ADVERBIAL ADJECTIVES AND NOMINAL SCALARITY

Melania Sánchez Masià

Supervised by

Dr. Violeta Demonte Barreto

Dr. M. Carme Picallo Soler

A doctoral dissertation submitted for the degree of
Doctor of Philosophy in Cognitive Science and Language

Universitat Autònoma de Barcelona
Facultat de Filosofia i Lletres
Departament de Filologia Catalana

February 2017

A mi abuela

mero[1] (¿del cat. «nero»? Epinephelus guaza) m. Pez perciforme de carne muy estimada, como lo demuestra el proverbio «de la mar el mero y de la tierra el carnero».

María Moliner, *Diccionario de uso del español*

Abstract

This dissertation investigates scalarity in the nominal domain through the study of a subset of prenominal adverbial adjectives in Spanish, adjectives of veracity (AVs; *verdadero* 'true', *auténtico* 'authentic') and adjectives of completeness (ACs; *completo* 'complete', *total* 'total', *absoluto* 'absolute'). Its aim is to contribute to the understanding of the values associated with prenominal position in Romance, the parallelism between adverbial and adjectival modification, and the manifestations of scalarity in nouns.

The analysis of AVs is used to explore conceptual gradability. It is shown that the relevant factor for AVs to combine with a noun is vagueness. I propose that AVs operate over the contextual parameters involved in the determination of the interpretation of the predicate. In particular, AVs state that the individual belongs in the denotation of the noun in all the relevant contexts. This has the effect of picking up a representative individual of the category, and accounts for the intensifier and metalinguistic readings of AVs. The factors that affect the ordering in the extension of the noun, especially typicality and subjectivity, and the grammatical consequences this has for the distribution of AVs are also addressed. Although the ordering is shown to have linguistic effects, it is argued not to be grammatically represented. That is, this kind of scalarity is conceptual, not lexical. Finally, the analysis is extended to the adverbs of veracity in their modification of adjectives and verbs.

The study of ACs serves to discuss grammatical gradability. Starting from the observation that adverbs of completeness are degree modifiers sensitive to scale

maximums, it is argued that the correlate adjectives have the same properties and should be analyzed as degree modifiers. The chapter consists of three case studies of nouns that can be modified by ACs. First, property concept nouns (*libertad* 'freedom') are shown to share the scale structure with their cognate adjectives. ACs only occur with those related to total adjectives. These facts are accounted for by adopting a view of property concept nouns as predicates of portions of substances and having the degree argument introduced externally. Second, aspectual inheritance in the nominalizations of incremental theme verbs (*destrucción* 'destruction') and degree achievements (*oscurecimiento* 'darkening') is tackled. I demonstrate that ACs are restricted to telic eventive nominalizations and behave as maximality modifiers. The analysis accounts for these degree uses by combining a constructionist approach to the syntax of nominalizations and a degree approach to aspect for their semantics. Third, ACs display a mixed behavior with respect to their maximality when combined with evaluative nouns (*idiota* 'idiot'). This is a consequence of the semantics of evaluative nouns, which are argued to denote extreme gradable properties and include an expressive component.

The results provide support for a richer representation of nouns in combination with a two-domain approach to adnominal adjectives. AVs and ACs and their correspondent adverbs are shown to be two morphological variants of the same intensifier and to be restrictive, as opposed to the non-restrictive readings prenominal qualitative adjectives receive in Romance. Regarding scalarity in the nominal domain, it can be concluded that many factors interact to produce scalar effects, but only a few of them constitute real manifestations of lexical gradability. On the one hand, typicality interacts with vagueness and subjectivity, but the ordering is not grammatically represented. On the other, only evaluative nouns are argued to be lexically gradable. In the other cases, degree arguments are introduced by specialized heads, either related to measurement or to aspect. This creates a continuum of nominals, from the most adjective-like to non-gradable, with property concept nouns and eventive nominalizations placed halfway between them.

Resum

Aquesta tesi investiga fenòmens d'escalaritat en l'àmbit nominal a través d'un subgrup d'adjectius adverbials prenominals en espanyol, els adjectius de veracitat (AV; *verdadero* 'vertader', *auténtico* 'autèntic') i els adjectius de completesa (AC; *completo* 'complet', *total* 'total', *absoluto* 'absolut'). Té com a propòsit contribuir a la caracterització de la posició prenominal en llengües romàniques, al paral·lelisme entre la modificació adverbial i adjectival, i a les manifestacions d'escalaritat en substantius.

Els AV s'utilitzen com a cas pràctic per tal d'abordar la gradabilitat conceptual. Es mostra que el criteri pel qual un AV es combina amb un substantiu és que aquest siga vague. Proposem que els AV operen sobre els paràmetres contextuals encarregats de la determinació de la interpretació dels predicats. En concret, la contribució dels AV és que l'individu és part de la denotació del nom en tots els contextos rellevants. Açò té l'efecte de seleccionar una entitat representativa de la categoria i explica les lectures d'intensificació i metalingüístiques d'aquests adjectius. Es discuteixen també els factors que afecten l'ordre en l'extensió del nom, especialment la tipicitat i la subjectivitat, i les conseqüències gramaticals que açò té per a la distribució dels AV. Encara que es mostra que l'ordre té efectes lingüístics, defensem que no té representació gramatical. És a dir, aquest tipus d'escalaritat és conceptual, però no lèxica. Per a acabar, l'anàlisi s'estén als adverbis de veracitat quan modifiquen adjectius i verbs.

A través de l'estudi dels AC explorem la gradabilitat gramatical. Partim de l'observació que els adverbis de completesa són sensibles als màxims en les escales

i argumentem que els adjectius corresponents tenen les mateixes propietats i han de ser analitzats com a modificadors de grau. El capítol està dividit en tres casos pràctics. En primer lloc, es mostra que els noms de qualitat (*libertad* 'llibertat') comparteixen l'estructura escalar amb els seus correlats adjectivals. Aquests fets s'expliquen mitjançant l'anàlisi d'aquests noms com a predicats de porcions de substàncies, els arguments de grau dels quals són introduïts de manera externa. En segon lloc, analitzem l'herència aspectual en les nominalitzacions de verbs de tema incremental (*destrucción* 'destrucció') i verbs deadjectivals (*oscurecimiento* 'enfosquiment'). Els AC estan limitades a les nominalitzacions eventives tèliques i es comporten com a modificadors de maximalitat. L'anàlisi proposada combina un acostament construccionista per a la sintaxi amb una perspectiva de grau de l'aspecte per a la semàntica. En tercer lloc, els AC mostren un comportament de maximalitat parcial amb noms avaluatius (*idiota* 'idiota'). Açò és una conseqüència de la semàntica d'aquests noms, per als quals proposem que denoten graus extrems de propietats i incorporen un component expressiu.

Els resultats recolzen una representació més rica de l'estructura interna dels substantius, en combinació amb una anàlisi de dos dominis dels adjectius atributius. Es demostra que els AV i els AC, juntament amb els seus corresponents adverbis, són dues variants morfològiques del mateix intensificador i que són restrictius. Això contrasta amb les interpretacions no restrictives dels altres adjectius prenominals romànics. Quant a l'escalaritat en l'àmbit nominal, concloem que diversos factors interactuen per a produir efectes escalars, però solament uns pocs constitueixen vertaderes manifestacions de gradabilitat lèxica. D'una banda, la tipicitat interactua amb la vaguetat i la subjectivitat, però aqueix ordre no està representat gramaticalment. Per una altra, solament els substantius avaluatius són lèxicament graduables. En la resta de casos, els arguments de grau s'introdueixen mitjançant nuclis funcionals relacionats amb mesura o aspecte. Açò crea un continu d'elements nominals, des dels més semblants als adjectius, passant pels noms de qualitat i les nominalitzacions eventives, fins als substantius no graduables.

Resumen

Esta tesis investiga fenómenos de escalaridad en el ámbito nominal a través de un subgrupo de adjetivos adverbiales prenominales en español, los adjetivos de veracidad (AV; *verdadero*, *auténtico*) y los adjetivos de completitud (AC; *completo*, *total*, *absoluto*). Tiene por propósito contribuir a la caracterización de la posición prenominal en lenguas romances, al paralelismo entre la modificación adverbial y adjetival, y las manifestaciones de escalaridad en sustantivos.

El estudio de los AV sirve para abordar la gradabilidad conceptual. Mostramos que el criterio para que un AV se combine con un sustantivo es que este sea vago. Proponemos que los AV operan sobre los parámetros contextuales encargados de la determinación de la interpretación de los predicados. En concreto, su contribución consiste en que el individuo es parte de la denotación del nombre en todos los contextos relevantes. Esto tiene el efecto de seleccionar a un individuo representativo de la categoría y da cuenta de las lecturas intensificadoras y metalingüísticas de los AV. Se discuten también los factores que afectan al orden en la extensión del nombre, especialmente la tipicidad y la subjetividad, y las consecuencias gramaticales que esto tiene para la distribución de los AV. Aunque se demuestra que el orden tiene efectos lingüísticos, defendemos que no tiene representación gramatical. Es decir, este tipo de escalaridad es conceptual, pero no léxica. Para acabar, el análisis se extiende a los adverbios de veracidad cuando modifican adjetivos y verbos.

A través del estudio de los AC, se explora la gradabilidad gramatical. Partimos de la observación de que los adverbios de completitud son sensibles a los máximos

en las escalas y argüimos que los adjetivos correspondientes tienen las mismas propiedades y deben ser analizados como modificadores de grado. El capítulo está dividido en tres casos prácticos. En primer lugar, se muestra que los nombres de cualidad (*libertad*) comparten la estructura escalar con sus correlatos adjetivales. Estos hechos se explican mediante el análisis de estos nombres como predicados de porciones de sustancias, cuyos argumentos de grado son introducidos de manera externa. En segundo lugar, se analiza la herencia aspectual en las nominalizaciones de verbos de tema incremental (*destrucción*) y verbos deadjetivales (*oscurecimiento*). Los AC están limitados a las nominalizaciones eventivas télicas y se comportan como modificadores de maximalidad. El análisis propuesto combina un acercamiento construccionista para la sintaxis con una perspectiva de grado del aspecto para la semántica. En tercer lugar, los AC muestran un comportamiento de maximalidad parcial con nombres evaluativos (*idiota*). Esto es una consecuencia de la semántica de esos nombres, para los que proponemos que denotan grados extremos de propiedades e incorporan un componente expresivo.

Los resultados apoyan una representación más rica de la estructura interna de los sustantivos, en combinación con un análisis de dos dominios de los adjetivos atributivos. Se demuestra que los AV y los AC, junto con sus correspondientes adverbios, son dos variantes morfológicas del mismo intensificador y que tienen lecturas restrictivas, lo que los diferencia de las interpretaciones no restrictivas de otros adjetivos prenominales romances. En cuanto a la escalaridad en el ámbito nominal, concluimos que varios factores interactúan para producir efectos escalares, pero solo unos pocos constituyen verdaderas manifestaciones de gradabilidad léxica. Por una parte, la tipicidad interactúa con la vaguedad y la subjetividad, pero ese orden no está representado gramaticalmente. Por otra, solo los sustantivos evaluativos son lexicamente graduables. En el resto de casos, los argumentos de grado se introducen mediante núcleos funcionales relacionados con medida o aspecto. Esto crea un continuo de elementos nominales, desde los más parecidos a los adjetivos, pasando por los nombres de cualidad y las nominalizaciones eventivas, hasta los no graduables.

Contents

List of Figures

List of Tables

List of Glossing Conventions

1	first person	M	masculine
2	second person	NEG	negation
3	third person	NMLZ	nominalizer
ACC	accusative	NPI	negative polarity item
AUG	augmentative	PEJ	pejorative
CL	clitic	PL	plural
COND	conditional	POSS	possessive
DAT	dative	PST	past
DET	determiner	REFL	reflexive
DIM	diminutive	SBJV	subjunctive
DOM	direct object marker	SE	clitic *se* in pronominal verbs
F	feminine	SG	singular
FUT	future	SUPL	superlative
GEN	genitive	TH	theme vowel
IMPRS	impersonal	VBZ	verbalizer
INF	infinitive		

Acknowledgments

Idle reader: Welcome. Whether you already know me and you are looking for your name or you are consuming this as a guilty pleasure (been there), I hope you enjoy these acknowledgments as much as I enjoyed writing them. Here are the deep words true acknowledgments must begin with:

Even accepting that a mere second can change everything, I believe people get truly tested in the long run. This dissertation has been one of my longest and difficult runs and I wish to express my gratitude to the people who has helped me throughout this process, in one way or another, for whom I'm sure it has felt like a very long journey as well.

