الإنسان، إذا عُلّق على من يشتكى شق رأسه، سكن الوجع. على من يشتكى الشقيقة في دماغه، فتسكن بإذن الله تعالى.		

It is likewise selected by IBN BUḤTĪŠŪʿ, whose wording combines, as usually, elements from *Ḥayawān*^B («سكن الوجع») and *Ḥayawān*^C («الشقيقة»). Half of the manuscripts consulted include a tooth (سن) or a molar (ضرس) alongside migraine, which, if original, would be unparalleled in the transmission of this property:¹

Ḥayawān I إنسان (G 4₅₋₆ | P 2r 3-4 | Q 2r 10-11) ≡ *Naṣṭ*^t I منافع الإنسان (L 103v 3-4)

شعر إنسان — [...] وإذا عُلّق على من يشتكى الشقيقة، سكن الوجع.

وإذا [وان LP | الشقيقة] ضرسه أو الشقيقة P، سنه أو الشقيقة Q | الوجع] المه Q، - P.

Manāfeʿ-e ḥayawān I خاصیت مرد و زن (R 51₃₋₄)

و موی را بر کسی آویزند که درد شقیقه دارد، ساکن گرداند.

¹ The passage, in the “from his tooth or from migraine” version, was also contained in AL-MAWṢILĪ's copy in the no longer extant opening folios, cf. «*Capilli humani [...] Collo autem suspensi dentium molestia aut hemicrania laborantibus dolorem mitigant*» (RUIZ 1980: xxxi). The evidence against the originality of this allusion to toothache is strong, as this element is absent not only from manuscript G (by far the best of the copies of IBN BUḤTĪŠŪʿ' s text available to me at the moment) but also from the Persian translation and from *Naṣṭ*^t.

There are three additional witnesses to this tradition, all three either anonymous or pseudepigraphy and therefore of uncertain chronology. Still within the *Ḥayawān* genre, *Sexaginta*:¹

<i>Sexaginta LV De homine</i>	<i>Saḡullōt</i> s.v. אינסאן [שיער ראשן]
A 71ra 41–42 V 109rb 66	P 52r 20
Capilli hominis suspensi a patienti emigraneam, alleuiant dolorem.	ואמר ארזי: «תלוי לצואר החולי. מרפא חולי המיגרניאה».

suspensi] – A | patienti] *paciente*
A || alleuiant] aufert V.

Then, the archaicising (yet not necessarily archaic) treatise that circulated in the Islamicate west under the authority of MASĪḤ B. ḤAKAM records this virtue amongst the specific properties and uses of the human being. On account of both the location of the passage within the text and the wording with which it is transmitted, close cognacy with, or dependence from, ^α*Ḥawāṣṣ* should be ruled out:

Hārūniyyah I.XI.1 (G 205₃₋₄) القول في خواص الإنسان وما فيه من المنافع

شعرة من رأس إنسان، إن علقها من يوجعه نصف رأسه على الناحية المريضة، زال عنه الوجع.

The even more enigmatic anonymous treatise that bears the title *Ḥikmatu Ḡālīnūs*, in turn, shows some interesting features that may reflect a different tradition. It is unique in providing detailed instructions for the amulet: the hair (which must be taken from a man) must be wrapped in a new cloth and hung by a thread from the patient suffering from migraine:²

Ḥikmatu Ḡālīnūs I.1 (P 3v 8–9)

للسقيقة — شعر الرجل، إذا انصرّ في خرقّة جديدة وعلق بخيط على من يشتكى وجع الشقيقة، سكن الألم بإذن الله.

¹ The inclusion of the passage in that treatise might, perhaps, justify an ascription to ARRĀZĪ, who is in fact cited immediately after AṬṬABARĪ in this chapter.

² This brief pseudepigraphic compilation is accessed through Paris, BnF MS Arabe 3047, which is available online.

The use of a cloth for the preparation of periapts is, of course, very much of a commonplace in this sort of literature and further research is needed to assess the quality of *Ḥikmatu Ğālīnūs* as to its date and the sources from which it draws. In any case, if these instructions were to be considered a spontaneous innovation by the compiler of the text, it is still rather striking that no other author seems to have felt the need to specify how the hair was to be hung from the patient.¹

¹ The obvious answer would be that whenever *hanging* was mentioned in a remedy the reader automatically understood that an *amulet* (requiring a container made of skin, cloth, etc) was involved.

II.vi.6 Arrāzī said: «If a hoopoe's skin is put on someone with a headache, it shall alleviate his head with God's permission»—proven by experience.

Cognates

Unlike the previous quote from AṬṬABARĪ in *Nat*-4, the present one is included in all extant witnesses to IBN ALHAYṬĪM's *Iktifāʾ*? and all of them share the same ascription to ARRĀZĪ (except for *Nisyōnōt*, which omits it):¹

Saḡullōt II.vi.9 (L-M 303₁₄₋₁₆)

Nisyōnōt II.vi.6 (L-M 168₁₁₋₁₇₀₁)

אמר ראזי: «אם תניח עור ההודיהוד

ואמר: «אם יונח תרנגול הבר

[[עוף גאל | דיאבירטא]]

על מי שבו כאב הרוש. ישקיטהו».

על מי שיש לו כאב הרוש. ישקיטהו».

Source

The passage is borrowed, indeed, from ARRĀZĪ's *Ḥawāṣṣ*, where it appears within the sequence of quotes on the hoopoe explicitly borrowed from AṬṬABARĪ. The manuscripts consulted transmit two quite differently worded versions that cannot be easily reduced to a single common archetypal form:

Ḥawāṣṣ 2-2 هدهد

I 81v 2 | Q 12₁₇₋₁₈ | V 5r 16-17

Ṭ 106r 3-4

إن وُضع الهدهد على رأس من به صداع، وللصداع: يوضع جلد الهدهد على الرأس،
أزال صداعه. فيسكن الصداع.

و... الهدهد] - Q | فيسكن الصداع] سكن I.

Like in other instances, indirect transmission suggest that there may have circulated even more versions, since ALĠAZZĀR, who includes the same three quotes from AṬṬABARĪ on the hoopoe in his own compilation, transmits a wording that mixes elements from both versions:²

¹ With regard to the different names by which the hoopoe is called in both Hebrew texts, see above the note corresponding to *Saḡullōt* in the commentary to *Nat* II.IV.2.

² The passage is commented upon by KĀS 2012: 98, who also adds the testimony of ṢUBAYDULLĀH, *Ḥayawān* 53r 8 (for which see below). Mark that the Latin translator appears to have substituted *motu proprio* “feathers” (less probably “wings”) for the original “skin”.

Ḥawāṣṣ [76b] (K 52₁₄)*Epistola* 105vb 27–28

وإذا وُضع جلد الهدد على الرأس، سكن
الصداع.

Et cum ponuntur penne upupe su-
per capud, sedat.

The same remedy is included also amongst the uses of a hoopoe in *Sexaginta*:¹

Sexaginta XXXVI *De upupa**Saḡullōt* s.v. דוכיפת

A 70ra 24–25 | V 108rb 61–62

P 47r 1

Corium upupe positum super pa-
cientem dolorem capitis sedatur
dolor.

וכן אם יונח הדוכיפת על מי שיש לו כאב
הצד הראש.

pacientem] eum qui patitur V | sedatur
dolor] sedat dolorem V.

Origin and transmission

As seen above in the analysis of *Nat*–4, the source of the passage included in *Ḥawāṣṣ* is AṬṬABARĪ's *Firdaws*, where it is found in almost the same form. There is, however, an even earlier witness to this remedy, namely IBN ʿALĪ, who must have found it described rather as an amulet (جعل against علّق) beneficial for pounding and heavy headaches:

Ḥayawān [49.8] هدهد (R 322)

A

C

يؤخذ جلد رأس الهدد، يُعلّق على من
يشتكى الضربان والصداع الشديد، فيبرأ
بإذن الله تعالى.

رأس الهدد، إذا علّق على من يشتكى وجع
الرأس، أبرأه.

This complementary testimony seems to lend support to the hypothesis that *Firdaws* reflects better than IBN BUḤṬĪŠŪʿ and ALMARWAZĪ the original circulation of *two* separate remedies (an amulet and an errhine) based on the hoopoe skin. Tangentially, let it be noted that the active element in IBN BUḤṬĪŠŪʿ' s text (but not in ALMARWAZĪ' s) is actually the hoopoe's *head*, a reading already

¹ Regarding the Hebrew text it must be by parablepsis that the word for “skin” is missing from the manuscript (and perhaps from the translation itself).

present in IBN ṢALĪ's *Ḥayawān*^c and attested also in the anonymous *Ḥikmatu Ḡālīnūs*, which provides the fullest account of the preparation of the amulet. First all head feathers must be plucked off, then the head is to be wrapped in a cloth and hang from a thread on a patient suffering from migraine rather than from generic headache:

Ḥikmatu Ḡālīnūs I.8 (P 4r 1–3)

رأس الهدهد، إذا نُظف من الريش وشدّ في خرقة وعلّق في خيط على من يشتكي وجع
الشقيقة، يُسكن ألمه.

The same instructions to put the *skin* of a hoopoe's head in a cloth are found also in a passage that IBN ALBAYṬĀR ascribes explicitly to IBN ZUHR but which I could not find anywhere in the compilation authored by ZUHR:¹

Almuḡnī I.1 الصداع في (L 6r 1–3 | M 3v 10–11 | P¹ 3r 21 – 3v 1 | P² 6v 11–13)

جلد رأس الهدهد — من خواص ابن زهر: «إذا صير في خرقة وعلّق على من يشتكي
رأسه، سكن عنه الوجع».

An apparently later reinterpretation is still recorded by ALQAZWĪNĪ, for whom it is the bird's comb or crest (قنزعة, confirmed by Persian تاج) that must be put to use:²

Ṣaḡāʾib II KĀʾINĀT II:3.1.6,54 هدهد

W 426_{10–11}

قنزعته — تعلّق على من به وجع الرأس:
يُسكن وجعه.

Ṣaḡāʾib s.v. هدهد

A 230v 5 | B 249r 1

و اگر تاج او را بر کسی بزند، صداع را از ایل کند.

¹ As seen in Chapter 1, not all mentions of an author's خواص in *Almuḡnī* are to be interpreted as allusions to a treatise of *Ḥawāṣṣ*. In the case of IBN ZUHR, the high frequency with which such references cannot be located in ZUHR's *Ḥawāṣṣ* makes one wonder whether a different source is being referred to (one perhaps actually by IBN ZUHR). This possibility has been briefly discussed in Chapter 1.

² The passage is borrowed virtually verbatim by IBN ALWARDĪ, *Ḥaridah* XXII.II.9 خواص أجزاء الهدهد (Z 362₉).

4.4 Nat IX.1—On tertian fever

IBN ALHAYTAM, *Saḡullōt* IX.1 בקדחת קאנשיניא¹ (L–M 3246–16)¹ || PSEUDO-ABENEZRA, *Nisyōnōt* IX.1 בקדחת שלישיה (L–M 284₁–286₂) || *Almuḡnī* XVIII.3 في الحمى الصفراوية (M 324r 13–17).

Nat–1 three roots of plantain | *Nat*–2 woodlice | *Nat*–3 panther spider | *Nat*–4 deer horn filings | *Nat*–5 locust.

Cognates

Out of the five quotations transmitted in the Hebrew version of IBN ALHAYTAM's book only *Saḡ*–2 from DIOSCORIDES on bruising a spider to make an ointment against fevers is not included in *Natāʔiḡ*,² but then *Saḡullōt* lacks the passage from AṬṬABARĪ on the spider known as lynx (*fahd*). Besides, as shall be shown below, *Saḡ*–3 reveals that *Nat*–2 is one of two originally consecutive passages that described two very similar periapts requiring woodlice on the one hand and a gecko (سام أيرص) on the other.