I would like to thank my advisors first. I met Violeta Demonte as an undergrad, during an internship at her research group and I have admired her scientific commitment since then. Violeta generously offered me the possibility to join her team and write this dissertation a couple of years after. During this process she has been constantly supportive, and has given me as much guidance and help to find my path in linguistics as freedom to explore new ideas and methods, without letting me lose focus. Working with her has certainly shaped me as a researcher, and I feel indebted to her for all those reasons.

I would like to show my gratitude to Carme Picallo as well for her constant support and advice since she supervised my MA thesis. She has always respected my own decisions and ideas, even when they were drifting apart from syntax and entering the darkness of semantics. I admire her passion for linguistics and

During the last years, it was great to share my concerns about the environment with the Ecosfera group at SCI. My lindy hop classmates made Thursdays the most awaited day of the week during the tortuous last year and a half of writing. I didn't expect to enjoy improv so much, so thanks to my classmates for so much fun and a space to say *¡Sí, y además...!* the last few months. Finally, thanks to my coworkers at Google Spain (through Adecco) (Claudia, Elena LN, Elena O, Laura, Mar, Paula, Vicent, Víctor, and Héctor), who are becoming good friends, for all their support and flexibility, and for taking me to my new favorite bar in Madrid. Special thanks to the shydinos for being so fun, and also for waiting for tired Melania for breakfast every day.

My parents always believed in education and encouraged me to pursue my studies and give the best of myself, and I am grateful for that. This dissertation is dedicated to the memory of my grandmother María. She's the strongest and most generous person I've ever met and left me enough strength and inspiration for a lifetime.

Chapter 1

Introduction

1.1   Purpose and object of study

This dissertation investigates scalarity in the nominal domain through the study of a subset of prenominal adjectives in Spanish, adjectives of veracity (*verdadero* 'true', *auténtico* 'authentic') and adjectives of completeness (*completo* 'complete', *total* 'total', *absoluto* 'absolute'). It has the purpose of contributing to the understanding of the values associated with prenominal position in Romance, the parallelism between adverbial and adjectival modification, and revealing ways in which gradability is manifested in the nominal domain, as well as discussing the implications this has for the theoretical understanding of scalarity across categories and the conceptual structure of nouns.

Adjectives in Romance languages may alternate between a prenominal and a post-nominal position with a consequent change of meaning. Adjective placement in Spanish constitutes a particularly interesting case of correlation between position and interpretation, that is, of the interface between syntax and semantics. Adjectives of veracity and completeness belong to the class of adjectives that change

meaning with respect to their position. In particular, their use as intensional adjectives is mainly restricted to prenominal position (1a, 2a). In those cases, they are intensifiers of the property denoted by the noun. In postnominal position, they receive their literal interpretation and behave as qualitative adjectives (1b–2c) (see section 2.2).

(1) a. El   cambio climático es un auténtico problema.
         the change climatic is a   authentic problem

         'Climate change is a real problem.' (a serious or big one)

     b. El   cambio climático es un problema auténtico.
         the change climatic is a   problem   authentic

         'Climate change is a real problem.' (not a fake one)

(2) a. Juan es un completo idiota.
         Juan is a   complete idiot

     b. ?? Juan es un idiota completo.
             Juan is a   idiot   complete

     c. Maria tiene la   colección completa de *Mad Men* en DVD.
         Maria has   the collection complete of mad men in DVD

         'Maria has *Mad Men* complete DVD collection.'

From a syntax-semantics interface perspective, the data in (1–2) raise the question of what the relation between the reading of these adjectives in prenominal position and their postnominal versions is and what role the semantics of the modified noun play in their interpretation. Put differently, how much of the meaning of the adjectives under consideration is encoded in the lexicon and how much builds up in the syntax? Zooming out, the study of these adjectives casts light on the type of modification associated with prenominal position in Romance and the connection between order and interpretation.

Adjectives of veracity and completeness are adverbial adjectives. That is to say that there is a strong correlation between their modification and the modification performed by their correlate adverbs. The examples (3) and (4), respectively, appear to be equivalent.

(3) a. Paloma es una verdadera artista.
       Paloma is a   true   artist

    b. Paloma es verdaderamente artística.
       Paloma is truly   artistic

    c. Paloma es verdaderamente una artista.
       Paloma is truly   an   artist

(4) a. Juan es un completo idiota.
       Juan is a   complete idiot

    b. Juan es completamente idiota.
       Juan is completely   idiotic

Modifiers with adverbial and adjectival counterparts are an important source of information for cross-categorial phenomena and connections across syntactic categories and semantic types. By focusing in those two case studies, in this dissertation I address the question of whether adjectival modification replicates, in the nominal level, the type of modification of their adverbial counterparts at the clause or adjectival level. After showing that that is the case through a battery of tests, and since the correspondent adverbs are usually analyzed as degree modifiers, I exploit the parallelism between adjectives and adverbs of veracity and completeness in order to reveal manifestations of gradability in the nominal domain.

In the adjectival domain, predicates are gradable if the property they denote can hold of their argument to a greater or lesser extent (or degree). This is signaled by combination with degree modifiers (*very tall*) and occurrence in degree structures (*Natasha is taller than Sonia*), what suggests that degrees are arguments of the semantic composition and are syntactically represented. Although it has been studied mostly with respect to adjectives, its cross-categorial nature has also been acknowledged.

Gradability is not the only linguistic phenomena related to orderings. Vagueness is the property of predicates that have borderline cases and whose truth conditions vary across contexts. For example, whether someone is an artist depends on the situation (your improv amateur class vs. a representation at the Globe in London),

and for some people is difficult to say whether they are artists or not. This is only possible if individuals are ordered according to how good examples of an artist they are for the relevant context. Although it has linguistic manifestations, the presence of an ordering does not always correlate with a representation of degrees in the lexical structure of the nominal.

The adjectives under study are related to scalar phenomena in two ways. On the one hand, adjectives of veracity in prenominal position have intensifying (5) and metalinguistic uses (6). According to the former, the individual is an outstanding exemplar in the denotation of the noun, in the speaker's opinion; on the latter, adjectives of veracity are used to indicate that the individual clearly belongs in the category. This has a correspondence with the interpretation of the correlate adverbs in (3b) and (3c), respectively. These adjectives thus interact with orderings in the denotation of the noun, or typicality, subjectivity, and graded membership, or vagueness. This can be subsumed under the label of *conceptual gradability*.

(5) Paloma es una verdadera artista.
     Paloma is a   true   artist
     'Paloma is a true artist.'   INTENSIFYING

(6) No   son animales intermedios entre   reptiles y   aves, sino auténticas
     NEG are animals   intermediate between reptiles and birds but authentic
     aves.[1]
     birds.
     'They are not transitional animals between reptiles and birds, but true
     birds.'   METALINGUISTIC

On the other hand, adjectives of completeness convey degree readings in combination with some nouns. Just like their adverbial counterparts are modifiers sensitive to the scale structure of their argument, adjectives of completeness also appear to relate to scale maximums with property concept nouns (7a), which are

---

[1]http://statveritasblog.blogspot.com.es/2010/11/de-reptiles-aves.html [adapted]

related to gradable adjectives, eventive nominalizations (7b), which inherit the telicity of the original VP, and evaluative nouns (7c). In all these three cases, the modifier expresses that some maximum has been reached, either of a property or the development of an event. Therefore, adjectives of completeness interact with grammatical gradability in the nominal domain.

(7) a. La prensa tiene completa libertad.   PROPERTY CONCEPT NOUN
        the press   has   complete freedom

    b. la   completa destrucción de la   ciudad   EVENT NOMINALIZATION
        the complete destruction of the city

    c. Juan es un completo idiota.   EVALUATIVE NOUN
        Juan is a   complete idiot
        'Juan is a complete idiot.'

The study of this set of adverbial adjectives thus informs the ongoing debate regarding gradability beyond the adjectival domain. In particular, their similarities to degree modifiers raise the question of whether gradability is present in the nominal domain. If so, the next question is about its nature (whether it is conceptual or grammatical) and, from a theory-internal perspective, whether it must be lexically represented.

I limit the empirical coverage of this dissertation in several ways. I discuss two sets of adverbial adjectives, adjectives of veracity and completeness, and only refer to other members of the class for comparison. In order to perform a more in depth analysis of conceptual and grammatical gradability in the nominal domain, I exclude from consideration other adjectives that have been argued to belong to the same intensional class, such as exclusives (*mero* 'mere', *puro* 'pure'). This is justified by the pragmatic nature of the scalarity involved in their modification, as will be brought up in chapter 5. I also focus on the non-qualitative uses of the adjectives under discussion, which are the ones related to scalarity. Finally, although I restrict the data to Spanish as a case study for Romance, other Romance languages and English are mentioned for comparison.

The rest of this chapter is devoted to present the semantic and syntactic framework adopted to address the research questions presented above. Section 1.3 offers a summary of the dissertation.

1.2   Framework

This section states some basic theoretical assumptions that are part of the framework adopted in this dissertation. I will presuppose some familiarity with the system, so I do not give an exhaustive introduction to the conventions here. In addition, more assumptions and conventions are introduced throughout the following chapters, when needed.

I adopt formal semantics as a semantic framework in its version described, for instance, in Heim and Kratzer (1998). This semantics is truth-conditional, model-theoretic, and compositional. First, the system of interpretation is truth-conditional, as it assumes that the meaning of a sentence corresponds to the set of conditions under which it would be true. Consequently, the meaning of the parts of a sentence is defined based on their contribution to the truth conditions of the sentence. Second, the system is model-theoretic because it is considered that a sentence is true or false with respect to a particular model. A sentence may be true in some states of affairs and false in others. Third, it is compositional, that is, the meaning of a complex expression is determined by the meaning of its components and the way they are combined. This is known as the *principle of compositionality*.

The set of types $\mathcal{T}$ includes five basic types, namely $\langle e \rangle$ (individuals), $\langle t \rangle$ (truth values), $\langle s \rangle$ (worlds), $\langle v \rangle$ (events), and $\langle d \rangle$ (degrees), and an infinite set of complex types. Complex or functional types are defined recursively as follows. If two (basic or complex) types σ, τ belong to $\mathcal{T}$, then the complex type $\langle \sigma, \tau \rangle$ is also a type in $\mathcal{T}$. This system will be expanded with expressive types in section 4.5.

Based on these types, the model can be divided into the domains in (8). The existence of these domains is mostly uncontroversial, except for that of degrees. I come back to this briefly when degree semantics is introduced in the next chapter (section 2.4.1).

(8) **Domains in the model**

$D_e = \{x : x \text{ is an individual}\}$

$D_t = \{\text{False, True}\}$ (or represented as $\{0,1\}$)

$D_s = \{w : w \text{ is a world}\}$

$D_v = \{v : v \text{ is an event}\}$

$D_d = \{d : d \text{ is a degree}\}$

$D_{\langle \sigma, \tau \rangle} = \{f : f \text{ is a function from } D_\sigma \text{ to } D_\tau\}$

The function that maps LF to its model-theoretic interpretation is the interpretation function, notated $[\![\ ]\!]$. The set of rules of semantic interpretation that I assume are the following. First, the interpretation of lexical items comes from the lexicon (9). Pronouns and traces of movement are treated as variables and are interpreted via the assignment function g, which maps pronouns and traces' numerical indexes to individuals in the domain (10). As a consequence, the interpretation function is relative to an assignment function, $[\![\ ]\!]^g$. I discuss more parameters of the interpretation function in chapter 3. Second, the LF of complex expressions is interpreted through the rules in (11–14). The metalanguage for stating denotations combines predicate logic and English.

(9) **Terminal Node** (TN)

If σ is a terminal node, $[\![\sigma]\!]$ is specified in the lexicon

(10) **Traces and Pronouns** (TP)

If α_i is a pronoun or a trace, then $[\![\alpha]\!]^g = g(i)$

(11) **Non-branching Nodes** (NN)

If α is a non-branching node and β is its daughter, then $[\![\alpha]\!] = [\![\beta]\!]$

(12) **Functional Application** (FA)

   If α is a branching node, $\{\beta, \gamma\}$ is the set of α's daughters, and $[\![\beta]\!]$ is a function whose domain contains $[\![\gamma]\!]$, then $[\![\alpha]\!] = [\![\beta]\!]([\![\gamma]\!])$

(13) **Predicate Abstraction** (PA)

   If α is a branching node whose daughters are a binder index λi and β, then $[\![\alpha]\!]^g = \lambda x \in D.[\![\beta]\!]^{g[i \to x]}$

(14) **Predicate Modification** (PM)

   If α is a branching node, $\{\beta, \gamma\}$ is the set of α's daughters, and $[\![\beta]\!]$ and $[\![\gamma]\!]$ are both of type $\langle e, t \rangle$, then $[\![\alpha]\!] = \lambda x : x \in D_e.[\![\beta]\!](x) \wedge [\![\gamma]\!](x)$

One more rule is necessary for the neo-Davidsonian analysis of verbal denotations I assume. Davidson (1967) argued for introducing an event argument in the analysis of verbs. According to the neo-Davidsonian view, the relationship between events and their arguments is mediated by thematic roles (Carlson, 1984; Parsons, 1990; Schein, 1993, a.o.). Kratzer (1996) proposes that the Agent role is introduced by Voice and the rule of Event Identification (15).

(15) **Event Identification** (EI)

   If α is a constituent with daughters β, γ, such that $[\![\beta]\!]$ is of type $\langle v, t \rangle$ and $[\![\gamma]\!]$ is of type $\langle e, \langle v, t \rangle \rangle$, then $[\![\alpha]\!] = \lambda x \lambda e.[\![\beta]\!](e) \wedge [\![\gamma]\!](x)(e)$.

Finally, I adopt the following notation conventions for variable names. Variables x, y, ... range over elements of D_e; e, e', ... range over elements of D_v; d, d', ... range over elements of D_d; σ, σ', ... range over elements of $D_e \cup D_v$; c, c', ... are used for contexts; w, w', ... range over possible worlds; G is used for gradable predicates of type $\langle d, \langle e, t \rangle \rangle$; R stands for relations; and f, g, ... range over other functional types.

Semantics operates over a syntactic representation, or Logical Form (LF) generated by syntax independently. This input to the semantic component is an unambiguous hierarchical representation of a sentence.

For the syntax, I assume the general framework of generative syntax. In particular, that of Principles and Parameters in its current instantiation as Minimalism (Chomsky, 1995). The structure of the nominal domain is taken to be closely parallel to that of the sentential domain, as in Abney (1987); a.m.o. That is, in the same way in which the Verb Phrase (VP) is embedded within a Complementizer Phrase (CP) and an Inflection Phrase (IP), the NP is dominated by several functional heads and their maximal projections (16) (for an overview, see Alexiadou et al., 2007; Picallo, 2012).

(16) $[_{DP}$ D $[_{NumP}$ Num $[_{FP_1}$ ... $[_{FP_2}$ ... $[_{NP}$ ...$]$ $]$ $]$ $]$ $]$

The highest projection is the functional head Determiner (D) and its maximal projection (DP), which bears similarities to CP. In particular, both projections are in charge of the referential and discourse-oriented properties of their complements. The functional projections between NP and DP are responsible for inflection and include, at least, a NumberP, responsible for number features that can enable argumental properties, and probably a ClassP or GenderP, the locus of noun classifiers. Adjectives are phrasal and merge in the specifier of functional projections above NP, although depending on their type of modification, they are generated in different structural positions, as discussed in section 2.2.2. In gradable adjectives, APs are the complement of a Degree Phrase (DegP) (see section 2.4.1.1).

The lexical level of the NP is taken to be headed by a category-neutral root and a series of hierarchically ordered functional categories. This syntactic approach to word formation assumes that, it is functional elements, rather than lexical items themselves, what determines the syntax of the construction. This constructionist approach becomes especially relevant in the analysis of eventive nominalizations in chapter 4. As such, the contrast between types of nominalizations lies on a systematic structural difference (Picallo, 1991; Halle and Marantz, 1993; Marantz, 1997; Harley and Noyer, 1998; Van Hout and Roeper, 1998; Alexiadou, 2001b;

Borer, 2003, 2005a; a.o.; for alternative lexicalist approaches, see Chomsky, 1970; Halle, 1973; Aronoff, 1976; Lieber, 1980; Hoekstra, 1986; Grimshaw, 1990; a.o.).

1.3   Overview of the dissertation

This dissertation is divided in two main chapters (chapter 3 and chapter 4), which discuss in turn two cases of scalarity in the nominal domain through the analysis of two classes of adverbial adjectives. Before that, chapter 4 provides an overview of the issues that will play a role in the discussion regarding the syntax and semantics of adjectives, in general, and adverbial adjectives, in particular. It also introduces the notion of scalarity and its manifestations in the adjectival and the nominal domain.

Adjectives of veracity (*verdadero* 'true', *auténtico* 'authentic') are discussed in chapter 3 as a case study for conceptual gradability in the semantics of nouns. It is first shown that the relevant factor for adjectives of veracity to combine with a noun is that the noun is vague. This requires that the individuals in its denotation are ordered along some parameter. The discussion shows that intensifier and metalinguistic interpretations of these adjectives, restricted to prenominal position, and literal readings in the presence of a definite determiner, can be accounted for if they are analyzed as vagueness quantifiers. Drawing upon Barker (2002); McNabb (2013); Beltrama and Bochnak (2015), I propose that adjectives of veracity operate over the contextual parameters involved in the determination of the interpretation of the predicate they combine with. In particular, they assert that the individual belongs in the denotation of the noun in all the relevant contexts. The chapter also discusses the factors that affect the ordering in the extension of the noun, especially typicality and subjectivity, and the grammatical consequences this has for the distribution of the phrase composed by an adjectives such as *true* and a noun. At the end of the chapter, the analysis is extended to the adverbial counterparts of the adjectives under discussion in their modification of adjectives and verbs.

Chapter 4 addresses adjectives of completeness (*completo* 'complete', *total* 'total', *absoluto* 'absolute') in order to explore grammatical gradability in the nominal domain. Starting from the observation that adverbs of completeness are degree modifiers sensitive to scale maximums, the discussion is centered in showing that the corresponding adjectives have the same properties and should be analyzed as degree modifiers when combine with certain nouns. The chapter consists of three case studies. First, section 4.3 deals with property concept nouns such as *libertad* 'freedom' and shows that they share the scale structure with their cognate adjectives. Adjectives of completeness only occur with those related to total adjectives. These facts are accounted for by adopting a view of property concept nouns as predicates of portions of substances (Francez and Koontz-Garboden, 2015) and having the degree argument introduced via a functional head. Second, section 4.4 explores aspectual inheritance in the nominalizations of incremental theme verbs and degree achievements. It demonstrates that adjectives of completeness are restricted to telic eventive nominalizations and behave as maximality modifiers. The analysis accounts for these degree uses by combining a constructionist approach to the syntax of nominalizations (Harley and Noyer, 1998; Van Hout and Roeper, 1998; Alexiadou, 2001b; Borer, 2003) and a degree approach to aspect for their semantics (Hay et al., 1999; Kennedy and Levin, 2008; Kennedy, 2012b). And third, section 4.5 focuses on evaluative nouns such as *idiot*. In this case, adjectives of completeness show a mixed behavior with respect to their maximality. I show that this is a consequence of the semantics of evaluative nouns, which I argue denote extreme gradable properties, following Morzycki's (2012a) analysis of extreme adjectives, and include an expressive component. In this sense, they are mixed expressives (Potts, 2005; McCready, 2010; Gutzmann, 2011). This also explains their occurrence in structures such as the *N of an N* construction.

Finally, chapter 5 summarizes the findings of this dissertation and discusses the implications of the results. It then offers suggestions for lines of further research.

Chapter 2

Prenominal position, adverbial adjectives, and scalarity in the nominal domain

2.1 Introduction

In this chapter I lay out the basic aspects of the syntax and semantics of adjectives and nouns that will be used for the analysis of adjectives of veracity and completeness in the following chapters. Three topics crosscut the discussion of those two classes of adjectives, namely, adjectival position and interpretation in Spanish and other Romance languages, the parallelism between adverbial and adjectival modification, and the presence of scalar phenomena in the nominal domain. Regarding the former, the adjectives that are the focus of this dissertation are mostly

restricted to prenominal position and belong to a class of adverbial adjectives that has not received much attention in the literature. Section 2.2 reviews three typologies of adjectives and the correlation between their classes and position in Spanish and discusses general proposals for adjectival position. Section 2.3 is devoted to the similarities between the modification performed by adjectives and adverbs and discussing formal approaches to adverbial adjectives. Finally, section 2.4 deals with scalarity in the nominal domain. In order to introduce this topic, it provides an overview of the theories on gradable adjectives and the theoretical consequences of applying them to nouns.

2.2   Prenominal position in Romance

Adjectives in Romance languages can appear both to the left and to the right of the noun. The examples in (17) show several different classes of adjectives and their position possibilities in Spanish.

(17) a. una habitación azul
         a   blue   room
      b. una novela divertida
         a   novel amusing
      c. una enfermedad pulmonar
         a   disease   pulmonary
      d. un problema frecuente
         a problem frequent
      e. un hombre pobre
         a man   poor

      f. una divertida novela
         a   amusing novel
      g. un presunto asesino
         a alleged   murderer
      h. un posible candidato
         a possible candidate
      i. un verdadero artista
         a true   artist
      j. un pobre hombre
         a poor   man

In the Spanish grammatical tradition, as well as in that of other Romance languages, prenominal position has been associated with the expression of subjective, affective, and vague qualities of the noun (Hanssen, 1910; Lenz, 1920; Bally, 1932; Gili Gaya, 1943; Fernández Ramírez, 1951; Sobejano, 1956; Real Academia Española, 1973; Alcina and Blecua, 1975; Lapesa, 1975; Rojo, 1975;

Real Academia Española and ASALE, 2009; a.o.). In particular, many grammarians have characterized prenominal adjectives as highlighting an implicit property of the referent of the noun, rather than adding a property to it or helping to individualize it (Bello, 1847; Lenz, 1920; Seco, 1954; Alcina and Blecua, 1975; Rojo, 1975; Hernández Alonso, 1984; Alarcos Llorach, 1994; a.o.). By contrast, postnominal adjectives are described in these grammars as expressing objective properties of the referent, and contributing to restricting the meaning of the noun and making it more precise. From Bello (1847), prenominal and postnominal position have been depicted as some version of being, respectively, *explicative* and *specifying*. This roughly corresponds to being non-restrictive and restrictive.

The values associated with each position are not absolute, and several phenomena may factor in to determine the final position of an adjective, including stylistic and rhetoric factors (Bello, 1847; Gili Gaya, 1943; Sobejano, 1956; Simón, 1979; Demonte, 1999a; Real Academia Española and ASALE, 2009), rhythmic factors (influenced, for instance, by the length of the adjective) (Bally, 1932; Gili Gaya, 1943; Fernández Ramírez, 1951; Real Academia Española, 1973; Lapesa, 1975; Simón, 1979; Picallo, 2002), syntactic factors such as the presence of complements or adverbial modifiers (Fernández Ramírez, 1951; Lapesa, 1975; Demonte, 1999a; Picallo, 2002; Real Academia Española and ASALE, 2009), the definiteness of the determiner (Gili Gaya, 1943; Demonte, 1999a; Picallo, 2002), the nature of the noun (e.g., whether it denotes properties of individuals or events) (Fernández Ramírez, 1951; Demonte, 1999a; Picallo, 2002), and, finally, the type of adjective (Lenz, 1920; Lapesa, 1975; Demonte, 1982, 1999a; Picallo, 2002; Real Academia Española and ASALE, 2009).