The parallel testimony of IBN ALBAYṬĀR's *Almuḡnī* is of exceptional importance in the case of the chapters on fevers, because it transmits several series of passages that appear to be related to the text family of ^α*Hawāṣṣ* and which might have been mediated by *Iktifāʔ*. Here an anonymous four-passage sequence is found that matches almost literally the minimal sequence formed by *Nat*|*Saḡ*–4 on stag horn and *Nat*|*Saḡ*–5 on locusts. A few significant differences in the wording, however, leave room for doubt about the exact relationship between these two traditions and further scrutiny might conclude that they are parallel rather than cognate:³

¹ This epigraph in *Saḡullōt* is most certainly corrupt: whether it actually contains a transcription of *continua* as the editors suggest or a deturpation of טיריניא* (ie *tertiana*, which is the actual subject of the chapter), a Latin gloss has usurped the place of the original word. The Hebrew translator is quite consistent in his use of Arabo-Hebrew «קדחת אלנב» throughout the text, and this is glossed only once in plain Hebrew (but never in Latin) as «שלישיה» in *Saḡ* IX.1.1.

² This remedy is borrowed from *Haṣāʔiṣ* 2:54 (P 34v 8–9 | T 147_{10–12}) ≡ *Mat. med.* 2:63 (WI 141_{4–7}). For further details, see below the analysis of *Nat*–3.

³ The indication «من كتاب التجريتين لسفيان الأندلسي» that precedes the rubric for deer horn filings must in fact belong to the previous passage on the syrup of sebesten (M 324r 11–13), since the latter follows another quote from SUFYĀN ALʿANDALUSĪ's *Taḡribatān* on the benefit of purging-cassia (خيارشمبر) against fevers. On typological grounds such conspicuously ḥawāṣṣic remedies can hardly be admitted into a book of that particular medical genre and the passages are to be found, indeed, in the fragments from that treatise preserved in indirect transmission, cf. SUFYĀN ALʿANDALUSĪ, *Taḡribatān* سبستان 1–س (C 91) and خيارشذب 10–***خ (C 62). The wording of the third passage in IBN ALBAYṬĀR's series is especially suspect, as such adverbial specifications (here بخورًا but also شربًا or تعليقًا elsewhere in the text) are totally uncharacteristic of the phraseology of ^α*Hawāṣṣ* and must reflect either the use of a different source or, less likely, authorial rewording.

Almuǧnī XVIII.3 الصفراوية (M 324r 13–17 | P¹ 28or 21 – 28ov 3)

برادة قرن الأيل — زعموا أنها، إذا سُخِّقت وشُربت بشراب، نفعت من حمى الغب، وينفع
أيضاً من اليرقان منفعه عظيمة فيما زعموا.
آخر — الجراد الطويل الأرجل الذي يكون في البساتين: إذا غُلِقَ على من به حمى الغب،
نفعه.
آخر — جلد الفأر ينفع من حمى الغب بخوراً.
آخر — السرطان النهري، إن غُلِقَ على من به حمى غب، نفعه.

برادة] – P¹ | الغب بخوراً] الربع بخوراً M.

Quite unfortunately, neither the *Hārūniyyah* nor the only extant version of ALMADĀʿINĪ's *Ḥawāṣṣ* contain any fever-related passages

Remarks

With the only exception of plantain (which is also recommended later against quartan fevers), all the antipyretic elements involved in this chapter are of animal origin: a spider, deer horn, locusts, and woodlice in *Natāʿiṣ*, also a gecko in *Saǧullōt* and probably originally in ^α*Ḥawāṣṣ* too. This is, in fact, the overall pattern in the ḥawāṣṣic treatment of fevers, whereas conventional therapeutics rely basically on products of plant origin.¹

As for the way in which these elements must be used for their effect to obtain, they can be taken in a drink with some wine (*Nat*–1|4), held in the hand or poulticed over the back of the neck *Nat*–1 (at least one liniment in the original compilation, reflected by *Saǧ*–2), or hung from the patient as amulets (*Nat*–2|5).

Numerological analogy is evident in the case of plantain in *Nat*–1 (three leaves with three ladlefuls of wine and another three of water), but the rationale for the attribution of a specific property against tertian fever to the several animals mentioned here is no longer transparent.²

¹ One cannot simply conclude, in any case, that all remedies against fevers that involve animals or animal parts are necessarily ḥawāṣṣic, nor that there is any clear-cut dichotomy between a conventional (otherwise rational) use of plants and a ḥawāṣṣic (otherwise irrational or superstitious) use of animals to the same effect. The case of plantain (which is in fact endorsed by the authority of DIOSCORIDES) is quite informative in this regard.

² Here followed, in my original draft, an epigraph on arithmology or numerical analogy as reflected in a number of antipyretic remedies reported by both DIOSCORIDES and PLINY and involving mostly herbs but also a few insects. The prevalence of this phenomenon precisely in the case of fevers is not hard to explain, as their manifestations show an evident link to arithmetics, both in their periodicity (daily, tertian, quartan, etc) and in the doctrine of the critical days that is most particularly related to them in the Hippocratic-Galenic tradition. Such a digression, however, had no place in this limited preview.

 Commentary

IX.1.1 Dioscorides said: «If three roots of plantain are drunk with three ladlefuls of wine mixed with another three of water, this shall avail against tertian fevers.»

Cognates

This report from *Materia medica* on plantain is also the opening quotation in the parallel epigraph in IBN ALHAYTAM's *Iktifāʿ*?¹

Saḡullōt IX.1.1 (L–M 324_{7–9})

אמר דיאסקרי: «אם ישתה משורש
לשון השה [[פלאנטני]] ב' שרשים
בג' קואתר[סאת] † בין מזונג
כמות בכמוה מים, יועיל מקדחת אלנב
[[שלישית]].»

Nisyōnōt IX.1.1 (L–M 284_{2–4})

אמר דיאשקורודוש: «אם ישתה משרש
פלאנטאיני ג' שרשים
בד' אוק' מין מזונג
בכמותו מים, יועיל מקדחת שלישית.»

The testimony of *Saḡullōt* concerning the measures involved in this passage is of exceptional relevance in that it appears to preserve a word reflecting the Arabic transliteration of the original Greek «*κρυάθω*» in *Materia medica*.² Such a reading agrees with the one transmitted by *Natāʿiḡ* but differs from *Nisyōnōt* (“four ounces”) and, above all, from the text of *Ḥaṣāʿiṣ* as translated by IṢṬIFAN. This hypothesis and the analysis of its possible implications are developed in some detail below.

¹ Once again the translator of *Saḡ* uses an Arabo-Hebrew phytonym (لسان الحمل ≡ לשון השה) whereas the compiler of *Nisy* prefers a Romance name. The gloss «פלאנטני» incorporated into the tradition of *Saḡ* is identical to the vernacular synonym provided by the Hebrew translator of IBN WĀFID in *Muḡradāt* חמל לטאן ו' חמל, which he equates with Hebrew «לשון השה», Latin «ארנגלושה» (ie *arnoglossa*), and Romance «פלאנטני» (P 53r10–11). From amongst the descendants of Latin *plantago*, it probably reflects Catalan *plantatge* (which is attested as «*plantadge*» in IBN WĀFID, *LMP* 111₃₉) or Occitanic *plantage* (shared by Oilitanic too, cf. VON WARTBURG, *FEW* IX 19–20 s.v. *plantago*). The form «פלאנטאיני» in *Nisy*, in turn, could be a transcription of *plantagine* (well documented in Italo-Romance alongside forms in *piant-*) similar to «פלאנטייני» in a medico-botanical Latin and Italo-Romance glossary in Hebrew characters (cf. BOS, HAJEK, KOGMAN-APPEL and MENSCHING 2019: 185).

² If I am not wrong in my interpretation, it has nothing to do with *quatre* as the editors of the text suggest.

Source

The source passage in DIOSCORIDES is one of those not so rare occasions in which the physician from Anazarbus introduces his report on an alleged medical benefit by the characteristic marker «φασὶ δέ». As seen in Chapters 2–3, this is usually interpreted as an expression of authorial distancing and disbelief but it is also a powerful device for anonymisation of the author’s written sources of information. In this particular case the expression may convey some degree of scepticism inspired by the numerological principle implied by the use of three roots against tertian fevers and four against quartan fevers:

<p><i>Materia medica</i> 2:26 ἀρνόγλωσσον WI 200₁₂₋₁₄</p> <p>φασὶ δὲ ρίζας ἀδράς τρεῖς ποθείσας μετ’ οἴνου κυάθων τριῶν καὶ ὕδατος ἴσου τριταίῳ βοηθεῖν, τεταρταίῳ δὲ τέσσαρας ρίζας.</p>	<p><i>Ḥašāʾiṣ</i> 2:119 وهو لسان الحمل P 46v 2–3 T 198₇₋₁₀</p> <p>وقد زعم قومٌ أنه، إذا شُربت ثلاثة أصول من أصول لسان الحمل بأربع أواق ونصف شراب ممزوج بمثله ماء، نفع من حمى الغب؛ وأنه، إذا شُربت منه أربعة أصول، نفعت من حمى الربع.</p>
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شُربت [شرب | منه] - T.

TESTIMONIA

² IBN MĀSAWAYH ∈ ARRĀZĪ, *Alḥāwī* XVI.14 (H XVI 117 | B 240₇₁₄₋₁₅) || AR-RĀZĪ, *Alḥāwī* XXI [745] لسان الحمل (H XXI 394 | B 329₀₂₃₋₂₄) || IBN SAMAGŪN, *Ġāmiʿ* J-15 s.v. (S II 268₁₇₋₁₉) || IBN ĠAZLAH, *Minḥāġ* J-46 s.v. (L 197_r 3–4) || IBN WĀFID, *Mufradah* [218] s.v. (A 286₁₋₃) ≡ *Liber Serapionis* [224] *lisen alhamel-plantago* (A 150₄₉₋₅₁ | P 95_{ra} 12–17) ≡ *LMP liçen* † *alhanal-plantadge* (F 112₂₃₋₂₄) ≡ *Muḫradāt* לְשׁוֹן-לְסַאֵן וְ הַמַּל (P 53_v 16–18) || ALĠĀFIQĪ, *Simplicia* P-44 *plantago-licen alhamal* (V 133_{vb} 30–34) || IBN ALBAYṬĀR, *Ġāmiʿ* J-22 s.v. (B IV 108₂₋₃) | *Almuġnī* XVIII.3 الصفراوية 3 في الحمى (M 322_r 21–23 | P¹ 278_v 19–20).

This is the universally received reading of the locus and indirect transmission shows only minor variations (such as, for instance, a different verb agreement). Nowhere in the corpus is a measure other than “four and a half ounces” attested. Moreover, even the *Vetus* translates Greek κύαθος into ounces, or rather equates the two measures showing no concern for accuracy.¹

¹ Cf. ULLMANN 2009: 177–178 s.r. √أوق in the painstaking glossary to the fragments of this trans-

On the other hand, a quick look at HUNAYN's translation of GALEN's *Simpl. med.* reveals a similar practice. Thus «κυάθων δυοῖν» in VII.x.60 Περὶ κυκλαμίνου (K XII 51₁₇) is rendered as «مقدار ثلث أواقي» (E 120r 17), and also «κυάθων τριῶν» in IX.ii.5 Περὶ Ἰουδαϊκοῦ (K XII 199₁₂) as «أربع أواقي» (E 148r 21, sic); but «κυάθων» in VIII.xvi.19 Περὶ πίτσης (K XII 101₁₄) is translated by a transliteration-cum-gloss «قدر قوائوس واحد (وهو أوقية ونصف)» (E 129r 11–12).