In this dissertation I primarily focus on the latter and I also address the relevance of the type of noun and the definiteness of the determiner in the interpretation of the adjectives under discussion and their consequent placement in the DP. In the following section, I review different typologies of adjectives and the behavior of the classes of adjectives with respect to their position relative to the noun. The influence of the determiner in the different readings is also discussed below. The bearing of the type of noun is introduced in sections 2.3 and 2.4.

2.2.1   Typologies of adjectives and position in the NP

In the philological tradition and in formal approaches, adjectives have been classified in a variety of ways, depending on the phenomena intended to be accounted for. This section discusses three typologies of adjectives and the distribution of their classes with respect to adjectival position. In particular, I focus on notional typologies (2.2.1.1), entailment-based typologies (2.2.1.2), and predicative and non-predicative adjectives (2.2.1.3). Sequences of adjectives are briefly addressed in section 2.2.1.4.

2.2.1.1   Notional typologies

In descriptive grammars and the philological tradition, adjectives are categorized according to their descriptive content (e.g., Huddleston and Pullum, 2002; Demonte, 1999a; Picallo, 2002). In these typologies, adjectives are divided into *qualitative adjectives* (*tall*, *funny*), which denote qualities or properties of an entity, *relational adjectives* (*musical*, *American*), which are denominal and relate two entities, and *adverbial adjectives* (*possible*, *complete*, *frequent*), which include the remaining adjectives. The latter is a heterogeneous class of adjectives that have in common, roughly, that they may be paraphrased with an adverb.

Qualitative adjectives denote properties of some entity. Most adjectives in this class are gradable and can thus be modified by degree expressions (18a). They also have antonyms, that is, they stand in polar oppositions with other adjectives of the same class (18b).

(18) a. un edificio muy alto; una novela bastante divertida
         a building very tall a   novel pretty   amusing
      b. alto / bajo; grande / pequeño; divertido / aburrido
         tall   short big   small   amusing   boring

Qualitative adjectives can alternate between the two positions with a change in meaning. In general, prenominal adjectives are interpreted as non-restrictive,

and postnominal ones, as restrictive. For example, in (19), when the adjective is in prenominal position (19a), the people who were late is the subset of Laura's friends who are pretentious. By contrast, the sentence with the adjective in postnominal position (19b) is only compatible with a situation where all Laura's relevant friends are pretentious.

(19) a. Los amigos pretenciosos de Laura llegaron tarde.   RESTRICTIVE
the friends pretentious of Laura arrived late

'Laura's pretentious friends were late.' (the subset of friends that are pretentious)

    b. Los pretenciosos amigos de Laura llegaron tarde.   NON-RESTRICTIVE
the pretentious friends of Laura arrived late

'Laura's pretentious friends were late.' (all her friends are pretentious)

(examples from Demonte, 2008)

The hypothesis that, in Romance, prenominal modifiers receive non-restrictive interpretations, while postnominal modifiers receive a restrictive interpretation is known as the *complementarity hypothesis* (Alexiadou, 2001a; Bouchard, 2002; Demonte, 2008; Katz, 2008; Martin, 2014; cf. Cinque, 2010). Although the authors differ in their definition of restrictiveness, the general intuition behind this notion can be captured in set-theoretical terms: given a noun, the result of composing its denotation with that of a restrictive modifier is a proper subset of the denotation of the noun. The effect of combining the noun's denotation with a non-restrictive modifier is the noun's denotation. The formal definitions are in (20), where s is a possible situation, M stands for a modifier and H, for a head.

(20) a. M restrictively modifies H in s iff $[\![\lambda x[M_s(x) \wedge H_s(x)]]\!]_{\mathcal{M},g} \subset [\![H_s]\!]_{\mathcal{M},g}$
or $[\![\lambda x[M_s(x) \wedge H_s(x)]]\!]_{\mathcal{M},g} = \emptyset$

    b. M non-restrictively modifies H in s iff $[\![\lambda x[M_s(x) \wedge H_s(x)]]\!]_{\mathcal{M},g} = [\![H_s]\!]_{\mathcal{M},g}$

(Piñón, 2005b, 4)

These set-theoretical definitions have been refined in order account for all the contrasts caused by position alternations (Umbach, 2006; Katz, 2008; Morzycki, 2008b; Martin, 2014; Leffel, 2014). For instance, Martin (2014) argues for intensional definitions so as to capture the differences between prenominal and postnominal evaluative adjectives in Romance. In addition, non-restrictive modifiers have been recently analyzed as contributing to the expressive dimension of meaning (Katz, 2008; Morzycki, 2008b; see also Potts, 2005; cf. Luján, 1980).

Among the class of qualitative adjectives, evaluative adjectives, especially extreme degree adjectives such as *horrible* 'horrible' or *maravilloso* 'wonderful', are generally considered to always be non-restrictive (e.g., Milner, 1978), and thus restricted to prenominal position. However, they may appear postnominally (Hernanz, 2001; Knittel, 2005; Demonte, 2008; Thuilier, 2012; Martin, 2014), with apparently the same value as they have to the left of the noun (21) (cf. Martin, 2014).

(21) a. Regarde, Pierre a   choisi cet affreux bouquet.   French
        look   Pierre has chosen this horrible bouquet
     b. Regarde, Pierre a   choisi ce bouquet affreux.
        look   Pierre has chosen this bouquet horrible
        'Look, Pierre has chosen this horrible bouquet.'

                                              (examples adapted from Martin, 2014)

The set-theoretical definitions of restrictiveness only apply to definite DPs (Demonte, 1999a; Picallo, 2002; Katz, 2008; a.o.). In indefinite DPs, prenominal adjectives force the specific interpretation of the determiner (Bosque, 1993, 2001; Picallo, 1994). DPs with postnominal adjectives (22a) allow both a specific [S] and an existential or non-specific [NS] reading of the indefinite, whereby there is a particular famous actor the girls have met or each of the girls has met a different famous actor, respectively. Only the former interpretation is possible when the adjective appears prenominally (22b).

(22) a. Las cinco muchachas habían conocido a   un actor famoso.   s/ns
        the five girls   have   met   DOM a actor famous

     b. Las cinco muchachas habían conocido a   un famoso actor.   s/*ns
        the five girls   have   met   DOM a famous actor

     'The five girls had met a famous actor.'

(examples from Bosque, 2001)

Generic sentences and existential constructions under the domain of modals block the specific reading of the indefinite. As a consequence, an adjective in prenominal position is ruled out (23–24).

(23) a. Una película interesante siempre se   ve   con agrado.
        a   movie   interesting always IMPRS watch with pleasure

     b. ?? Una interesante película siempre se   ve   con agrado.
           a   interesting movie   always IMPRS watch with pleasure

        'An interesting movie is always watched with pleasure.'

(examples from Bosque, 2001)

(24) a. Hi   ha d'haver un polític   honest en el Senat.   Catalan
        there has to.have a   politician honest at the Senate

     b. ?? Hi   ha d'haver un honest polític   en el Senat.
           there has to.have a   honest politician at the Senate

        'There must be an honest politician at the Senate.'

(examples from Picallo, 1994)

Finally, there is a small set of adjective whose meaning changes depending on their position with respect to the noun (Bally, 1932; Gili Gaya, 1943; Sobejano, 1956; Real Academia Española, 1973; Alcina and Blecua, 1975; Lapesa, 1975; Hernández Alonso, 1984; Alarcos Llorach, 1994; Demonte, 1999a; Real Academia Española and ASALE, 2009). For instance, (25a) refers to a former church, whereas (25c) is a church that is old; (25b) denotes something that is nothing else than a business, whereas (25d) is a business that is simple. Other examples include *cierto* 'certain', *pobre* 'poor', *puro* 'pure', and *verdadero* 'true'.

The postnominal adjectives are qualitative (and intersective, see section 2.2.1.2), while the postnominal ones are non-intersective and mostly belong to the class of adverbial or intensional adjective, to which we turn next.

(25) a. una antigua iglesia   c. una iglesia antigua
          a   old   church   a   church old

      b. un simple negocio   d. un negocio simple
          a   simple business   a   business simple

Adverbial adjectives (*posible* 'possible', *periódico* 'periodical') are rarely mentioned in Romance descriptive grammars and have not been treated as an independent class until recently (Demonte, 1999a; Picallo, 2002; Real Academia Española and ASALE, 2009). There has also been a tendency to group them, especially intensional ones, with evaluative adjectives (Navas Ruiz, 1962; Rojo, 1975; Demonte, 1982, 2008), and assume that intensional adjectives have undergone a greater process of subjectification that may account for their different properties.

The class of adverbial adjectives is heterogeneous. It can be divided into two subclasses, intensional and event-related adjectives. Intensional adjectives include modal adjectives, but also adjectives such as *auténtico* 'authentic' or *único* 'unique'. Frequency adjectives constitute the biggest subclass of event-related adverbial adjectives, but other examples are *próximo* 'next' or the circumstantial readings of *largo* 'long' (*un viaje largo* 'a long trip').

Adjectives of veracity and completeness, which constitute the focus of this dissertation, belong to the intensional class and contribute to evaluate how well the property expressed by the noun applies to the referent. They have been referred to as *restrictive adjectives* (Quirk et al., 1985), *degree and quantifying adjectives* (Huddleston and Pullum, 2002), or *markers of intension or reference* (Demonte, 1999a).

Regarding their position in the NP, in general, adjectives of the intensional class cannot appear in predicative position (unless they modify propositions), but

frequency adjectives can. As for gradability, some, but not all, adverbial adjectives are gradable (27).

(26) a. * El asesino   es presunto.
         the murderer is alleged

   b. # La artista es verdadero.
        the artist   is true

   c. Los problemas son frecuentes.
      the problems   are frequent

(27) a. * un muy presunto asesino   c. un poco   posible candidato
         a   very alleged   murderer   a   slightly possible candidate

   b. * un bastante completo idiota   d. los muy frecuentes problemas
        a   pretty   complete idiot   the very frequent   problems

Adverbial adjectives are not usually subject to the complementarity hypothesis and the different subclasses have a heterogeneous behavior with respect to their position in the DP. To begin with, some modal adjectives may alternate between prenominal and postnominal position (28). When they occur to the left of the noun, modal adjectives receive a direct modification reading. By contrast, in postnominal position, they have an implicit relative reading. For instance, (28a) means that she helped all the people who were possible visitors, while (28b) can be paraphrased as 'she helped all the visitors that it was possible for her to help' (see Bolinger, 1967; Larson, 2000; Demonte, 2008; Cinque, 2010).

(28) a. Atendió a todos los posibles visitantes.   DIRECT MODIFICATION
      helped to all   the possible visitors
      'She helped all the possible visitors.'

   b. Atendió a todos los visitantes posibles.   IMPLICIT RELATIVE
      helped to all   the visitors   possible
      'She helped all the visitors possible.'

(examples from Demonte, 2008)

But not all modal adjectives alternate. Adjectives such as *supuesto* 'supposed' and other intensional adjectives are obligatorily prenominal (29).

(29) a. la {supuesta llegada / *llegada supuesta} de las tropas
          the supposed arrival   arrival supposed of the troops

    b. un {mero ayudante de campo / *ayudante de campo mero}
        a   mere aide   de camp   aide   de camp mere

Finally, frequency and other adjective related to events have a preference for postnominal position but some of them may appear prenominally without a change in interpretation (30).

(30) a. los {frecuentes problemas / problemas frecuentes}
          the frequent   problems   problems frequent

    b. las {??semanales cartas / cartas semanales}
        the   weekly   letters   letters weekly

Prenominal adverbial adjectives do not receive a non-restrictive reading (Bouchard, 2002). Rather, the interpretation is restrictive (31). For instance, in (31a), the people that were late are the true artists, but the example does not entail that all the artists at the party were considered true artists. The same applies to (31b), which is compatible with a situation where there are both murderers and alleged murderers present.

(31) a. Los verdaderos artistas llegaron tarde.
          the true   artists   arrived late
          'The true artists were late.' (only the subset that are true artists)

    b. Los presuntos asesinos   salieron por   la puerta de atrás.
        the alleged   murderers went.out through the door   of back
        'The alleged murderers came out through the back door.' (only the subset that are alleged murderers)

In indefinite DPs, intensional adjectives in prenominal position do not force the specific reading of the indefinite and are thus acceptable in generic sentences

and existential sentences embedded under modal verbs, and accept subjunctive relative clauses (32) (cf. (23–24)).

(32) a. Un auténtico thriller siempre se   ve   con agrado.
a   authentic thriller always   IMPRS watch with pleasure
'A real thriller is always watched with pleasure.'

b. Tiene que haber un completo genio en el   Senado.
has   to   have a   complete genius in the Senate
'There must be a complete genius at the Senate.'

c. Estan buscando   un posible candidato que hable   ruso.
are   looking.for a   possible candidate that speaks.SBJV Russian
'They're looking for a possible candidate who speaks Russian.'

Finally, some adjectives are banned from prenominal position. That is the case of relational adjectives, also known as *pseudoadjectives*, such as *musical* 'musical' or *pulmonar* 'pulmonary' (33) (Bally, 1932; Bosque and Picallo, 1996; Demonte, 1999a; Picallo, 2002; McNally and Boleda, 2004; Fábregas, 2007; a.o.). These adjectives are systematically postnominal (unless they are reinterpreted as qualitative) (33b) and must be strictly adjacent to the noun (33c). Only some of them may appear in predicative position (33d–e). Regarding their entailments, they appear to be subsective (34) (cf. McNally and Boleda, 2004).

(33) a. una comedia musical americana divertida
a   comedy musical American amusing
'an amusing American musical comedy'

b. * una musical americana comedia
a   musical American comedy

c. * una comedia divertida musical americana
a   comedy amusing musical American

d. ? La comedia es musical.
the comedy is musical

    e. * La producción es sedera.
        the production is silky

       'The production is silky.'

<div align="right">(examples based on Bosque and Picallo, 1996)</div>

(34) *Cantando bajo   la   lluvia* es una comedia musical americana.
     Singing   under the rain is a   comedy musical American

    '*Singin' in the Rain* is an American musical comedy.'

   a. ⊨ *Cantando bajo   la   lluvia* es una comedia
       Singing   under the rain is a   comedy

   b. ⊭ *Cantando bajo   la   lluvia* es musical
       Singing   under the rain   is musical

To sum up, according to notional typologies, adjectives are divided into qualitative, relational, and adverbial adjectives. Not all the classes of adjectives may occur both in prenominal and postnominal position in Romance. In fact, only qualitative adjectives can alternate between prenominal and postnominal position with a clear change of interpretation (non-restrictive/restrictive). Relational adjectives are always postnominal. As for adverbial adjectives, some of them show a difference between position and interpretation (modals), others are restricted to prenominal position (the remaining intensional adjectives) and event-related adjectives have a preference for postnominal position but may appear prenominally without a change in their interpretation. Typologies based on entailments are discussed next.

2.2.1.2 Typologies based on entailments

Adjectives can be divided into semantic classes based on the entailments they license (Montague, 1970; Parsons, 1972; Kamp, 1975; a.o.). The standard classification consists of three categories: intersective modifiers, and non-intersective modifiers, which can be subsective or non-subsective.

First, an adjective A is intersective if, for every noun N, if x is AN, then x is A and x is N. That is, the set of individuals denoted by the modified noun is the

intersection between the denotations of the noun and the adjective (35). Second, an adjective A is subsective if, for every noun N, if x is AN, then x is N, but x is not A (36). In other words, the set of individuals denoted by the modified noun is a subset of the denotation of the noun.

(35) a. $\llbracket AN \rrbracket = \llbracket A \rrbracket \cap \llbracket N \rrbracket$ (36) a. $\llbracket AN \rrbracket = \llbracket A \rrbracket \subseteq \llbracket N \rrbracket$

   b. Pierre is a Russian count.   b. Pierre is a bad landowner.

     ⊨ Pierre is Russian.   ⊭ Pierre is bad.

     ⊨ Pierre is a count.   ⊨ Pierre is a landowner.

Finally, an adjective can also be non-subsective. In this case, for any noun N, if x is AN, then x is not A and it cannot be inferred that x is N (37). That is, the set of individuals denoted by the modified expression is not a subset in the denotation of the noun. This class also includes privative adjectives, which entail that x is not N (37). Note that this class operates on the noun's intension.

(37) a. $\llbracket AN \rrbracket = \llbracket A \rrbracket \nsubseteq \llbracket N \rrbracket$

   b. Pierre is a possible murderer.   c. Pierre is a former mason.

     ⊭ #Pierre is possible.   ⊭ *Pierre is former.

     ⊭ Pierre is a murderer.   ⊨ Pierre is not a mason.

In general, intersective adjectives appear postnominally in Romance (38f–i). However, the correlation between entailments and position is not clear cut. Some adjectives may appear postnominally with a subsective interpretation. For instance, (38g) is ambiguous between an intersective reading (Pierre is a landowner and he is bad) and a non-intersective one (He is bad for a landowner). Yet, these adjectives can be reanalyzed as intersective once the comparison class has been taken into account (Wheeler, 1972; Kamp, 1975; Siegel, 1976; Higginbotham, 1985; DeGraff and Mandelbaum, 1993; Kamp and Partee, 1995; Larson, 1999; Landman, 2001; Kennedy, 2007). In saying that Pierre is a bad landowner, or a

big man, the speaker sets the standard for *bad* or *big* according to the individuals being compared. So what it is really meant is that Pierre is bad *for* a landowner. But not all subsective adjectives can be reclassified as intersective. For example, (38c) cannot be interpreted as Pierre being true for a friend. These real non-intersective adjectives have a strong preference for prenominal position (38c–e), and are not possible in postnominal position when no intersective interpretation is available (38j) (cf. (38h, 38i)). In addition, non-restrictive interpretations of intersective adjectives occur prenominally (see (19b)).

(38) a. * Pierre es un ruso   conde.
          Pierre is a   Russian count

      b. Pierre es un mal terrateniente.
         Pierre is a   bad landowner
         'Pierre is a bad landowner.'

      c. Pierre es un verdadero amigo.
         Pierre is a   true   friend
         'Pierre is a true friend.'

      d. Pierre es un antiguo masón.
         Pierre is a   old   mason
         'Pierre is a former mason.'

      e. P. es un presunto asesino.
         P. is a   alleged   murderer

      f. Pierre es un conde ruso.
         Pierre is a   count Russian

      g. P. es un terrateniente malo.
         P. is a   landowner   bad
         'P. is a landowner and he is bad.'

      h. Pierre es un amigo verdadero.
         Pierre is a   friend true
         'Pierre is a real friend.' (not imaginary)

      i. Pierre es un masón antiguo.
         Pierre is a   mason old
         'Pierre is a mason and he is old.'

      j. * P. es un asesino   presunto.
            P. is a   murderer alleged

To sum up, adjectives can be classified based on their entailment. In Spanish and other Romance languages, prenominal position tends to be associated with non-intersective interpretations, whereas postnominal adjectives are usually intersective.

2.2.1.3   Predicative and non-predicative adjectives

Adjectives can also be divided according to whether they are predicated of the set of individuals denoted by the noun or not. In general, intersective adjectives

are predicative and non-intersective adjectives are non-predicative. Predicativity is syntactically reflected in the possibility to appear in postcopular constructions (39).[1]

(39) a. El   conde es ruso.
        the room is blue

    b. El   terrateniente es malo.
        the landowner   is bad

    c. * El   asesino   es presunto.
           the murderer is alleged

    d. # El   amigo es verdadero.
          the artist is true
          'The friend is real.' (not imaginary)

In Spanish and other Romance languages, predicative adjectives normally occur in postnominal position and non-predicative ones are situated prenominally. For instance, *ruso* 'Russian' is predicative (39a) and it can only appear in postnominal position (38a, 38f). By contrast, *presunto* 'alleged' is non-predicative (39c) and it is not possible in postnominal position (38j). This does not apply in the case of non-restrictive interpretations of predicative adjectives, such as *divertida* 'amusing' (40a) or *pretenciosos* 'pretentious' (40b) (see (17b, 19b)). Adjectives with an intersective and a non-intersective interpretation can generally only have the former in predicative position, such as in the case of *malo* 'bad' (39b) or *verdadero* 'true' (39d).

(40) a. La novela es divertida.
        the novel   is amusing
    b. Los amigos de Laura son pretenciosos.
        the friends of Laura are pretentious

To sum up, predicative adjectives tend to appear postnominally in Spanish, and non-predicative adjectives are usually prenominal. Before concluding, we briefly look at sequences of adjectives in the NP.

---

[1]The term *predicative* is used in two senses. First, it refers to the use of adjectives in copular constructions, in contrast to *adnominal* adjectives. Second, *predicative* is also used to refer to adnominal adjectives that can appear in a predicative context, such as in postcopular position.

2.2.1.4   Sequences of adjectives

Across languages, multiple adjectival modifiers usually observe ordering restrictions in the NP. The ordering is usually stated in terms of hierarchically organized semantic classes of adjectives (Sproat and Shin, 1988; Cinque, 1994; Scott, 2002; Laenzlinger, 2005). For instance, size adjective, color adjectives and provenance adjectives appear in this order with respect to the noun (*a large red Chinese vase*, **a Chinese red large vase*). Setting aside fine-grained distinctions between semantic classes, the main generalization is that adjectives denoting objective properties of the noun are usually closer to it than subjective and evaluative adjectives (Vendler, 1968; Sproat and Shin, 1988). In other words, adjectives that target a subcomponent of the noun, such as adverbial adjectives, are placed further away from it.

When two prenominal adjectives occur in Spanish, adjectives of the intensional class are not adjacent to the noun (41). Other adverbial adjectives are not so restricted and may appear in different positions, with the adjective to the left taking scope over the one following it (42) (for Romance, see Cinque, 1994; Demonte, 1999a; Bouchard, 2002; Picallo, 2002; Knittel, 2005).

(41) a. una {verdadera gran orquesta / ??gran verdadera orquesta}
      a   true   big band   big true   band

    b. una {posible buena candidata / ?buena posible candidata}
      a   possible good candidate   good   possible candidate

    c. la   {presumible ansiosa reacción / *ansiosa presumible reacción}
      the presumed anxious reaction   anxious presumed reaction

(42) a. sus {frecuentes tímidas críticas   / tímidas frecuentes críticas}
      her frequent shy   criticism shy   frequent   criticism

    b. una {excelente futura diplomática / futura excelente diplomática}
      a   excellent future diplomat   future excellent diplomat

The relative position with respect of the noun of different classes of adjectives connects with two domain approaches to the syntax of adjectives (Larson, 1998, 1999; Bouchard, 2002; Knittel, 2005), which are reviewed in the next section.

2.2.1.5   Summary

This section has discussed the two positions adjectives can appear in Romance and their distribution across classifications of adjectives. According to notional typologies, prenominal adjectives belong to the qualitative and the adverbial class. Not all prenominal adjectives from these classes may be postnominal. In general, qualitative and some modal adjectives alternate with a change of meaning, event-related adjectives alternate without change of meaning, and the remaining adverbial adjectives are restricted to prenominal position. A summary of this can be seen in table 2.1.

		PRENOM	POSTNOM	
QUALITATIVE		NR	R	[inters/non-inters]
RELATIONAL		*	R	[subsective]
	MODAL	DM	IR	[non-intersective]
ADVERBIAL	OTHER INTENSIONAL	R	*	[non-intersective]
	EVENT-RELATED	(R)	R	[intersective]

TABLE 2.1: Notional typology of adjectives and position

Taking entailments under consideration, qualitative adjectives may be intersective or subsective, relational adjectives are subsective, and adverbial adjectives can be divided into intensionals, which are non-intersective, and event-related, which are mostly intersective. In general, prenominal position is associated with non-intersective interpretations (either subsective or otherwise), whereas intersective adjectives are restricted to postnominal position, and some subsective may appear also in that position. Table 2.2 provides a summary of entailment-based typologies. Finally, predicative adjectives are mainly postnominal, while non-predicative adjectives mostly appear in prenominal position table 2.3.