In view of this phenomenon, it is worth noting that on the margins of manuscript P of *Ḥašāʾiṣ* a number of glosses have been added by the same main hand at the exact point at which the word in question appears (in a sort of Masorah minima). From *Materia medica* 1:56 to 1:77 the marginal note explains that the word rendered as “one and a half ounces” corresponds to Greek قوائوس; then from 2:81 to 4:75 the transliteration قوائوس of the body of the text is glossed as “one and a half ounces”:

الاسم الذي أخرج أوقية ونصف هو باليونانية قبايس	1:56
الاسم الذي أخرج أوقية ونصف هو باليونانية قبايس	1:69
هذه الأربع أواقي ونصف أصلها في الكتاب ثلث قوائوسات	1:77
القوائوس أوقية ونصف	2:81 106, 3:19
القوائوسين أوقية ونصف	2:165
القوائوس أوقية ونصف، والأوقية ثمان ادرخميات	4:75

The reading in the first person singular is confirmed by an analogous note on the left margin of P 59r that is explicitly ascribed to IŞTIFAN (= A) and by a second explicit reference on the left margin of P 17r 17 (= B) to ὀγκη μίαι:¹

قال إصطفن: كلما أخرج فيما تقدم وزن مثقال، فهو درخمي.	A
ألقي فيما ذكر إصطفن درخمي، وهو وزن درهم ونصف.	B

That the *Vetus* cannot possibly be the origin of the passage in our text has been already shown above and even if their translations ought to be disregarded on purely chronological grounds, it must be noted here that ANNĀTILĪ 85v 12–13 has the exact same measure as IŞTIFAN, and that MIHRĀN 87r 17 omits altogether the mention of the amount of wine with which the herb must be taken:

وقيل إنه، إذا شرب من أصوله بالخمر، نفع الحمى المثلثة؛ وأربعة للحمى الربعية.

¹ Additional marginal notes of this category are found on P 9r left margin («خمسة وسبعين رتنا» is retro-translated as «هذا في الرومي مائة قوطول، والقوطول تسع أواق»); then 13v 8, 13v 13, and 90v, all three on the right margin and all three related to measure units.

<i>Materia medica</i>		<i>Ḥaṣāʾiṣ</i>
1:30 25 ἔλαιον	κυάθων ἕξ πλήθος	تسع أواق 9r 5
1:31 26 ἔλαιόμελι	πλήθος κυάθων δυεῖν	ثلث أواق 9v 8
1:56 46 ἱρίνον	κυάθου πλήθος	مقدار أوقية ونصف 13v 21
1:69 65 στρόβιλοι	κυάθων τὸ πλήθος τριῶν	أربع أواق ونصف 17v 3
1:72 68 πίσσα	κυάθου πλήθος	أوقية ونصف 18v 5
1:77 κέδρος	κύαθος	مقدار أوقية ونصف 20r 6
1:128 135 μορέα	κυάθου πλήθος	قدر أوقية ونصف 29r 12
1:128 137*** σῦκα	κυάθου... κυάθου πλήθος	3 أوقية ونصف... أوقية ونصف 30r 11–12
2:16 17 ἔχιδνης	κυάθων ἕξ	تسع أواقي 31v 20
2:70 61 γάλα	κύαθος	أوقية ونصف 35r 15
2:76 67 στέαρ	κύαθον ἕνα	تسع أواق 38r 7
2:81 72 οὐρον ἀνθρώπου	κυάθων πλήθος δύο	مقدار قوائسين 40r 15
2:106 100 ὁ Αἰγύπτιος κύαμος	κυάθων τριῶν	مقدار ثلث قوائسات 43v 2
2:165 159 κυκλάμιнос ἐτέρα	κυάθων δυεῖν πλήθος	بقوائسين 51r 11
3:19 λευκάκανθα	κύαθοι τρεῖς	ثلث قوائسات 59r 10
3:23 ἀψίνθιον	εἰς πλήθος κυάθων τριῶν	مقدار ثلث قوائسات 60r 4–5
3:124 121 κραταιόγονον	κυάθων δύο	بقوائسين 75v 20
4:1 κέστρον	κυάθου ἐνὸς	بقوائس 81r 8
	κυάθων δέκα	بعشر قوائسات 81r 11
4:42 38 πεντέφυλλον	τριῶν κυάθων πλήθος	مقدار ثلث قوائسات 85v 20
4:63 58 μήκων ροιάς	κυάθους τρισίν... εἰς δύο	ثلث قوائسات... إلى قوائسين 88v 20
4:75 70 μανδραγόρας	κυάθω ἐνί	مقدار قوائس 90v 7
	κυάθους τρεῖς	قوائسات 90v 18
4:85 79 ἑλξίνη	κύαθος	مقدار قوائس 92r 14
4:125 120 χαμαίσισος	κυάθους τρισί	ثلث قوائسات 96r 19
4:150 145 σίκυς ἄγριος	κυάθους τρεῖς	ثلث قوائسات 99r 8
	κύαθον ἕνα	مقدار قوائس 99v 4
4:154 148 σπαρτίον	κύαθος	مقدار قوائس 100r 19
4:181 ἄμπελος ἀγρία	κυάθων δύο	بقوائسين 105v 10
4:188 κνήκος	κυάθους τρεῖς	ثلث قوائسات 106v 19
5:7 μελιτίτης οἶνος	κύαθον ἕνα	مقدار قوائس 110r 15
5:16 14 θυμοξάλλη	κατὰ τρεῖς ἢ τέσσαρας κυάθους	ثلث أو أربع قوائسات 111v 6
5:17 15 σκιλητικὸν ὄξος	κυάθου... κυάθους δύο	قوائس... قوائسين 111v 21
5:37 31 κεδρίτης	κυάθω ἐνί	مقدار قوائس 114r 8
5:55 31* οἶνος πρὸς κατάρρους	κύαθον ἕνα	مقدار قوائس 115v 1
5:57 31* διὰ Συριακῆς νάρδου...	κύαθον ἕνα	مقدار قوائس 115v 6
5:67 φθόριος ἐμβρύων οἶνος	κυάθου πλήθος	مقدار قوائس 116r 8
5:71 μανδραγορίτης	κύαθος εἷς	مقدار قوائس 116r 19
5:72 31* ἑλλεβορίτης	κύαθον ἕνα... κυάθους τρεῖς ἢ δύο	مقدار قوائس 116v 1
5:78 5* λεπῖς	κύαθον ἕνα	مقدار قوائس 119r 8
	κυάθων ἕξ	مقدار ست قوائسات 119r 9
5:137 61* ὁ Ἰουδαϊκὸς λίθος	κυάθους τρισί	بثلث قوائسات 129v 18

Table 4.1: Concordance for κύαθος in IŞTIFAN's translation of *Materia medica*.

In sum, there are two major perspectives from which to look at *Nat|Ikt*-1. On the one hand and regarding the actual contents of the passage, the subtradition represented by ^α*Hawāṣṣ* is exceptional in that it preserves, unlike all other extant echoes of the original locus, the most complete version of the arithmology on which the effectiveness of the remedy must have been based. Sensible and practical as the translation of cyathi into ounces may have been in all other contexts, in this particular case it missed the rationale of the original instructions—although the fact that even in the new version three and four roots were still prescribed for tertian and quartan fevers, respectively, preserved the ḥawāṣṣic essence of the potion. Again, only in the text family of ^α*Hawāṣṣ* was the perfect symmetry of the ingredients preserved.

Then, there is the crux of how to explain this remarkable feature. If the problem is reduced to simple dichotomies, the anonymous compiler either accessed this information on a copy of *Ḥašāʾiṣ* or inherited it from a pre-existing compilation that included this particular reading. Unfortunately we know virtually nothing about the earliest copies of *Ḥašāʾiṣ* in Andalus,¹ but the Paris manuscript of IṢṬIFAN's translation bears witness to a tradition of marginal glosses that must go back to the very first copy of the book, since they record the translator's (and also ḤUNAYN's) remarks to his own text. If the compiler of ^α*Hawāṣṣ* accessed directly a copy of this translation (which is not absolutely certain) and if and only if that copy included the original marginal glosses, then he might be credited with the merit of restoring the original measure in order to better reflect the nature of the remedy.

If, on the other hand, this feature is supposed to have been simply inherited (as so many others) from a text that transmitted non-Iṣṭifani Arabic reflections of *Materia medica*, the hypothesis is perhaps more credible but in the end it just reassigns the responsibility of the divergent reading to an earlier and equally anonymous author. At the moment I have no solution to offer for this crux. I am quite sure that a thorough and meticulous examination of the Dioscoridean passages transmitted by the descendants of ^α*Hawāṣṣ* shall help to draw a much clearer picture of their origin (probably origins, in the plural). As seen in Chapter 3, there are some significant coincidences with the pre-standard terminology used by the translator of the *Vetus* and by early-ninth-century physicians. The relative frequency of blends or hybridised Dioscoridean-Galenic passages seems to point towards the same early context. In this particular case there is

¹ Despite the availability of much material either in critical edition or in facsimile reproduction, the boastful claims about a local revision of the eastern translation have not resulted in any attempt at reconstructing the early Andalusī circulation of the text or the specificities (if there are any) of the Andalusī DIOSCORIDES as reflected in local pharmacognosics.

no evidence to link this reading to the Qayrawānī school (the passage is not recorded even in its standard form in that pharmacognostic subtradition) and one should perhaps scan the corpus searching for instances of Graeco-Arabic قوائوس in order to pinpoint the most likely candidates to be the ultimate transmitters of this passage. Here and now the mystery must remain unsolved.

Transmission

Besides of the particular hermeneutical problem of the measure involved in the passage, the transmission of the remedy is actually quite unproblematic because it is virtually non-existing. DIOSCORIDES' passage is not included by GALEN in his survey of the medical characterisation of plantain in *Simpl. med.*¹ which may reflect, perhaps, a distaste for the conspicuous numerical analogy implied in it. Nor did Byzantine compilers receive it into their own catalogues, and this overall disregard extends to the Islamicate tradition, with the exceptions in the pharmacognostic genre recorded in the concordance above.

Even if all epistemic genres are considered, this property is only exceptionally reported. One of those rare cases is ALQAZWĪNĪ:

ṣaġāʾib II KĀʾINĀT II.2.114 لسان الحمل (W 296₂₅₋₂₆)

وقيل إته نافع من حمى الربيع. وقيل إته يُشرب للغب ثلاثة من أصوله في أربع أواقٍ (و) نصف شرايا؛ وللربيع أربعة: أصول منه.

The same old remedy is still echoed much later in the pharmacognostical but at the same time quite ḥawāṣṣ-like *Tadkirah* of ALʿANṬĀKĪ (d. 1599). His testimony is extremely interesting not only as an example of the survival of older epistemic traditions centuries after the so-called Classical period but also because it appears to reflect an innovative reading that substitutes the stems (أضلاع) for the roots:

Tadkirah I.III لسان الحمل 20 (B 271₂₁₋₂₂)

ومن خواصه: أن تعليقه ينفع الحنازير، وشرب ثلاثة أضلاع منه لحمي الغب وأربع للربيع.

¹ Cf. *Simpl. med.* VI.I.60 Περὶ ἀρνογλώσσου (K XI 838₁-839₈) ≡ *Mufradah* VI.59 لسان الحمل (E 100r 17-100v 5).

Origin

Within the Greek tradition of the Dioscoridean text an addition is found in the so-called “interpolated Dioscorides” (= Di) that is edited by WELLMANN in his critical apparatus to *Materia medica* 2:126 and which reports the use of plantain (and also mint) by Syrians, precisely for the treatment of fevers. Although it is the juice (ζωμός) that is mentioned in the passage, the empirical and secretive context in which the remedy is transmitted makes it worth mentioning here:

οἱ δὲ Σύροι τὸν τούτου ζωμὸν καὶ τῆς καλαμίνθης σὺν μέλιτι φασι τοὺς πυρε-
τοὺς θεραπεύειν, διδόμενον δευτέρῳ, τετράδι καὶ παρασκευῇ, τοῦτο ὡς μυστή-
ριόν τι δέχου. ἔστι γὰρ ἀληθέστατον καὶ διὰ πείρας.

A closer and also far more informative testimony is contributed, on the other hand, by PLINY, whose dependence from a Greek source is most evident in his use of *cyathi*, which allows for the numerological connection to be preserved:

NH XXVI.11.[71] (J–M IV 213_{14–18})

Plantago ex aqua mulsa II horis ante accessionem pota binis drachmis
vel sucus radice madefactae vel tusae vel ipsa radix trita in aqua ferro
calfacta. Quidam ternas radices in III cyathis aquae dedere. Eadem in
quartanis quaterna fecerunt.