In view of these classifications, prenominal position in Spanish can be associated with non-intersective adjectives and the non-restrictive readings of intersective adjective. Non-intersective and intersective adjectives correlate with reference and referent modifiers, respectively. This distinction, due to Bolinger (1967), is

	PRENOMINAL	POSTNOMINAL	
INTERSECTIVE	ok	ok	[predicative]
SUBSECTIVE	ok	ok	[predicative/non-pred]
NON-SUBSECTIVE	ok	*	[non-predicative]

TABLE 2.2: Entailment-based typology of adjectives and position

	PRENOMINAL	POSTNOMINAL
PREDICATIVE	(ok)	ok
NON-PREDICATIVE	ok	*

TABLE 2.3: Predicativity typology of adjectives and position

based on whether the adjective is intensional or extensional. Reference modifiers are non-predicative and modify the noun's intension, while referent modifiers are extensional and predicative. In the next section, formal approaches to adjectival position in Romance are discussed.

2.2.2   Formal approaches to adjectival position

As we have seen above, adjectives can be predicative or attributive. Most adjectives have the two options, but not all of them. There are attributive adjectives that cannot be predicative (non-predicative adjectives) and adjectives that are only predicative. From a formal perspective, the main question is whether predicative and attributive uses are derived from the same source, or from one another, or, alternatively, whether there are two different sources. In its semantic correlate, the question is whether all adjectives have the same semantic type. In this section I review the theoretical approaches to this issue within semantics and syntax.

From the semantic perspective, one of the most basic issues regarding adjectives is how to account for the fact that most of them may function both as predicates and as modifiers (for an overview, see Morzycki, 2015, §2.3; McNally, 2016).

One possibility is to derive one of the functions from the other. In other words, to assume that both attributive and predicative adjectives are of the same type. Early homogeneous approaches "generalized to the worst case" and took all adjectives to be predicate modifiers (type $\langle\langle e, \langle s, t \rangle\rangle, \langle e, \langle s, t \rangle\rangle\rangle$, or its extensional version $\langle\langle e, t \rangle, \langle e, t \rangle\rangle$) in order to maintain a fixed correspondence between semantic type and syntactic category (Lewis, 1970; Montague, 1970; Wheeler, 1972). In this approach, adjectives in prenominal position involve an unpronounced noun.

It is also possible to treat all adjectives as first-order properties (type $\langle e, t \rangle$) and assume that there are more modes of composition than functional application. In this approach, predicative adjectives are functions from entities to truth values and combine via functional application. In attributive position, adjectives have the same type as the noun they modify and thus functional application cannot apply. They are combined by a non-saturating operation that composes two properties of individuals, such as predicate modification (Heim and Kratzer, 1998) or modify (Chung and Ladusaw, 2006).

However, the most extended approach treats adjectives as ambiguous between a property of individuals denotation ($\langle e, t \rangle$) and a property of properties denotation ($\langle\langle e, t \rangle, \langle e, t \rangle\rangle$) (Siegel, 1976). According to this approach, there are two distinct classes of adjectives with distinct semantic properties. The first class are predicates, functions from entities to truth values, and are extensional. Their combination with the noun results in predicate conjunction (and thus an intersective interpretation). The second class is constituted by attributive adjectives. They are modifiers, that is, functions from properties to properties. They combine with the noun as function to argument. Therefore, they are intensional and that is the source of the non-intersective readings.

This theory is known as *doublet theory*. Although some adjectives are exclusively predicates or exclusively modifiers, most adjectives belong to both classes. That is, they are ambiguous. This explains why most adjectives can be attributive and predicative and why others are restricted to one position. It also explains ambiguities between intersective and non-intersective readings of the same adjective.

The syntactic counterpart of this issue focuses on whether attributive and predicative adjectives are derived from one another or it is necessary to posit two independent sources for them (for an overview, see, e.g., Alexiadou et al., 2007, §III.1; Demonte, 2011). Early derivational approaches (Smith, 1964; Chomsky, 1965; Lakoff, 1971; Kayne, 1994) encountered problems explaining adnominal adjectives that cannot be predicative (*former*, *mere*), exclusively predicative adjectives (*asleep*, *ready*), and the fact that some languages lack either attributive or predicative adjectives entirely (Baker, 2003; Dixon and Aikhenvald, 2004).

Nowadays it is mostly assumed that adnominal adjectives are derived from two sources, a predicative and a non-predicative one (Bolinger, 1967; Sproat and Shin, 1988; Lamarche, 1991; Sadler and Arnold, 1994; Demonte, 1999b, 2000, 2008; Alexiadou, 2001a; Bouchard, 2002; Cinque, 2010).[2] The predicative source involves more structure and typically consists of a reduced relative clause, whereas the non-predicative source implies simpler structures. These two sources correspond to Sproat and Shin's (1988) indirect and direct modification, respectively, and to Bolinger's (1967) referent and reference modification. The two structures would be responsible for the two different interpretations. The two-source analysis is illustrated by Cinque (2010) next.

2.2.2.1   Cinque (2010)

Starting from a systematic interpretative difference between prenominal and postnominal adjectives in Romance, Cinque (2010) proposes that adnominal adjectives have two structural sources, namely an indirect modification (IM) and a direct modification (DM) source, adopting Sproat and Shin's (1988) terminology.

Cinque (2010) argues that DM adjectives enter the structure as phrasal specifiers of dedicated functional layers in the extended projection of N. Since they are

---

[2]Previous accounts that postulated two sources for adnominal adjectives are Bernstein (1993); DeGraff and Mandelbaum (1993); Zamparelli (1996); a.o., who argued that reference modifiers (prenominal in Romance) are heads that take the noun as their complement, while referent modifiers (postnominal in Romance) are phrases that adjoin to the NP.

generated below the head in charge of assigning (part of the) referential value to N, dP, they are able to modify the reference of the nominal. By contrast, IM adjectives are situated above this projection and they can only modify the noun's referent. This order would be general for Romance and Germanic languages (43a), and the different surface orders are derived via phrasal movement (in particular, snowballing) (cf. Crisma, 1993; Cinque, 1994, where N-movement was claimed to be head movement, and Cinque, 2010, §1 for problems with that proposal). The surface order for Romance is shown in (43b). Note that, according to this structure, postnominal adjectives in Romance may be ambiguous between the two sources.

(43) a. Det > IM > DM > N   GENERAL ORDER
      b. DM > N > DM > IM   SURFACE ORDER FOR ROMANCE

Each of the two sources for adnominal adjectives is associated with a cluster of interpretative properties (table 2.4). These values necessarily go together: if an adjective is non-restrictive, it is also individual-level, has an absolute reading, and so on.

Adjectives (more specifically, APs) may thus be merged as specifiers of dedicated functional projections in the extended NP (DM) or as reduced relative clauses (IM). Cinque (2010) argues that many adjectives can access the two sources, but some are restricted to one of them, such as *former* or *mere* (DM only). Therefore, whether an adjective enters the DP as a DM or IM determines the semantics of adjectival modification. In other words, structural location defines type of modification, but, at the same time, there exist two types of adjectives (direct modifiers and RRCs).

To sum up, the core idea of two-source analyses is that postnominal adjectives are related to a clausal or predicative structure, whereas prenominal adjectives are modifiers of the sense of the noun. This structural difference is responsible for the interpretation of postnominal adjectives as intersective and predicative, and of

DIRECT MODIFICATION	INDIRECT MODIFICATION (RRC)
individual level	stage- (or individual-) level
(non-)restrictive	restrictive
modal *possible*	implicit relative clause *possible*
non-intersective	intersective
absolute	relative (to a comparison class)
absolute (with superlatives)	comparative (with superlatives)
specificity inducing	(non-)specificity inducing
evaluative *unknown*	epistemic *unknown*
NP-dependent *different*	discourse anaphoric *different*
generic	deictic
possibly idiomatic	only literal interpretation
closer to N	further away from N
rigidly ordered	not rigidly ordered
not possible in predicative position	possible in predicative position

TABLE 2.4: Properties of direct and indirect modification (Cinque, 2010)

prenominal adjectives as non-intersective (intensional) and attributive. However, this sort of approach has some shortcomings with respect to their treatment of attributive adjectives. In the next section I discuss some problems for analyzing all attributive adjectives alike and show how at least some adverbial adjectives are better analyzed as predicates.

2.3   Parallelism between adjectival and adverbial modification

There is a correspondence between the type of modification of adjectives and that of adverbs. In particular, it is assumed in the grammatical tradition that adjectives modify nouns and adverbs modify verbs, adjectives, and clauses. For instance, the sentences in the examples in (44–46) show the same type of modification, performed by an adjective and by an adverb, respectively.

(44) a. Los frecuentes viajes de Andréi.
          the frequent   trips   of Andréi

          'Andréi's frequent trips'

      b. Andréi viajaba   frecuentemente.
          Andréi traveled frequently

(45) a. la   completa recuperación de la   paciente
          the complete recovery   of the patient

          'the patient's complete recovery.'

      b. La   paciente se recuperó completamente.
          the patient   recovered   completely

          'The patient completely recovered.'

(46) a. Dmitri es el   presunto asesino   de su padre.
          Dmitri is the alleged   murderer of his father

      b. Presuntamente, Dmitri es el   asesino   de su padre.
          Allegedly   Dmitri is the murderer of his father

Although not all adjectives have adverbial counterparts, some non-intersective adjectives may function like adverbs. For instance, in (47), both the adjective and the adverb are predicated of the dancing event (see (51) below).

(47) a. Lucía es una elegante bailarina.
          Lucía is an   elegant   dancer

      b. Lucía baila   elegantemente.
          Lucía dances elegantly

Since adjectives and adverbs occur in mutually exclusive environments (44–46) (cf. Payne et al., 2010), some authors have argued that adjectives and adverbs are inflectional variants of a single major category (Moignet, 1963; Lyons, 1966; Bowers, 1975; Emonds, 1976; Baker, 2003) or that there is a derivational relation between them (Jackendoff, 1972; Zagona, 1990; Zwicky, 1995). This is based, for example, on the fact that the notional ordering of adjectives and adverbs is similar (Valois, 1991; Baker, 2003), that they are modified by the same degree

expressions (Emonds, 1976), or that the distinction between restrictive and non-restrictive interpretation also applies to adverbs and it is correlated with position (see Peterson, 1997; Shaer, 2000; Morzycki, 2008b; Martin, 2014).

The parallelism between adjectival and adverbial modification also relies in the parallelism between DP and CP, that is, the hypothesis that functional categories in the noun phrase are direct equivalents of the functional categories in the clause (Abney, 1987; Szabolcsi, 1987; Giorgi and Longobardi, 1991; Picallo, 1991; Valois, 1991; Cardinaletti and Giusti, 1992; Bernstein, 1993; Cinque, 1994; a.m.o.; see section 1.2 above). In the structure of NP assumed here, modifiers are situated in the specifier of the functional projections above N. Likewise, adverbs are licensed in the specifier of dedicated functional projections (Valois, 1991; Alexiadou, 1997; Cinque, 1999).

Apart from the facts mentioned above, there is no uniform analysis for the correlation between adjectival and adverbial modification shown in the examples in (44–47). The intuition is that adjectives replicate, in the nominal domain, the type of modification of their corresponding adverbs. By pursuing these parallels, adverbial adjectives help to reveal temporal, modal, and other adverbial-like type of modification in the domain of nouns. In the next section, a few formal approaches to adverbial adjectives are discussed. This section reviews intersective and intensional approaches to adverbial adjectives.

2.3.1   Formal approaches to adverbial adjectives

As discussed in section 2.2.2, many general approaches to adjectives consider adverbial adjectives to be predicate modifiers. This sets them apart from intersective adjectives and accounts for their entailments. More specifically, in this analysis, the adjectival property is not directly ascribed to the individual, so it is not entailed that the set of individuals in the denotation of the noun has the adjectival property. However, this view is problematic for a number of reasons (McConnell-Ginet, 1982; Larson, 1998; McNally and Boleda, 2004; Partee, 2010).

First, grouping together all non-intersective adjectives (subsective and non-subsective) assumes that subsective adjectives and intensional adjectives are similar, but they display very different properties. Although neither of them entails that the individual possesses the adjectival property, intensional adjectives have different entailments and behave differently with respect to gradability. In addition, comparison classes are only relevant for the interpretation of some subsective adjectives.[3] The fact that relativity to a comparison class is not equivalent to non-intersectivity is manifested in the compatibility of non-intersective readings with the presence of a PP denoting the comparison class (48) (Larson, 1999).

(48) Gwen is a beautiful dancer for a 4-year old.   (Larson, 1999)

Second, in an ambiguous example such as (49) (see also (47)), the non-intersective reading involves Olga not being a beautiful individual, but the subsective semantics for these adjectives neither includes any reference to the event of dancing nor relates this reading to the adverbial counterpart *Olga dances beautifully*.

(49) Olga is a beautiful dancer.
    a. Olga is beautiful and a dancer.
    b. Olga is beautiful as a dancer.

And third, some adverbial adjectives are predicative after all, what contradicts their analysis as predicate modifiers (50).

(50) a. Sus viajes eran frecuentes.
       his trips were frequent
    b. La pistola es falsa.
       the gun is fake

---

[3] Relational adjectives are subsective according to their entailments, but are not interpreted with respect to a comparison class, see Bosque and Picallo (1996); McNally and Boleda (2004), and discussion around examples (34) and (38b) above.

Therefore, the analysis of adverbial adjectives as second-order properties is problematic. The research in adverbial adjectives has shown that the modified expression depends not only on the semantics of the adjective, but also on the semantics of the noun. In particular, some nouns provide more than one variable for the adjective to target, such as an event variable in the cases above. Thus, a richer representation of the lexical semantics of the noun is needed to account for the modification of adverbial adjectives. (Pustejovsky, 1995; Larson, 1998; Demonte, 2000, 2008; Bouchard, 2002; a.o.; see also McNally, 2006). In the next section I review an alternative analysis for event-related adjectives as predicates of events. Intensional adjectives are addressed in section 2.3.1.2.

2.3.1.1   Event-related adjectives

Some adjectives, such as *beautiful* in (49), may characterize the individual not by directly predicating a property but by characterizing some event related to it (Bolinger, 1967; Siegel, 1976; Larson, 1998; see also Pustejovsky, 1995; Winter and Zwarts, 2012). Assuming a Davidsonian approach, Larson (1998) argues that, in this case, and parallel to the modification of verbs by manner adverbs, manner adjectives are predicates of events and target the event variable made available by the noun. In the first case (52a), the adjective is predicated of the individual variable of the noun. Once this is saturated by the individual, it results in an intersective reading of the adjective, whereby Olga is beautiful and a dancer (49a). Alternatively, when the adjective is predicated of the event variable of the noun (52b), it is the dancing what is said to be beautiful, resulting in an apparent subsective reading *Olga is beautiful as a dancer* (49b).

(51) Olga is a beautiful dancer.

(52) a. $[\![beautiful\ dancer]\!] = \lambda x \lambda e [\mathbf{dancer}(x, e) \wedge \mathbf{beautiful}(\mathbf{x})]$

     b. $[\![beautiful\ dancer]\!] = \lambda x \lambda e [\mathbf{dancer}(x, e) \wedge \mathbf{beautiful}(e)]$

Larson (1998) thus proposes that both intersective and non-intersective adjectives denote properties and the source of the distinction is based on the semantics of the noun and the position of the adjective in the DP. In particular, the DP contains a silent event quantifier, a generic quantifier (Chierchia, 1995) that divides it into two domains (53). In this sense, it is a two-source approach (see section 2.2.2). While predicates of events are situated below the generic quantifier (and therefore closer to the noun), predicates of individuals are outside its scope (for details, see Larson, 1998; Larson and Cho, 2003; Larson and Marušič, 2004).

(53) [$_{DP}$ $\exists e$ [AP$_{indirect}$ [Γe [$_{NP}$ AP$_{direct}$ N]] AP$_{indirect}$]]

(Larson and Marušič, 2004)

Introducing event arguments in nouns is necessary for accounting for another type of adverbial adjectives related to events, such as frequency adjectives (54) (Stump, 1981; Larson, 1998; Zimmermann, 2003; Gehrke and McNally, 2015). However, not all nouns can be argued to include an event argument in their lexical representation. Besides participant nouns (*bailarina* 'dancer', *donante* 'donor') and event-denoting nouns (*visita* 'visit', *destrucción* 'destruction'), for other nouns the event related to them has to be coerced. For example, in (54c), the noun *cartas* 'letters' does not seem to involve an event, but it can be recovered from the stereotypical activity that comprises the object (writing, in this case) (see, e.g., Gehrke and McNally, 2015).

(54) a. una donante frecuente
          a   donor   frequent
          'a frequent donor'

      b. sus raras visitas
          her rare visits

      c. sus cartas semanales
          her letters weekly
          'her weekly letters.'

Larson (1998) suggests that other apparently non-intersective adjectives can be analyzed in a similar fashion. For instance, McNally and Boleda (2004) extend the analysis to relational adjectives and argue that they denote properties of

kinds and are thus actually intersective. Other non-intersective adjectives may target a degree variable in the semantics of the noun (Larson, 1998). In this line, Morzycki (2009) analyzes intensional adjectives such as *true* and *utter* as degree morphemes. This is the approach I assume for adjectives of completeness in this dissertation.

2.3.1.2   Intensional adjectives

In the same way that not all adverbs are predicates of events, not all adverbial adjectives can be given event semantics. Intensional adjectives, more specifically modal adjectives, are more properly analyzed as quantifying over possible worlds. A modal adjective such as *possible* 'possible' in its direct modification use can be given the semantics in (55), where $f_c(w)$ returns the set of worlds epistemically accessible, that is, compatible with what it is known. Note that, according to this semantics, the noun is selected by the adjective.

(55) $[\![possible]\!]^{c,w} = \lambda P_{\langle e,\langle s,t\rangle\rangle}\lambda x\lambda w.\exists w' \in f_c(w)\,[P(x)(w')]$

Other intensional adjectives have received less attention in the literature. Adjectives such as *cierto* 'certain' or *relativo* 'relative' have been analyzed as marking imprecision (Eguren and Sánchez, 2007); exclusive adjectives such as *simple*, *mere* or *sole* have been recently given a unified analysis with exclusive adverbs in Coppock and Beaver (2014). As mentioned above, the adjectives that constitute the focus of this dissertation have been analyzed as modifiers of the property assignment (Bouchard, 2002; Demonte, 2008; Constantinescu, 2011; a.o.) and degree modifiers (Morzycki, 2009).

2.3.2   Conclusion

This section has addressed the similarities between adverbial and adjectival modification and has discussed how adverbial adjectives can be analyzed in

light of this parallelism. Regarding the former, both adverbs and adjectives are modifiers, but there is no uniform semantic or syntactic behavior that covers the whole set of uses (for an overview on modification, see Castroviejo and Gehrke, 2014; Morzycki, 2015; McNally, 2016).

Technically, a modifier is an expression that combines with an unsaturated expression to form another unsaturated expression of the same type (McNally, 2016). However, from the syntactic point of view, treating adjectives and adverbs as adjuncts does not directly account for their types of modification (e.g., Cinque, 1999, 2010). From the semantic perspective, treating all adjectives as predicates, while simplifying the variety of types, complicates the lexical semantics of the noun and increases the number of modes of composition available. However, although adding arguments to the structure of the noun accounts for most adjectives, including event-related and some intensional adverbial adjectives, that does not seem to be the appropriate approach to modal and other intensional adjectives. Therefore, the best way to approach the modification performed by adverbial adjectives remains an unresolved issue both in syntax and semantics.

In the revision of predicate approaches to adverbial adjectives, the question of how many arguments are needed in the internal structure of the noun has arisen. Some of the proposals include an event argument (e.g., Larson, 1998; Demonte, 2008), a time argument (Bouchard, 2002), a characteristic function (Bouchard, 2002; Demonte, 2008), a kind argument (Krifka et al., 1995; McNally and Boleda, 2004), and a degree argument (Morzycki, 2009). This leads to the question of how rich the lexical representation of nouns should be, which of those arguments are syntactically represented, and how much is filled in by context, and the kinds of composition rules that are necessary (for discussion, see McNally, 2006). In the next section, I introduce scalarity.

2.4   Scalarity in the nominal domain

Gradability can be found across categories. Although adjectives are the prototypical gradable predicates and most of the literature has focused on them, verbs and nouns can also denote properties that may hold of an individual to different extents (Sapir, 1944; Bolinger, 1972; Doetjes, 1997; Matushansky, 2002; Sassoon, 2013c; a.o.). Before proceeding, let me clarify the terminology I use in this dissertation. The terms *scalarity* and *scalar* are used as general terms to refer to expressions that involve some sort of ordering, for instance by having their domain ordered, such as nouns showing typicality effects, or by giving rise to scalar implicatures, such as quantifiers like *most* and *all*. *Gradability*, *gradable* and *degree* are reserved for manifestations of scalarity that are lexically encoded. In this case, the expressions denote properties that hold of entities to a higher or lower degree. Gradable adjectives are an example of this. The terms are also used for elements that operate on these expressions with the mentioned interpretation, such as degree modifiers like *very*.

There are several diagnostics for gradability. Degree words are specialized modifiers that provide information about the degree to which a property holds of its argument (McNally, 2016). Cross-linguistically, degree expressions differ with respect to their possibility of modifying different categories (see Doetjes, 2008). For instance, in English, *too* only combines directly with adjectives but, in Spanish, its equivalent may modify verbs and nouns as well (56).

(56)	a.	demasiado grande	too big	ADJECTIVE
	b.	apreciar demasiado	to appreciate too much	GRADABLE VERB
	c.	bailar demasiado	to dance too much	EVENTIVE VERB
	d.	demasiada sopa	too much soup	MASS NOUN
	e.	demasiados libros	too many books	COUNT NOUN

(based on Doetjes, 2008)

Although Spanish *demasiado* modifies nouns, the readings are different from the intensification resulting from their modification of adjectives and gradable verbs. *Too much soup* does not mean that this particular soup has the property of being a soup to a high degree. Rather it is an amount reading. The same happens with *books* and a verb like *dance*.

The question here is whether, in the same way that there are gradable verbs, there are gradable nouns; that is, nouns that describe properties that may be possessed to different degrees. A test for determining gradable verbs is combination with degree adverb *enormemente* 'enormously', which exclusively modifies the degree of intensity of a property (57) (Doetjes, 1997; see also Bosque and Masullo, 1998). Likewise, some nouns have degree readings when modified by *enormous* (58).

(57) a. John appreciated the movie enormously.

  b. * Anne goes enormously to the movies.

(examples from Doetjes, 1997)

(58) John is an enormous idiot.

In this section I present gradability in the adjectival domain and discuss two general approaches to gradable adjectives, degree-based and vagueness theories. I then introduce manifestations of scalarity in the domain of nouns.

2.4.1   Gradability in the adjectival domain

Gradability has mainly been studied in the domain of adjectives, and has often been considered a prototypical property of this class of words. A gradable adjective denotes a property that the subject can bear to a higher or lesser extent. For instance, Pierre may be tall to different degrees (59a). This is manifested in the combination with degree expressions (59b–c) and the occurrence in degree constructions such as the comparative (59d).

(59) a. Pierre is a tall count.

   b. Pierre is six feet tall.

   c. Pierre is a very tall count.

   d. Pierre is taller than Andréi.

But not all adjectives are gradable. Some of them denote non-gradable properties. For instance, *Russian* is either true or false of an individual. This is reflected in the fact that it does not occur in the contexts in (59b–d) (60b–c). Note, however, that non-gradable adjectives can be coerced into a scalar interpretation. For instance, in (61), Pierre is said to have the stereotypical properties associated with being Russian.

(60) a. Pierre is a Russian count.

   b. * Pierre is a very Russian count.

   c. * Pierre is more Russian than Andréi.

(61) Pierre is so Russian!

There are two main approaches to gradable adjectives depending on whether they introduce degree arguments in the semantics of the adjective or they take adjectives to be vague predicates with an ordering in their domain. In the next two sections, degree-based approaches and vagueness approaches are outlined.