It is possible that an echo of this tradition might have also been recorded by the Syrian Methodist master THEMISON OF LAODICEA in his monographic treatise on the plantain.¹

¹ Cf. PLINY, NH XXV.8.[39] (J–M IV 142_{10–19}). In that text a description of two different varieties (*genera*) was provided that matches quite closely the one given by DIOSCORIDES (but mark that according to PLINY's excerpt *heptapleuron* is the name of the second, larger, variety, whereas in *Materia medica* ἑπτάπλευρον is a synonym for ἀρνόγλωσσον) and the two texts further share the mention of the herb's drying property and its benefit against ρευματικά / *rheumatismos*. The same book on the plantain is cited by PSEUDO-GALEN in *De virtutibus centaureae* I: «sicut Themison famosus magister de arnoglossa narrabat» (N 161_{3–4}). For the restoration and consequential interpretation of this long-misread passage in the pseudo-Galenic treatise, cf. NUTTON 2010: 217–219 and 2015: 155–157. On THEMISON OF LAODICEA, cf. an early survey in DEICHGRÄBER 1934: 1632–1638; and an exhaustive collection and analysis of all extant fragments in MOOG 2019 (particularly 2019: 250–253 on the evidence for the existence of a monographic *De arnoglossa*).

IX.1.2 He said: «If one takes the many-legged little beast that curls itself upon being touched and puts it into a cloth, then hangs it on someone affected by fever, this shall cause the fever to cease entirely.»

Cognates

No matching quotation is found in the Hebrew translation of *Iktifā?* but *Sāḡ*-3 transmits extremely similar instructions for a periapt that requires a different animal:

Sāḡullōt IX.1.3 (L–M 324₁₁₋₁₃)

אמר אל סקורסיקאס: «אם תקח תנשמת [נ"א סאם אבריאין] ויושם בבגד ויתלה על בעל הקרחת. יסירנה.»

First, IBN ALHAYTAM's text seems to have preserved, unlike *Natā?iḡ*, the authority to which the passage may have been attributed in their common source and, as shall be seen below in the analysis of *Nat*-3, the distorted reading «אל סקורסיקאס» may actually mask the name of AṬHŪRUSFUS. Then, there is a duplicity of readings transmitted in *Sāḡullōt* from two different copies and according to which the beast that is to be amuletised would be either a *tinšemet* תנשמת or a gecko («סאם אבריאין» ≡ «سَامٌ أْبْرَصٌ»¹). Now, from what can be inferred from previous instances of this word in *Sāḡullōt*, תנשמת appears to have been the first element of at least two different Hebrew-Romance glosses² with which the translator tried—and utterly failed—to make this animal identifiable to a new readership unfamiliar with the Arabic tradition.

In any case, *Nat*-2 does not mention any gecko but rather the quite ubiquitous “many-legged little beast that curls itself up upon being touched”, which is of course the woodlouse, yet no such property against fevers is recorded for this insect by DIOSCORIDES (the source of the preceding passage in *Natā?iḡ*) or by GALEN in their corresponding entries. In the ensuing paragraphs I shall try to demonstrate that ^a*Hawāṣṣ* probably contained, after at least two quotes from DIOSCORIDES (= *Nat*|*Sāḡ*-1 on plantain and *Sāḡ*-2 on a spider), two consecutive passages ascribed to AṬHŪRUSFUS on the gecko and the woodlouse, respectively, from which *Iktifā?* (at least as preserved in *Sāḡullōt*) keeps the first one together with its ascription, while *Natā?iḡ* transmits the second passage and has thus lost the mention of the author.

¹ The Hebrew text reads actually «סאס» just like in two other instances of this word in *Sāḡullōt* (cf. *Sāḡ* VI.IV.2 and VI.VIII.2), yet the originally correct spelling «סאם אבריאין» is preserved IX.1.3.

² Namely «תנשמת טלפה» and «התנשמת שקורין שוייטא», cf. *Sāḡ* VI.IV.2 and VI.VIII.2.

Source

Two passages are included in ARRĀZĪ's collection of ḥawāṣṣic quotes that are contentually identical to the ones discussed here and which are both unambiguously ascribed to AṬḤŪRUSFUS, a name that would not be impossible to accept as the origin of the much-deformed «אל סקורסיקאס» in *Saḡullōt*.¹

<p>حمار البيت 5- Hawāṣṣ</p> <p>I 81v 5-7 Q 16₂₋₃ V 6v 6-7</p> <p>حمار البيت (هي الدويبة التي لها أرجل كثيرة تستدير إذا مُسَّت) قال أطهورسفس: «إن لُقت في خرقة وعَلقت على من به حمى مثلثة، قلعنها أصلاً».</p>	<p>السام أبرص الأخضر 6- Hawāṣṣ</p> <p>سام أبرص 3- Hawāṣṣ</p> <p>I 79r 19 - 79v 1 Q 22₄₋₆</p> <p>‡ 104v 2-3 V 3r 6-7</p> <p>قال أطهورسفس: «إن صُرَّ حيًّا في خرقة وعُلِق على من به حمى مثلثة، قلعها».</p>
<p>تستدير [مستديرا I قال] وقال V أطهورسفس [اطهور V في] على Q حمى مثلثة [الحمى المثلثة Q قلعنها] قلعته I أصلاً] ولم يترك لها اصلا I.</p>	<p>أطهورسفس [اطهور V، بلبناس ‡ صُرَّ ... خرقة] + طرحناه في صرة او في خرقة V صُرَّ [صير IV، + سام ابرص الاخضر Q حمى مثلثة [مثلثه V.</p>

Mark that while it omits the specification for the fever (ie مثلثة) and apparently substitutes صبر for لف 'wrap', Nat-2 preserves the idiosyncratic apodosis of the original passage. In fact, given that the two passages are identical except for this particular verb (and, obviously, the initial mention of the animal) and that ^αHawāṣṣ may have omitted the adjunct "alive" (حيًّا is not reflected in *Saḡullōt*), the probability of a merger is remarkably high. In this hypothesis, صبر in *Natāʿiḡ* might not be an unmotivated synonymical substitution but rather an indicator of conflation.

¹ The entry السام أبرص الأخضر is placed under letter alif, between the skink (أسفتور) and the weasel (ابن عرس), in three of the four manuscripts consulted, but it is introduced in Q rather at 3-س as سام أبرص in agreement with what is most often found in Arabic texts. The apparently odd position of the lemma under alif may have been induced by its actually being a compound word. Incidentally, the entry on عظامية promised twice in *Allḥāwī* XX to deal with [419] سام أبرص and [887] وزع seems no to have been fulfilled (at least not in the edited text). A parallel attestation of these two passages in AṬṬABARĪ's *Firdaws* shall be analysed below at the end of the entry.

Transmission

The majority reading of the text of *Ḥawāṣṣ* is confirmed by the evidence of indirect transmission. An early Andalusī echo of the passage on woodlice is found in IBN SAMAGŪN's *Ġāmiʿ* with the same ascription and virtually the exact same wording and it is also included by IBN ALBAYṬĀR in his homonymous treatise:¹

IBN SAMAGŪN, *Ġāmiʿ* > 25 حمار قبان (S I 177₁₇₋₁₈)

وقال أطهورسفس: «إن لُق حمار البيت في خرقه وعلق على من به حمى مثلته، قلعها أصلاً».

أطهورسفس [اطهورسفس S].

IBN ALBAYṬĀR, *Ġāmiʿ* > 5 هدية

B IV 194₃₀₋₃₁ | L 538r 11-12 | P¹ 195r 19-20 | P² 203v 27-28

أطهورسفس: «وإن لُق حمار قبان في خرقه وعلق على من به حمى مثلته، قلعها أصلاً».

أطهورسفس [اطهورسفس P²، B - | حمار قبان - | B | وإن | ان P¹ | وعلق | وعلقت B | أصلاً] - B.

If assuming ARRĀZĪ's text as the most likely source for the two passages included in *Ḥawāṣṣ* is quite unproblematic, assessing who may have been responsible for the rewording of the original text shall prove a much harder task. Internal comparison within the *Natāʾiġ-Iktifāʾ* subtradition suggests that the omission of the Arabic name of the woodlouse (here حمار البيت) may have been one of the characteristic traits of the anonymous author of *Ḥawāṣṣ*, as none of the passages that involve this insect mentions it.² If intentional, the omission of the qualification of the fever in the two quotes may also be ascribed to him, as this datum was rather superfluous given that the passages were comprised in a chapter entirely devoted to tertian fevers. Moreover, only the Arabic copy

¹ For IBN ALBAYṬĀR's *Ġāmiʿ* an identical text is transmitted also in P¹¹ 296r 17-19, P¹² 187v 12-13, and P¹³ 208v 7-8—a (not so) friendly reminder of how unreliable the Būlāq print is as far as details of textual criticism are concerned. Through IBN ALBAYṬĀR (as proved by the synonym (حمار قبان) the passage surfaces in the same form but with an impersonal ascription («وقال بعضهم» in ADDAMĪRĪ, *Ḥayawān* [229] حمار قبان (§ II 1048-9).

² With the remarkable exception of the synonym *qaranbā* in a quote from *Materia medica* in *Nat* III.II.4, this insect is consistently referred to through the formulaic description “the beast that curls itself up upon being touched” whether the quote is drawn from DIOSCORIDES, GALEN or AṬHŪRUSFUS. On a side note, data like this lose very much of their informative value when decontextualised for this sample and some assumptions may appear less compelling than they actually are when the whole text is considered.

of *Iktifāʿ* can help to confirm whether the specification “alive” referred to the gecko in *Sāḡ*-3 was actually omitted or not, which would confirm or negate the hypothesis of a conflation.

On the other hand, ALʿILBĪRĪ’s rôle as a compiler appears to have been an active one regardless of the exact reconstruction of the sequence for ^α*Hawāṣṣ*. Even if the passage on the gecko preceded the one on the woodlouse and one assumed an accidental eyeskip resulting in a merger, then he would still have intentionally omitted the name of the authority—and a fortiori, of course, if it was the passage on woodlice that came first.¹ In any case, it is rather unlikely that absolutely all divergences between *Natāʿiḡ* and *Iktifāʿ* (and of either of them with regard to ^α*Hawāṣṣ*) should be reduced to mechanical accidents: the process of selection of passages may have necessitated some additional modifications, such as relocating the mention of the authority or omitting it depending on authorial criteria. In this respect, it might be of some significance that none of the three documented uses of the gecko in ^α*Hawāṣṣ* were selected for inclusion by the author of *Natāʿiḡ*, perhaps because he may have been uncertain as to the identification of the animal. The omission of AṬHŪRUSFUS’ name, in turn, would be less justifiable (it is mentioned elsewhere in the text), but then the original passage may have transmitted it in such a corrupted form that made its mention unreasonable. This is, needless to say, the most speculative and interpretive level of reconstruction of the primitive texts and of their authors’ intentions, and interpreters are bound to err and even to fail embarrassingly in their presumptions.

Origin

The two antipyretic amulets quoted by ARRĀZĪ from AṬHŪRUSFUS had been previously introduced in the Islamicate tradition by AṬṬABARĪ, who reproduces the same text but does not mention his source. This anonymisation is the main reason why I have provisionally disregarded *Firdaws* as the source of the two quotes under scrutiny:²

¹ In the latter hypothesis it may have been IBN ALHAYṬAM that merged the two passages.

² As I have commented in Chapter 1, the explicit mention of the sources of each passage or sequence of passages is one of the main features that distinguish *Hawāṣṣ* from *Ḥayawān* as epistemic genres. This case here is a perfect example of this genre convention. As for AṬṬABARĪ’s idiosyncratic phrase «سَامَ أْبْرَصَ الَّذِي يُوْخَذُ وَيُلْقَى» cf. also «وَالضَّفْدَعُ الَّذِي يُوْخَذُ وَيَقْتَطَعُ...» in *Firdaws* VI.IV.36 (§ 44^{o10}).

Firdaws VI.IV.38 في العقب وسام أبرص (§ 442⁶⁻⁷)

فأما سام أبرص الذي يؤخذ ويُلق، وهو حي، في خرقه ويُعلق على من به حمى الغب،
يقلعها بإذن الله.

Firdaws VI.IV.39 في العنكبوت والنمل والديدان الطوال تكون تحت الجرار والحشرات (§ 443¹⁻²)

وإذا لُق في خرقه وُعلِق على من به حمى الغب، قلعها.

The wording of the passages points towards a common source (mark قلع in the two apodoses) and while the variance in the use of صبر / لُق might be considered stylistic, the differential use of حمى الغب in *Firdaws* against مثلثة حمى in *Hawāṣṣ* is harder to explain if not as reflections of two different ways of transmission of the same materials or, much less probably, as two different renditions of an original text that was not written in Arabic.

There is still a third excerpt from AṬHŪRUSFUS handed down by ARRĀZĪ in which some sort of lizard (عظاية, which is in fact often identified as a gecko) is used in a similar way against chronic fevers:

عظاية 5-ع Hawāṣṣ

I 85r 15-17 | Q 23¹³⁻¹⁵ | T 108v 7-8

قال أطهوسفس: «إن شُدَّت العظاية، وهي حية، في خرقه سوداء بخيط أسود وُعلقت
على من به حمى مزمنة، أبرأته. وإن عُلق قلبها على امرأة، منعها أن تلد».

العظاية [العضاية T | وهي حية T- | سوداء ... أسود] وخيط اسود T | سوداء [سوادا I | بخيط] وبخيط
Q | وُعلقت [وعلق Q | مزمنة] لازمه T | أبرأته [ابرهه T، أبراه Q].

Judging from the combined testimony of ALQAZWĪNĪ and ADDAMĪRĪ, it is probable that *Hawāṣṣ* (or at least some copies thereof) would have specified this benefit against chronic *quartan* fevers:

ADDAMĪRĪ, *Ḥayawān* [648] (§ III 114¹⁸) العظاءة

وإن عُلقَت في خرقه سوداء على من به حمى الربع المزمنة، أبرأته.

IX.1.3 Aṭṭabarī said: «If the fly-hunting lynx spider is taken, beaten up, and rubbed on a linen cloth to be held with one's left hand, or otherwise stuck over the occipital hollow, this shall break tertian and quartan fevers»—proven by experience.

Source

An essentially identical passage in AṬṬABARĪ's medical encyclopaedia is introduced by a verb «ذَكَرَ» that is coordinated to a preceding verb «ذَكَرَ» for which no explicit agent has been mentioned:¹

Firdaws VI.IV.39 ... في العنكبوت والنمل (§ 442₁₈₋₂₀)

وَذَكَرَ أَنَّهُ عَلَّمَ بَعْضَ الْأَطْبَاءِ أَنْ يَأْخُذَ مِنَ الْعَنْكَبُوتِ الَّذِي يَصِيدُ الذَّبَابَ وَيُشَدِّخُ وَيُطْلَى عَلَى خَرْقَةٍ كَثَّانٍ، وَيَأْخُذَ بِالْيَدِ الْيَسْرَى وَيُلْصِقُ عَلَى نَقْرَةِ الْقَفَا، فَيَنْفَعُ مِنَ الْغَبِّ وَالرَّبْعِ جَمِيعًا.

There is a noticeable difference between the instructions provided by AṬṬABARĪ and the text transmitted in *Nat*-3: the original remedy describes one single way of use, whereas its Andalusī echo reports on two alternative (mark أو) ways of utilising the spider's property. In the absence of further witnesses and given the high probability that the change in the conjunction might reflect a simple clerical lipography, there is not enough evidence to postulate a new apomorphy in the parent compilation.

The same instructions are recorded by ARRĀZĪ in *Hawāṣṣ* at the end of a series of three quotations on the antipyretic properties of spiders that are apparently all three ascribed to AṬHŪRUSFUS:

Hawāṣṣ 3-ع عنكبوت (I 85r 7-11 | Q 23₂₋₅ | T 108r 16 - 108v 1)

وَأِنْ أَخَذَ مِنْهُ الَّذِي يُسَمَّى «فَهْدًا» (وَهُوَ الَّذِي يَصِيدُ الذَّبَابَ) وَرُضَّ وَشُدِّخَ وَطُلِيَ عَلَى خَرْقَةٍ كَثَّانٍ، وَأَخَذَ بِالْيَدِ الْيَسْرَى فَأُلْصِقَ عَلَى نَقْرَةِ الْقَفَا، أَذْهَبَ حَمَى الرَّبْعِ وَالْغَبِّ — وَهَذَا أَيْضًا مَجْرَبٌ تَعَلَّمْتَهُ مِنْ بَرَطْيُوسِ الطَّبِيبِ.

وَأِنْ ... فَهْدًا] الفهيد ان اخذ الفهيد T | منه - Q | الذباب] الذبان T | وشُدِّخَ - T | فأُلْصِقَ] والصبق QT | حَمَى الرَّبْعِ] بالحمى الربع T | أَيْضًا مَجْرَبٌ] صحيح مجرب Q، - T | برطْيُوسِ] برطْيُوسِ T، ابن طهرس Q.

¹ For the preceding passage in *Firdaws*, see below *Nat* IX.III.3. On a tangential note, Arabic قفا corresponds to Greek ἰπίον 'occipital bone, occiput' in the medical tradition and was borrowed into Mediaeval technical Latin as *alchafa*; for further details and a lengthy and very informative excursus on the history of medical Latin *nucha* and its Romance descendants, cf. the commentary on نقرة القفا by PEÑUELA 1940: 70-77.

The copyist of the Vatican manuscript must have had a hard time understanding his text and I reproduce his passage in its original, unedited, form as an illustration of the reality of the manuscript transmission of this kind of materials:

Hawāṣṣ V 23r 4–6

وان اخذ الذى يسمي الذباب روض وطفى على خرقة كتان واخذ باليد اليسرى فالصفتن
على نغرة القفا اذهب حمى الغب والربع وهذا ايضا مجرب تعلمته من الطيب.

The relationship between *Nat*–3 and these two possible sources is remarkably complex to define. On the one hand, it is evident that the text quoted here is much closer to *Hawāṣṣ* than to *Firdaws*. The synonym *fahd* is not available in AṬṬABARĪ's text and the presence of the verb رَضَّ distinguishes also ARRĀZĪ's passage from its predecessor's.¹ In fact, the would should little hesitation to consider *Nat*–3 a borrowing from *Hawāṣṣ* were it not that the text mentions explicitly AṬṬABARĪ as its source and this ascription could not have been inferred from that locus. Now, *Nat*–4 below (and also its cognate *Sāḡ*–4) is likewise explicit in its attribution to ARRĀZĪ of a quote that cannot be located in his literary output. There is a distinct possibility, therefore, that either by mistake or by some unclear motivation the compiler of *Hawāṣṣ* may have misascribed his passages. Wrong attribution of passages to the couple AṬṬABARĪ/ARRĀZĪ is even more frequent in our text than the analogous mixing of DIOSCORIDES/GALEN.

The link between the passage transmitted in *Firdaws* and the quote included in *Hawāṣṣ* is far more enigmatic. At first glance, the first person in ARRĀZĪ's text (تعلّمته) might be co-referential with the anonymous physician who was taught this remedy by the unnamed author echoed by AṬṬABARĪ. According to this reading of the passages *BRṬYŪS would be the source anonymised in *Firdaws*, and moreover the two Iranian authors would have accessed two different texts: one by the teacher (reflected in *Firdaws*), the other by the disciple (echoed in *Hawāṣṣ*). Both must have been written in Arabic, which would be the only explanation for the striking coincidence in the exact linguistic form of the two passages and at the same time for the slight but yet significant differences between them (such as the alternative name of the spider and the addition of the verb رَضَّ).

However, I suspect that there is a much simpler explanation that does not imply the unnecessary proliferation of unattested medical texts. The parallel

¹ The order in which tertian and quartan (or quartan and tertian) fevers are mentioned or the appended note "proven by experience", in turn, are far less conclusive, as they are rather accidental than substantive.

use of AṬHŪRUSFUS by both AṬṬABARĪ and ARRĀZĪ is confirmed by a number of passages (see Chapter 3) and that source is rich in remedies involving several taxa of insects in general and also specifically against fevers. It is, therefore, more plausible to assume that «عَلَمَ بعض الأطباء» in *Firdaws* corresponds actually, by authorial or clerical mistake, to «تعلمته من برطيوس الطبيب» in *Hawāṣṣ*. The first person echoed by both authors would then be AṬHŪRUSFUS and this particular passage would contribute an additional small piece of evidence with which to reconstruct the profile of this intriguing figure. This hypothesis is compatible, in fact, with the probable mention of AṬHŪRUSFUS above in *Saḡullōt* IX.1.3.

Later transmission

The same remedy is included in *Sexaginta* too in a form that is virtually identical to that of *Firdaws*:

<i>Sexaginta</i> LIII <i>De aranea</i>	<i>Saḡullōt</i> s.v. עכביש
A 70ra 8–11 V 109rb 45–47	P 55r 31–33
Si sumpseris araneam capientem muscas et triueris et in panno lineo ligaueris, et acceperis cum manu sinistra et posueris super collum retro, curabit tertianam et quarta- nam.	אם תכתוש האוכלת הזבובים ותקשור בבגד פשתן ותקח בזרוע השמאל ותשים על העורף. ינקח השלישית.

sumpseris] suspenderis A araneam] – V lineo] – A ligaueris] posueris V.	

It is echoed by ZUHR too. His version substitutes “the back” (or even “the sight” in some manuscripts) for “the occipital hollow” of the original passage:

<i>Hawāṣṣ</i> 6–6 عنكبوت (H 155i–3 P 65r 12–14 T 323ii–12)
إن أخذ الذي يصيد الذباب وشدخ وطللي به خرقة كتان وأخذت باليد اليسرى وألرقت على الظهر، أذهب حمى الريح وأزاله.

و شدخ] دم P وطللي] وطلليت T وأخذت] واحذن H, واخذ PT الظهر] البصر PT وأزاله] واتعب .P

Parallel transmission and possible origin

In IBN ALHAYTAM's *Iktifāʾ*? as reflected by both *Saḡullōt* and *Nisyōnōt* as passage has been previously selected that represents a typological parallel (actually almost a duplicate) for the remedy under examination. It is included within the sequence drawn from DIOSCORIDES:

Saḡullōt IX.I.2 (L–M 324_{9–11})

ואמר כשתשחוק העכביש ותעורב בקצת
המשיחות או הרטיות ויומשח בהם
על הצדעים והמצח. תבריאם מקדחת
אלגב.

Nisyōnōt IX.I.2 (L–M 284_{4–6})

ואמר: «אם יקח קורי העכביש וישחק
ויעורב עם דיאלטיאה ותחבוש הצדעים.
יבריא מקדחת שלישיה».

It is, indeed, a genuine quote from DIOSCORIDES and the original passage is so similar to *Nat*–3 that it is only natural to assume some genetic relationship between them:

Materia medica 2:63 ἀράχνη τὸ ζῷον
WI 141_{4–7}

συμμελαχθεῖσα σπληναρίῳ καὶ ἐμ-
πλασθεῖσα εἰς ὀθόνιον προστεθείσα
(τε) τῷ μετώπῳ ἢ τοῖς κροτάφοις τρι-
ταικᾶς περιόδου ὑγιάζει.

أرخني، وهو العكبوت 2:54
B 68v 4–5 | P 34v 8–9 | T 147_{10–12}

إذا خلط ببعض المراهم وأطخ على خرقة
وضيّر على الجبهة أو على الصدغين، أبرأ من
الحمى الغبّ.

[أو] B و. [الحمى الغبّ] الحما الغبّ P.

The only major difference between the two remedies is the place on which the cloth must be put and judging from the excerpts collected by ARRĀZĪ in *Alḥāwī*, it must be inferred that AṬHŪRUSFUS must have been well acquainted with the Graeco-Roman medical tradition (especially with the branch of zootherapeutics). It would not be unreasonable to speculate, therefore, that *Nat*–3 might be a faint echo, mediated by multiple sources, of either DIOSCORIDES' passage or even of the tradition of which he himself is simply a witness—one whose written work happens, unlike so many others, to have been preserved for posterity.¹

¹ The subcorpus of remedies involving spiders is extremely complex and several different strands become intertwined, conflated, and reinterpreted through the centuries in the Islamicate tradition. As few more examples are to be found in the next chapters but my provisional remarks here cannot substitute for a systematic analysis of this traditions.

IX.I.4 Arrāzī said: «If deer horn filings are beaten up and drunk with wine, this shall avail greatly against tertian fever and jaundice.»

Cognates

The same quotation is reproduced also in *Iktifāʾ* likewise under the explicit authority of ARRĀZĪ:¹

Saḡullōt IX.I.4 (L–M 324_{13–14})

ואמר ראזי: «אם ישתה מנסורת דק האיל
שחוקק בין. יועיל מן מוקדחת אלנב
ולירקון תועלת גדולה».

Nisyōnōt IX.I.3 (L–M 284_{6–7})

ואמר: «אם ישתה מנרידת קרן אייל
שחוקק בין. יועיל מוקדחת שלישית
והירקון תועלת מבואר».

It is also the first passage in the aforementioned sequence in IBN ALBAYṬĀR's *Almuḡnī*, where it precedes immediately a parallel to *Nat*–5. The passage, however, is anonymously transmitted here:

Almuḡnī XVIII.3 الصفاوية في الحصى (M 324r 13–14)

برادة قرن الأيل — زعموا أنها، إذا سحققت وشربت بشراب، نفعت من حمى الغب، وينفع
أيضًا من اليرقان منفعه عظيمه فيها زعموا.

There is a noticeable difference in the wording too, which may be indicative of paraphrase or of parallel (rather than cognate) transmission.

Source

The agreement of *Saḡullōt* and *Natāʾiḡ* in ascribing this passage to ARRĀZĪ suggests that this may have been the authority mentioned already in ^α*Hawāṣṣ*.² However, no such property can be found in the entry on deers in his *Hawāṣṣ*.³

¹ Apparently the original קרן 'horn' was at some point in the Hebrew transmission of *Saḡ* misread as דק, which is the form found in the edited text and which, as an adjective, could only be understood to qualify either the chips ('fine, minute') or the animal ('small, young', especially when speaking of cattle). On the lexical side, *Saḡ* נסורת *nisōret* is Mishnaic Hebrew for 'chips, saw-dust' (cf. JASTROW, *DTTML* 915b), a later reflection of the lexeme underlying Tanakhic משור *maššōr* 'saw' (ie √*nšr*), whereas *Nisy* features the more common word נרידה, which is used also elsewhere in *Saḡ* itself but rather in reference to a metal (cf. «נרידה הזהב» 'gold filings' in *Saḡ* V.I.4).

² This ascription is not shared by *Nisyōnōt*, however, in which the only author named in the whole section is the opening one, namely DIOSCORIDES.

³ Cf. *Hawāṣṣ* 1–10 أيل (I 79v 11–13). To be sure, a confusion with camels (إبل) shall not even be considered here for obvious anatomical reasons.

and only a partial match is provided by *Sexaginta*, where stag horn (*cornu cerui*) is said to benefit against haemorrhage, intestinal ulcers, bowel discharge or diarrhoea, bladder-ache, womb flow, and jaundice. No mention of fever, either tertian or otherwise, is made here:

Sexaginta XI De ceruo (A 67ra 34–39 | V 106ra 17–22)

Si combustum abluatur et bibatur ad pondus III aureorum et dimidium [...], et contra dolorem uesice, et abscindit humiditates peruenientes ex matricibus, et ualet contra uermes et yctericiam.

bibatur] + ex eo V | matricibus] matrice V | uermes et] – V | yctericiam] yctiricia A.

In fact, whether it was original or introduced by the Andalusī compilers, the ascription to ARRĀZĪ may be the result of a mistake, since the origin of this passage can be located in AṬṬABARĪ's *kunnāš*. There the same potion is commended in similarly enthusiastic terms against *unspecific* fever and jaundice:

Firdaws VI.IV.11 في الأيل (§ 427^{14–15})

وإذا أخذ من برادة قرن الأيل، ثم سحق وشرب مع الشراب، نفع من الحمى والبرقان منفعة عظيمة.

Parallel traditions

This combined effect on fevers and on jaundice is, indeed, peculiar to AṬṬABARĪ, as the corpus under survey documents rather two separate benefits for this item. Tertian fever (حمى الغب) is found amongst the several ailments that a similar preparation made of *burnt* deer horn and *honey* is affirmed to heal in a passage recorded by IBN BUḤTĪŠŪF. A basic version of this recipe was known also to IBN ḤALĪ, but in his text the potion is attributed exclusively an antihelminthic effect:

Ḥayawān [12.17] الأيل (R 118)

A	B ^w	C
يؤخذ للدود في الجوف: قرن الأيل فيحرق ويسحق، ويستقي منه صاحب الدود بعسل، فلا ابقي في جوفه دود ولا ما يؤذيه.	قرون الأيل، إذا أحرقت وسحققت وشرب منها أخرج الدود من البطن.	قرن ايضا اذا احرق وسحق وخلط بعسل ولعقه انسان على الريق ارمي الدود الذي في جوفه كبارا او صغارا.

Ḥayawān III.1 أَيْل (G 122₉-123₅ | P 12v 6-7) ≡ ALMAWŞİLĪ, *Manāfiʿ* E 29v 1-8

≡ *Naṣīʿ* III.1 منافع الأَيْل (L 165r 1 - 165v 2)

قرن الأَيْل — [...] وإن أُحرق وشرَّب بعسل، أخرج الدود من البطن، وينفع من نفث الدم ومن حصى المثانة، ومن حمى الغبّ ومن السرطانات المتأكلة. [...] وينفع من حمى الربيع إذا شُرِب.

قرن الأَيْل [قرنه P | وإن] وأذا G | ومن نفث... ومن نفث... نفث... و... P... | الغبّ] أَيْل L.

There is no mention of jaundice in the early zootherapeutic tradition, and there are not many later reflections of this passage in later texts that might suggest that a more complete version ever existed. It looks as if AṬṬABARĪ had extracted a very specific benefit against tertian fevers from a longer list that was available in that genre and added a mention of jaundice from some other source.

Jaundice

As a matter of fact, a medical use of burnt stag horn is reported by DIOSCORIDES and he includes jaundice amongst the ailments against which the remedy is credited to avail:¹

Materia medica 2:59 ἐλάφου κέρας

WI 139₄₋₇

κεκαυμένον καὶ πεπλυμένον ἀρμόζει πλῆθος πινόμενον κοχλιαρίων δυσὲν αἰμοπτυκτοῖς, δυσεντερικοῖς, κοιλιακοῖς, ἰκτερικοῖς, κύστεως ἀλγήμασι μετὰ παρακαάνθης.

قرن الأَيْل Ḥaṣāʿiṣ 2:50

B 69v 11-12 | P 34r 12-13 | T 145₁₅₋₁₇

إذا أُحرق وُعْسل وشرَّب منه مقدار فخليارين مع كثيراء، وافق مَنْ به نفث الدم، وقرحة الأمعاء، والإسهال المزمن، واليرقان، ووجع المثانة.

فخليارين [فحلارس B، صليارس T].

¹ For roughly contemporary parallels recording the same list of ailments, cf. WELLMANN's apparatus of *ad loc.*, where reference is made to PLINY's *Naturalis historia* and also to the pseudo-Dioscoridean *Simpl. med. / Euporista*. The use of burnt deer horn (κέρατος ἐλαφείου κεκαυμένου) is well documented in the Greek tradition, cf. especially a recipe for hepatic and icteric ailments by ANDROMACHUS recorded in GALEN, *Sec. loc.* VIII.7 (K XIII 203₆₋₇); then another formula against jaundice transmitted by APOLLONIUS that GALEN notes down through ANDROMACHUS in *Sec. loc.* IX.1 (K XIII 231₈₋₁₄); cf. further similar preparations involving the same ingredient in *Sec. loc.* IX.5|X.1 (K XIII 293₆, 327₅).

It is worth noting that no medium is specified by DIOSCORIDES for this potion (it may have been water, wine, oxymel) and that even in IŞTIFAN's translation the combination with tragacanth (which he relocates perhaps in an unwarranted way) does not result in a drinkable mixture. The passage in *Materia medica*, moreover, does not mention any kind of fevers.

Neither of these two distinctive features is altered by the later transmission of the passage. The instructions are virtually identical in a typically anonymised echo by GALEN:

Simpl. med. XI.1.8 (K XII 334₆–335₃)

Περὶ κέρατων ἐλάφου καὶ αἰγῶν

τὸ δὲ τῆς ἐλάφου τινὲς τῶν γραψάντων τὰ τοιαῦτα μάλιστα ἐπαινοῦσιν, ὡς εἰ μετὰ τὸ καυθῆναι πλυθείη καὶ δυσεντερίαν καὶ πτύσιν αἵματος, ἔτι τε τὰς καλούμενας κοιλιακὰς διαθέσεις ἐκθεραπεύειν, ἰκτερικοῖς τε διδόμενον ὠφέλιμον, ἐπὶ πάντων δὲ τούτων κελεύουσι διδόναι κοχλιάρια δύο.

Mufradah XI.5 (E 173v 11–14)

ذَكَرَ الْقُرُونِ

فَأَمَّا قُرُونِ الْأَيْلِ، فَقَدْ ذَكَرَ قَوْمٌ مِنْ أَصْحَابِ الْكُتُبِ الَّتِي وَصَفُوا أَمْثَالَ هَذِهِ الْأَشْيَاءِ أَنَّهُ مَحْمُودٌ خَاصَّةً مِنْ طَرِيقِ أَنَّهُ، إِنْ أُحْرِقَ وَغُسِّلَ بَعْدَ الْإِحْرَاقِ، شَفَى قُرُوحَ الْأَمْعَاءِ وَنَفَثَ الدَّمَ وَاسْتَطْلَقَ الْبَطْنَ؛ وَإِنْ شَرِبَهُ أَصْحَابُ الْبَرْقَانِ، نَفَعَهُمْ. وَأَمَرُوا أَنْ يُسْتَقَى مِنْهُ هَوْلَاءُ كُلِّهِمْ فِي شَرِبَتِهِ قَدْ مَلَعْتَيْنِ.

and no change was introduced in Byzantine times either:

ΛΕΤΙΟΥΣ, *Iatrica* II.156 (O I 210_{11–15})

φασὶ δὲ ὡς τὸ τῆς ἐλάφου κέρατος μετὰ τὸ πλυθῆναι, εἰ καυθείη, καὶ δυσεντερίαν καὶ πτύσιν αἵματος καὶ τὰς καλούμενας κοιλιακὰς διαθέσεις ἐκθεραπεύειν καὶ ἰκτερικοῖς δίδοται ὠφελίμως.

Kyranides II.11 Περὶ ἐλάφου 19–22 (K 135)

Κέρατος δὲ ἐλάφου [...] μετὰ δὲ τὸ καυθῆναι καὶ πλυθῆναι πινόμενον ὡσεὶ κοχλιάρια β', δυσεντερικοῦς τε καὶ κοιλιακοῦς καὶ ἰκτερικοῦς καὶ αἱμοπτοϊκοῦς ὠφελεί.

An apparent paraphrase by IBN MĀSAWAYH in *Alkamāl wattamām* specifies, perhaps spontaneously, that the (ashes of the) burnt horn are to be taken with cold water against jaundice caused by hepatic obstructions:

IBN MĀSAWAYH C ARRĀZĪ, *Alḥāwī* VII.2 (H VII 161₁₂₋₁₃)

واسقه قرون الإيتل محرقه درهمان بماء بارد على الريق.

But I can find no parallel for the prescription of wine (which, after all, may also be a mere sensible addition by AṬṬABARĪ) or, more importantly, for the combination of tertian fevers *and* jaundice.

Given that the strictly medical inquiry appears to lead to a dead end, I call the attention here to an ancient tradition according to which deers were thought not to be subjected to fevers. They could even provide a remedy to cure them, but it is their venison, according to PLINY, that possesses this property, and only if the stag has been killed with one single wound:¹

NH VIII.32.[119] (I–M II 119₁₈₋₁₂₀₃)

Febrium morbos non sentit hoc animal, quin et medetur huic timori. Quasdam modo principes feminas scimus omnibus diebus matutinis carnem eam degustare solitas et longo aevo caruisse febribus, quod ita demum existimant ratum, si vulnere uno interierit.

¹ Cf. also «*Febres arcet cervorum caro*» in PLINY, NH XXVIII.16.[66] (J–M IV 353₂₂).

IX.1.5 He said: «The long-legged locust that cannot fly and is found in gardens, when taken and hung on a patient suffering from tertian fever, does him good.»

Cognates

The same quote, with an identical wording, closes the chapter also in *Saġullōt*:¹

Saġullōt IX.1.5 (L–M 324₁₄₋₁₆)

ואמר: «אם תקח הארבה ארוכת הרגלים אשר לא יעוף ויהיה בננים, ויתלה על בעל קרחת אלנב, יועילהו».

This one is also the second passage in IBN ALBAYṬĀR's parallel sequence, where it follows (just like in *Natāʾiṣ* and in *Saġullōt*) the potion made of deer horn filings. The version noted down by IBN ALBAYṬĀR lacks, however, any reference to the locust's inability to fly:

Almuġnī XVIII.3 الصفراوية في الحمى (M 324r 14–15 | P¹ 280v 1–2)

آخر — الجراد الطويل الأرجل الذي يكون في البساتين: إذا عُلق على من به حمى الغب، نفعه.

Source

As it was the case with the preceding ARRĀZĪ-ascribed quotation in *Nat*-4, no such passage is to be found in *Ḥawāṣṣ*, which does nonetheless include an entry for locusts, nor in the homonymic lemma in *Sexaginta* or in the pharmacognostic section of *Alḥāwī*.² A literal match is provided, in turn, by AṬṬABARĪ in *Firdaws* and also, in abridged form, in *Hifṭ*:

¹ The word אָרְבֵּה with which the Hebrew translator renders Arabic جراد is a generic, and already Tanakhic, designation for locusts of the flying kind, in opposition to non-flying אָרְבֵּה לָאֵר (a cognate to Arabic حرجول).

² In *Ḥawāṣṣ* جراد 1-ج one single passage is excerpted from the Persian *Filāḥah*. As for *Sexaginta* XXXV *De locustis* (in the Venetian print «*De aldea locustis*»), a reference is made to DIOSCORIDES and a property is attributed to locusts against bites. In *Alḥāwī* XX [225] جرادة this insect is identified with Greek «*φρίδης*» (ie *φρίδης**, which is IŞṬIFAN's transliteration of *φρίδης* in *Ḥaṣ* 2:43, cf. also *φρίδης* and particularly *φρίδης* in BAR BAHLŪL, *Lexicon* 278_{16|21}), which is said to have been mentioned in DIOSCORIDES' *Materia medica* 2 and PAUL OF AEGINA's *Pragmateia* VII as beneficial against dysuria (especially for women), but omitted by GALEN (cf. *Alḥāwī* H XX 284–285* | B 30₁₄₂₋₁₁).

Firdaws VI.IV.32 (§ 437₂₂₋₂₄)

فَأَمَّا الْجَرَادُ الَّذِي يَكُونُ فِي الْبَسَاتِينِ
 (وَهُوَ الْأَخْضَرُ مِنْهَا، الطَّوَالُ الْأَرْجُلِ،
 وَلَا يَطِيرُ): فَيُعَلَّقُ عَلَى مَنْ بِهِ حَمَى الْغَبِّ،
 فَيَنْفَعُهُ بِإِذْنِ اللَّهِ.

Hifid §237 (K 148₉)

وإن أخذ من الجراد
 الطويل الأرجل
 وعلق على من به حمى الغب،
 نفع.

The passage in *Firdaws* has all the elements and even the formulaic pattern of our quote. Comparison to the corpus (for which see below) shows moreover that, unlike the common qualification “long-legged”, the explicit mention of the habitat of the insect and of its flightless nature are highly characteristic traits of the tradition passed on by AṬṬABARĪ. In this regard, dependence of IBN AL-BAYṬĀR from *Firdaws* can be assumed quite safely for this remedy. The question of its possible mediation, on the other hand, is open to interpretation. The fact that AṬṬABARĪ’s name is nowhere mentioned in the immediacy of the passage suggests that the compiler did not extract it directly from the ultimate source but must have found it in a locus in which no name was available. In any case, whether direct or indirect, this reflection of *Firdaws* shows omission (or loss) of an element (namely the phrase “that cannot fly”) that was transmitted both by the original text and by ^a*Hawāṣṣ*.

Parallel traditions

Surprisingly enough, IBN ṢALĪ’s *Ḥayawān* does not contain an entry on locusts and this insect is not mentioned even once in that text. However, an exceptional ninth-century testimony to the same zootherapeutic tradition echoed by AṬṬABARĪ is provided by his contemporary SĀBŪR B. SAHL (d. 869). A dense epigraph transmitted in the Ṣaḍudī recension of his *Aqrābādīn* brings together a number of medical benefits (typically labelled as *manāfiʿ* rather than as *ḥawāṣṣ*) of animals and animal organs that is quite obviously extracted from a zootherapeutic text of the humans-first *Ḥayawān* type.¹ Towards the end of the epigraph the periapt under examination is found and a much simpler description of the insect is given:

Aqrābādīn XVI في منافع أعضاء الحيوان [243] (K 102₇)

وإن أخذ الجراد الطوال الأرجل وعلق على من به حمى الغب، نفع.

¹ The chapter begins with a vague “Some physician has said” introducing the exact same passage on human hair that AṬṬABARĪ ascribes to the enigmatic AṬRŪMĪNUS (= ARRĀZĪ’s AṬHŪRUSFUS) in *Firdaws* 420₄ and then the text of *Aqrābādīn* runs quite parallel to its source. The authenticity of the epigraph as a part of the primitive dispensatory is implicitly assumed by KAHL 2009: 6 in the affirmation that it was “discarded from the small version of the original”.

A systematic comparison of SĀBŪR's chapter (including, if pertinent, the testimony of the longer version of *Aqrābādīn*) with *Firdaws* ought to be conducted to rule out dependence of the former (or, to be more precise, of this particular epigraph) from the latter. Judging from regular differences in the wording between the two texts even in an explicit quotational context (cf. a passage from GALEN on frogs in *Aqrābādīn* 102₁₂₋₁₃ ≈ *Firdaws* 44₁₂₋₁₄), I am currently inclined to assume a parallel access of the two authors to an early *Ḥayawān* compilation. It might even be the same text quoted from by IBN MĀSAWAYH and perhaps even the Vorlage for IBN ḤALĪ's own book. Had it been written in Syriac, that might help to explain the slight (but still noticeable) differences in the wording in its diverse reflections. All of this, in any case, is mere speculation.

As far as the autonomous zootherapeutic genre is concerned, IBN BUḤTĪŠŪḤ seems to be the first to record this property of “vegetable-locusts” (جراد البقل) when used as a periapt against tertian fevers. Now, while all four witnesses to the text of *Ḥayawān* (including its Persian translation) are unanimous in their reference to tertian fever («تحتی غت» ≡ «تب غب»), the anonymous *Naṣṭ* disagrees and transmits rather “quartan fever” («تحتی ربع»), as well as a different verb in the apodosis of the passage:

Ḥayawān VII.1 جراد

G 189₄₋₆ | Q 93_v 4-5

≡ ALMAWṢILĪ, *Manāfiḥ* E 114_r 10-12

جراد البقل — [...] وَأَنْ عَلَّقَ عَلِي مَن وَجِراد البقل — [...] وَإِنْ عَلَّقَ عَلِي مَن بِهِ
تحتی ربع، ازالها. تحتی غت، نفع.

Manāfeḥ-e ḥayawān II.91 (R 179₁₁₋₁₃)

القول في ذكر الجراد و خواصه و منافعه

وژراده بقل [...] چون علی کند بر آن موضع و بر کسی بنده،
تب غب باز دارد.

The alternative denomination of the insect and above all the entirely different context in which the passage is included strongly suggest that IBN BUḤTĪŠŪḤ is not following *Firdaws* here but a different text that might, indeed, be the source for AṬṬABARĪ's (and SĀBŪR's) remedy too. The specific mention of vegetables in annexation may be significant here and might reflect a different rendition of the original phrase.

Quartan fever

As for the variant reading “quartan” in *Naṣṭ*^L, it may not be a mere clerical misreading. As a matter of fact, the benefit of a periapt made of long-legged (occasionally “long-necked” or simply “long”) locusts against quartan fevers is fairly well documented in the Islamicate corpus. Writing in the second half of the 10th c. ALMAĠŪSĪ includes this property in the pharmacognostic section of his medical encyclopaedia:

<p><i>Kāmil</i> II.11.53,25 جراد S II.1 194₉₋₁₉</p>	<p><i>Regalis dispositio</i> II.11.52 <i>locuste longe</i> V 104vb 54–55</p>
<p>الجراد الطوال — إذا عَلَّقَتْ على من به حمى الربيع، نفعته.</p>	<p>Locuste longe si suspendantur collo quartanam patienti prosunt.</p>

His *Kāmil* may be the source for some later representatives of the pharmacognostic genre, but others probably echo (directly or indirectly) earlier texts such as *Naṣṭ*^L itself. Thus, in the 11th c. IBN ĠAZLAH may have borrowed his passage from *Kāmil* (the wording is exactly the same in both loci), but in the next century in Andalus a different source can be suspected for ALĠĀFIQĪ, who points out that the “long-necked” species of locust is required:¹

<p>IBN ĠAZLAH, <i>Minhāj</i> جراد 19– L 53v 20</p>	<p>ALĠĀFIQĪ, <i>Mufradah</i> جراد 38– M IIIv 6–7 R 253₁₄₋₁₅</p>
<p>وقيل إن الجراد الطوال، إذا عَلَّقَتْ على من به حمى ربيع، نفعته.</p>	<p>وأما الجراد الطويل العُنُق: فَإِنَّهُ، إذا عَلَّق على من به حمى الربيع، نفعه.</p>

The wide and long circulation of this version of the remedy is further attested by ALQAZWĪNĪ. The Iranian encyclopaedist opens the ḥawāṣṣic segment of his entry on locusts with a quote from the *Filāḥah* akin but not identical to the one

¹ After a brief excerpt from DIOSCORIDES' *Ḥaṣāʾiṣ* 2:43, ALĠĀFIQĪ quotes from some anonymous author («غيره») a series of benefits that is only partially coincident in its contents with, but remarkably more detailed in its wording than, the corresponding entry in both IBN BUḤTĪŠŪṢ' *Ḥayawān* and *Naṣṭ*^L. Its Latin translation reflects a conflation with the immediately following lemma on *محمدب*, cf. *Simplicia* L-4 *locusta campestris-jarat* «*Et locuste que habent collum longum, quando comburuntur et puluis earum ponitur super vulnera cancrosa et valet*» (V 80va 55 – 80vb 3). The Arabic passage of *Mufradah*, besides, is borrowed word by word by IBN ALBAYṬĀR for *Ġāmiʿ* جراد 19– (B I 161₂₀₋₂₁) and also for *Almuġnī* XVIII.2 الربيع في حمى الربيع (M 320v 11–12); and it must be through IBN ALBAYṬĀR's *Ġāmiʿ*, in turn, that ADDAMĪRĪ got his passage for *Ḥayawān* [149] الجراد (Ṣ I 621₄).

drawn from the same source by ARRĀZĪ in *Ḥawāṣṣ*, then he goes on with this passage describing a hanging made of long-legged locusts against quartan fevers, afterwards he adds the benefit of smoking with burnt locusts a patient suffering from haemorrhoids and also from dysuria, and he finally closes the entry with a quotation from IBN SĪNĀ. The passage in *ṣaġāʾib* is the only one to share with AṬṬABARĪ the specification “long-legged” but it diverges from *Firdaws–Ḥifḍ* in its mention of *quartan* fever:¹

<p><i>ṣaġāʾib</i> II KĀṬĪNĀT II.III.7,6 جراد W 43L₇ P¹ 277V 14–15 P² 326r 6–7 P³ 262V 11–12</p>	<p><i>ṣaġāyeb</i> s.v. جراد B 252r 19 – 252v 1</p>
<p>والجراد الطوال الأرجل تُعلّق على رقبة صاحب حمّى الربيع: تزول حمّاه.</p>	<p>اكر از جراد (طوال) لارجل در كردن صاحب تب ربيع آویزند، پیش برود.</p>
<p>تُعلّق [تشدد P¹]² حمّى الربيع [الحمّى الربيع] P³.</p>	

Origin

AṬṬABARĪ’s description of the insect is reminiscent of DIOSCORIDES’ ἀκρις τρω-
ξαλλίς (≡ IŞṬIFAN’s حرجول), which he qualifies as wingless (ἄπτερος) and long-
thighed (μεγαλόκωλος ≡ عظيم الجسم), but no antipyretic property is reported for
locusts in *Materia medica*,² nor for that matter in the Graeco-Byzantine corpus
as far as I can see.

Now, DIOSCORIDES himself affirms that this particular species of locust is also
known as ὄνος, which IŞṬIFAN translates quite literally as حمار and happens to be

¹ In a different context this divergence could be classed as a mere variant reading (one cannot disregard the possibility that some copy of *Firdaws* may have transmitted «الربيع» rather than «الغب»), and requiring the amulet to be hung from the neck might be considered a spontaneous addition by the author. However, neither the contents of ALQAZWĪNĪ’s entry nor the parallel documentation of *quartan* as a genuine interpretation support such an hypothesis.

² Cf. *Mat. med.* 2:52 ἀκριδες (W I 137_{11–15}) ≡ *Haš* 2:43 جراد (P 33v 20–23 | T 144_{1–7}). A wider array of benefits was transmitted by PLINY’s source, but availing against fevers was not amongst them, cf. *NH* XXX.6.[16] on the wingless locust-like insects called *trixallis* in Greek (J–M IV 437_{13–438}). Another wingless species of locust («*locustarum minimae sine pinnis*») called *attelebos* (= ἀττέ-
λεβος / ἀττέλεβος) is mentioned by PLINY in connection to antipathies, cf. *NH* XXIX.4.[29] (J–M IV 401_{8–9}). At this point the reader is spared a lengthy and tedious excursus on the typology and onomastics of locusts in the Islamicate tradition that may have nevertheless some interest from a linguistic perspective (Western Semitic languages are particularly rich in locust-related terminology) and which I hope may find its place in a future version of this study. Some of the provisional results of that survey do bear on the history of the texts analysed in this chapter, but none of them is directly relevant to the tradition of *Nat* III.

the name of woodlice too. As seen above in *Nat-2*, periapted woodlice were likewise attributed a healing power against tertian fevers in a quote that AR-RĀZĪ draws from AṬHŪRUSFUS and that AṬṬABARĪ had previously transmitted without mentioning any source. A misidentification, nonetheless, seems out of the question given that all authors involved (especially AṬṬABARĪ) distinguish quite consistently these two insects. Furthermore, even if a contamination of the properties of locusts with those of woodlice were assumed for AṬṬABARĪ's passage, it still would not account for the apparently independent testimony of SĀBŪR and IBN BUḤTĪŠŪS, nor for the parallel circulation of an analogous amulet against quartan fevers.

Conclusions

After so many words, there is still too much that has remained untold. Besides, it must be quite obvious by now that I am not one to close questions but rather a curious opener of debates—even where there may be none to begin with—and the long series of “conclusions” that I have regularly appended to most chapters were all of the inconclusive kind. These final conclusions could not be any different. There are too many questions and too few answers available. And yet tradition and norm impose that a thesis, even when it is rather an exploration or an inquiry (no actual “thesis” prompted this research and I may have proved nothing after all), must end with some conclusions. Let me then recapitulate some of the features and elements discussed at some length in this dissertation so that a provisional end can be put to this journey.

As an intelligent collector of older traditions ALḤILBĪRĪ deserves some gratitude from historians of Islamicate epistemic traditions. Whether he was a philosophising physician addressing some dignitary or rather a learned apothecary with a curious mind and some resources, whether he lived towards the mid-10th c. or much later in the 12th c., the materials that he brings together in *Natāʾiḡ* echo in an unambiguous way a medical knowledge (inclusive of natural philosophy, dietetics, therapeutics, pharmacopoeia, the applications of the specific properties, and even apotheconomy) deeply rooted in the ninth- and tenth-century tradition.

Some bits of his Islamicised philosophy he borrows (perhaps at second hand) from ALKINDĪ, others maybe from the IḤWĀN, but his immediate sources remain enigmatic. His natural philosophy is unsophisticated, yet it *is* a philosophy and he notes it down, not without some eloquence, as a premise for the study of medicine, which he conceives as a means to the well-being of the body and the

soul. To that end he has compiled a book the like of which is nowhere to be found in the whole Andalusī tradition. Some are much longer and most are far better-organised, but no local physician appears to have ever attempted to compile a comprehensive *kunnāš* of this particular kind.

His rudimentary nosology and most of his therapeutics is IBN MĀSAWAYH's, who happens to be one of the towering, and almost semi-mythical, figures of the earliest phase in the genesis and development of Helleno-Islamicate medicine. Our author may not have even known whose text he was excerpting and even if he did, the reputation of his source did not prevent him from adapting the text, ever so slightly, for a local Andalusī readership. The extraordinary chance to compare his reproduction of *Nuǧh* with IBN ZUHR's (and I do not mean exclusively in their material wording) should not be wasted.

His regimen strings together small pieces from primitive eastern dietetics with a monthly dietetic calendar that has proved to be an exceptional witness to a less-attested tradition, and in the Islamicate geography only IBN ʿIMRĀN appears to have accessed the same text. This minuscule piece within the compilation is quite telling of the nature of *Natāʿiǧ*, which is a true box full of surprises waiting to be opened.

His formulas for compound drugs are cognate to (or perhaps borrowed from) SAʿĪD B. ʿABDIRABBIH's and reflect, thus, a peculiar blend of Mašriqī and Qayrawānī traditions apparently further filtered by a specific Andalusī reception. The history of that reception and the circumstances of the interrupted transmission of this knowledge (as of medical knowledge in general) remains to be written, but this modest section within *Natāʿiǧ* ought to be allotted a small place in that narrative.

His ḥawāšṣic anthology... I have devoted a whole part of my dissertation to it and there is no point in abridging here the pages that precede these conclusions. *Nat* III has been the true catalyser of this research and the only reason why I turned to the text after a long estrangement. The interest sparked by the multiple echoes that it transmits has resulted in an overgrowth of materials and above all in an unquenchable wish to know more and more about its extended family and its origins.

In the last years more and more evidence has been brought to the fore that shows that "official" histories of medicine reflect only a partial (in the sense of both fragmentary and biased) selection of the actual medical activity in Andalus. Hitherto unknown authors are being added to the list of physicians, allusions to texts that had previously gone unnoticed are being incorporated into the literary corpus, and the recent exhaustive analysis of some major Andalusī texts (most particularly that of IBN ǦANĀH's *Talhīṣ*) reveals the

existence of early, and to us anonymous, compilations that predate the local bloom of pharmacognosy in the first years of the 11th c.

If one bears in mind that it is in the 10th c. that one must locate IBN ISHĀQ's *Kunnāš* and the common source of IBN ĠANĀH's *Talḥiṣ* and IBN SAMAGŪN's *Ġāmiṣ*, that it is early in that century that ARRĀZĪ's texts arrive from the east, and also that this period extends to the time of IBN ĠULĠUL and even AZZHRĀWĪ—the reconstruction of the paths of transmission of knowledge in Andalus during the 10th c. reveals itself as one of the most fascinating projects a historian of Islamicate science could imagine.

A small piece for that puzzle is contributed, I think, by ALḤILBĪRĪ's modest *Natāriġ*, the *Book of the rational conclusions*. It is a text that has so much to tell to whoever is willing to listen carefully, and even if the sensible reader may not partake in my philological enthusiasm, I have hopefully shown that it is indeed worth reading.

Toutes gens desirent par nature a savoir. Et pour chu ke nus ne puet tout savoir, ja soit che ke cascune cose puist estre seüe, si covient il ke sacuns sache aucune cose, et che ke li uns ne set mie, ke li autres le sache; si ke tout est seü en tel maniere qu'il n'est seü de nullui a par lui, ains est seü de tous ensamble. Mais il est ensi ke toutes gens ne vivent mie ensamble, ains sont li un mort avant ke li autre naissent, et cil ki ont esté cha en ariere ont seü tel cose ke nus ki ore endroit vive ne le conquerroit de sons sens, ne ne seroit seü, s'on ne le savoit par les anchiiens.

RICHART DE FORNIVAL, *Bestiaire d'Amours* (M 370₁₋₉)

Bibliography

Diacritics are ignored for the purpose of alphabetisation and so is ʿ (ع). Thus, š and ʃ are not distinguished alphabetically from s, nor ʔ and ʔ from t, and so forth. To the same effect and for ease of reference a preposition (namely *de*, *von*, *van*) has been considered a part of the family name. Unlike in the text, a double family name is provided when available. An asterisk (*) signals a text that is mentioned in this dissertation but which I could not consult personally (= [n.v.] / *non vidi*).

Abbreviations of libraries

BAV	Biblioteca Apostolica Vaticana
BnF	Bibliothèque nationale de France
BNRM	Bibliothèque Nationale du Royaume du Maroc
BRME	Biblioteca del Real Monasterio del Escorial
BSB	Bayerische Staatsbibliothek
DKM	Dār al-kutub al-miṣriyyah
DKWQ	Dār al-kutub wal-waṭāʾiq al-qawmiyyah
KSUL	King Saud University Library
PUL	Princeton University Library
SBB	Staatsbibliothek Berlin
UCLA	University of California Arabic Medical Manuscript Collection
WMS	Wellcome Institute for the History of Medicine

Abbreviations of encyclopaedias and series

- BA* = *Biblioteca de al-Andalus*. Dirección y edición J. LIROLA and J. M. PUERTA. Almería: Fundación Ibn Tufayl de Estudios Árabes, 2004–2012.
- CMG* = *Corpus medicorum Graecorum*. Leipzig: B. G. Teubner.
- CML* = *Corpus medicorum Latinorum*. Leipzig: B. G. Teubner.
- EI* = *The Encyclopaedia of Islam. New edition*. Leiden: Brill, 1986–2004.
- EIr* = *Encyclopaedia Iranica* [accessed online at <https://www.iranicaonline.org>].
- RECA* = *Paulys Real-Encyclopädie der classischen Altertumswissenschaft. Neue Bearbeitung*. Stuttgart: J. B. Metzlersche Buchhandlung, 1893–1978.

Primary literature

Greek (including Hellenistic and Byzantine) corpus

Collectanea atque anonyma

BEKKER 1831 = *Aristoteles Opera*. 2 vols. Ed. Immanuel BEKKER. Berlin: Academia Regia Borussica, 1831.

CMG I,1 = *Hippocratis. Vol. I 1. Indices librorum · Iusiurandum · Lex · De arte · De medico · De decente habitu · Praeceptiones · De prisca medicina · De aere locis aquis · De alimento · De liquidorum usu · De flatibus* Ed. Johan Ludvig HEIBERG. Leipzig – Berlin: B. G. Teubner, 1927

CMG V 4,2 = *Galenī De sanitate tuenda. De alimentorum facultatibus. De bonis malisque sucis. De victu attenuante. De ptisana*. Ed. Konrad KOCH, Georg HELMREICH, Karl KALBFLEISCH, and Otto HARTLICH. Leipzig – Berlin: B. G. Teubner, 1923.

CMG V 9,1 = *Galenī in Hippocratis De natura hominis. In Hippocratis de victu acutoru. De diaeta Hippocratis in morbis acutis*. Ed. Johann MEWALDT, Georg HELMREICH, and Johann WESTENBERGER. Leipzig – Berlin: B. G. Teubner, 1914.

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DELATTE 1927 = *Anecdota Atheniensia. Tome I. Textes grecs inédits relatifs à l'histoire des religions*. Ed. Armand DELATTE. Bibliothèque de la Faculté de Philosophie et Lettres de l'Université de Liège, fascicule 36. Liège – Paris: Imp. H. Vaillant-Carmanne – Édouard Champion.

— 1939 = *Anecdota Atheniensia et alia. Tome II. Textes grecs inédits relatifs à l'histoire des sciences*. Ed. Armand DELATTE. Bibliothèque de la Faculté de Philosophie et Lettres de l'Université de Liège, fascicule 87. Liège – Paris: Faculté de Philosophie et Lettres – Librairie E. Droz.

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