2.4.1.1   Degree-based approaches to gradability
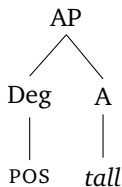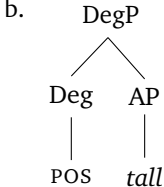
In degree-based approaches to gradability, gradable adjectives relate their arguments to abstract representations of measure, or degrees (Bartsch and Vennemann, 1973; Seuren, 1973; Cresswell, 1977; von Stechow, 1984; Heim, 1985, 2000; Bierwisch, 1989; Kennedy, 1997). A set of degrees totally ordered with respect to some dimension constitutes a scale. Degrees are thus considered part of the ontology and can be understood as either points on a scale (von Stechow, 1984;

Heim, 1985) or as intervals (Seuren, 1973; Kennedy, 1997; Schwarzchild and Wilkinson, 2002).

A degree-based lexical semantics of gradable adjective can be implemented in several ways. One option is to analyze gradable adjectives as functions from individuals to degrees (type $\langle e, d \rangle$) (Bartsch and Vennemann, 1973; Kennedy, 1997, 2007; Bale, 2008; a.o.). A second tradition has analyzed them as relations between individuals and degrees (type $\langle d, \langle e, t \rangle \rangle$) (Cresswell, 1977; von Stechow, 1984; Heim, 1985, 2000; Bhatt and Pancheva, 2004; for the differences between the two, see Kennedy, 1997; Heim, 2000; Bhatt and Pancheva, 2004; Neeleman et al., 2004). According to the first option, an adjective like *tall* is a measure function that applies to an entity x and returns the degree d to which x is tall (62a). In the second analysis, *tall* is a gradable property of individuals that only contributes the measure function (62b).

(62) a. $[\![tall]\!] = \lambda x.\textbf{tall}(x)$

  b. $[\![tall]\!] = \lambda d \lambda x.\textbf{tall}(d)(x)$

A degree semantics for gradable adjectives entails a particular syntax. In particular, a Degree Phrase, a functional structure that hosts the degree elements is assumed. Two main possibilities can be found in the literature. According to the one view, DegP is in the specifier position of the AP. In this case, the comparative and any other dependent clauses are complements to Deg° (63a) (Bresnan, 1973; Heim, 2000; Bhatt and Pancheva, 2004). On the other view, the degree head takes AP as its complement. Comparative clauses are adjuncts to Deg° (63b) (Abney, 1987; Larson, 1988; Corver, 1990; Kennedy, 1997).

(63) a.

```
        AP
       /  \
     Deg    A
      |     |
     POS   tall
```

b.

```
       DegP
      /   \
    Deg    AP
     |     |
    POS   tall
```

In the view in (62b), gradable adjectives start as relations between individuals and degrees and need to be turned into predicates in the derivation in order to be predicated of an individual. The degree argument can be bound by measure phrases (64b), which can be simply taken to denote degrees (64a). In addition, degree morphology is also able to close off the degree argument. Degree morphemes denote functions from relations between degrees and individuals to properties of individuals and differ in the restriction **R** they place on the value of the degree argument of the adjective G (65a) (Kennedy and McNally, 2005). Examples of degree morphemes are the comparative (65b) and modifiers such as *very* (65c).

(64)   a. $[\![\textit{six feet}]\!] = \textbf{6-feet}$

      b. $[\![\textit{six feet tall}]\!] = \lambda x.\textbf{tall}(\textbf{six-feet})(x)$

(65)   a. $[\![\text{Deg}]\!] = \lambda G \lambda x. \exists d[\textbf{R}(d) \wedge G(d)(x)]$

      b. $[\![\textit{-er/more than } d_c]\!] = \lambda G \lambda x. \exists d[d \succ d_c \wedge G(d)(x)]$

      c. $[\![\textit{very}]\!]^c = \lambda G \lambda x. \exists d[\textbf{stnd}(d)(G)(\lambda y.[\![\textit{pos}(G)(y)]\!]^c) \wedge G(d)(x)]$

<div align="right">(Kennedy and McNally, 2005, 367-370)</div>

In the absence of degree morphology, degree analyses posit a phonological null morpheme POS or an equivalent type shift in order to convert degree relations into the right semantic type (66b). POS supplies the contextual standard for the predicate (calculated by the function **stnd**), that is, the cut-off point that separates the positive and the negative extension (66a). Once the degree argument is saturated, *x is tall* is true if, and only if, the projection of x onto the scale associated with the adjective is above the standard for the adjective.

(66)   a. $[\![\text{POS}]\!] = \lambda G_{\langle d, \langle e,t \rangle \rangle} \lambda x. \exists d[d \succ \textbf{stnd}(G) \wedge G(d)(x)]$

      b. $[\![\text{POS } \textit{tall}]\!] = \lambda x. \exists d[d \succ \textbf{stnd}([\![\textit{tall}]\!]) \wedge [\![\textit{tall}]\!](d)(x)] =$

         $= \lambda x. \exists d[d \succ \textbf{stnd}([\![\textit{tall}]\!]) \wedge [\lambda d' \lambda y.\textbf{tall}(y) = d'](d)(x)] =$

         $= \lambda x. \exists d[d \succ \textbf{stnd}([\![\textit{tall}]\!]) \wedge \textbf{tall}(x) = d]$

In the degree approach, vagueness of adjectives (the fact that there is no clear point, or degree, on the height scale at which John goes from not being tall to being tall) is incorporated into the POS morpheme, either provided by the comparison class argument (which is context dependent) or by the standard calculation function itself.

2.4.1.2   Vagueness approaches to gradability

In vagueness approaches (Fine, 1975; Kamp, 1975; Klein, 1980; Larson, 1988; van Rooij, 2008; Doetjes et al., 2011; Burnett, 2012), also referred to as *supervaluation* or *delineation* theories, adjectives denote properties of individuals. Gradable adjectives are vague predicates and, as such, denote partial functions. Consequently, there are individuals in a context that may lack a truth value. In addition to this, gradable adjectives differ from non-gradable ones in that their domain is partially ordered with respect to some dimensional parameter.

Gradable adjectives divide the domain into the positive extension of the predicate (those individuals for which the function yields true), its negative extension (those for which the function returns false), and an extension gap (those for which there is no truth value). For *tall* (67a), for instance, its positive extension includes the individuals that are tall (67b), its negative extension consists of individuals that are not tall (67c), and, since it denotes a partial function, there is an extension gap that contains borderline cases, that is, individuals that are neither tall nor not tall.

(67)   a. $[\![tall]\!]^c = \lambda x.\mathbf{tall}(x)$ in c

     b. $\mathbf{pos}_c(\mathbf{tall})(x) = \{x \mid \mathbf{tall}_c(x) = 1\}$

     c. $\mathbf{neg}_c(\mathbf{tall})(x) = \{x \mid \mathbf{tall}_c(x) = 0\}$

Borderline cases vary across contexts depending on the set of individuals relevant for comparison, the comparison class. Context supplies this information. For

instance, in a context, *tall* can mean 'tall for a 4-year old', and in the other, 'tall for a basketball player'. In other words, *tall* denotes the property of being tall, and what counts as tall is provided by the context. Contexts are dynamic, so as the discourse unfolds, contexts are extended into new ones (e.g., Barker, 2002). With the addition of information, the extension gap diminishes. A context without borderline cases is a *precisification*.

In degree-less approaches, the relation between the individual object of predication and the property denoted by the gradable adjective is not directly represented in the lexical semantics of the adjective, but it is indirectly specified by the inherent ordering in the domain of the adjective. Therefore, degrees are not part of the ontology and a POS morpheme can be dispensed with. Gradability is derived from the presence of a salient order in the domain of the predicate. Degree constructions operate over the contextual parameter and establish a partition of the domain. For example, a comparative such as *Natasha is taller than Sonia* divides up the domain of *tall* such that Natasha falls in the positive extension of the predicate, but Sonia does not (68a). In order to guarantee that there is no comparison class that makes Sonia tall and Natasha not tall, a consistency postulate is needed (Klein, 1980). A degree modifier such as *very* sets the comparison class to individuals that are already in the positive extension of the predicate (68b) (Klein, 1980). Measure phrases such as *6-feet* are analyzed as denoting equivalence classes of individuals, so that *John is 6 feet tall* is true if, and only if, John is as tall as objects in the equivalence class of that height. Functions that quantify over possible values of c and thus manipulate the extension of a gradable predicate are known as *degree functions*.

(68) a. $⟦\textit{Natasha is taller than Sonia}⟧ = \exists c [\textbf{tall}_c(\textbf{Natasha}) \land \neg\textbf{tall}_c(\textbf{Sonia})]$

   b. $⟦\textbf{very}\textit{(tall)}⟧ = ⟦\textit{tall}⟧_{c[X]}$, where $X = \textbf{pos}_c(\textbf{tall})$

In this approach to gradability, vagueness is inherent in vague predicates themselves rather than the result of how they enter the compositional semantics. The fact that, in partial contexts (or simple valuations), the extension of a predicate

includes an extension gap accounts for the existence of borderline cases. These are eliminated in complete contexts, or *supervaluations*.

2.4.1.3   Evaluation of degree-based and vagueness approaches

Most of the criticism towards degree approaches involves the degree morpheme POS, which marks the positive form. Specifically, cross-linguistically, the positive form tends to be unmarked and thus simpler than the comparative (Klein, 1980). In addition, this morpheme appears not to have an overt realization in in any language. It is often mentioned that adding degrees unnecessarily complicates the ontology (Klein, 1980), although degrees are not necessarily primitives (e.g., Bale, 2008; Anderson and Morzycki, 2015).

Vagueness approaches have the advantage of not adding any extra machinery. This is especially relevant for scalar phenomena beyond the adjectival domain. However, linking gradability to vagueness requires stipulating a basic contrast in the semantics of adjectives, the distinction between relative adjectives, which are gradable and vague, and absolute adjectives, which are gradable, but not vague (cf. Burnett, 2012).

Adding degrees allows to handle with simplicity measure phrases and it is better suited for differential comparatives (*Natasha is three inches taller than Sonia*) (von Stechow, 1984) and incommensurability, that is, comparatives that involve different dimensions of measure (*My copy of* The Brothers Karamazov *is heavier than my copy of* The Idiot *is old*) (Kennedy, 1997; cf. Doetjes et al., 2011).

In this dissertation I take these arguments to point in favor of a degree approach. This will allow us to separate vagueness from real gradability in the nominal domain in analyzing different scalar phenomena. Before turning to scalarity in the nominal domain, next section introduces scale structure.

2.4.1.4   Scale structure

Adjectives differ in the structure of their scales (Rotstein and Winter, 2004; Kennedy and McNally, 2005). In particular, adjectival scales may have open and closed ends. There are four logical possibilities: scales closed in both ends, scales closed in the upper end, scales closed in the lower end, and open scales. The typology of scale structure is represented in table 2.5.

(Fully) closed scale	●————————●	(*full*, *empty*, *closed*)
Upper-closed scale	○————————●	(*clean*, *dry*, *straight*)
Lower-closed scale	●————————○	(*dirty*, *wet*, *bent*)
Open scale	○————————○	(*tall*, *long*, *expensive*)

TABLE 2.5: Typology of scale structures (Kennedy and McNally, 2005)

Scale boundedness is relevant for the distribution of degree expressions. For instance, proportional modifiers such as *half* or *mostly* return a degree in the middle of the scale and thus require the scale have two closed ends. In this way, they discriminate between adjectives with totally-closed scales (69a–b) and with partially closed scales and open scales (69c–d) (Kennedy and McNally, 2005).

(69) a. The glass is {half / mostly} full.

   b. Her eyes were {half / most of the way} closed.

   c. ?? That car was {half / mostly} expensive

   d. ?? The rope is {half / mostly} long.

(examples from Kennedy and McNally, 2005)

Other degree modifiers are sensitive to whether the scale is closed in the upper or the lower end. End-point oriented modifiers such as *completely* or *fully* only combine with adjectives that have a maximum (70). Taking pairs of polar antonyms into account, whose scales are identical except in the direction of ordering, the modifiers sensitive to scale maximums help classify them into fully closed (70a),

upper-closed (70b), lower-closed (70c), and open-scale adjectives (70d) (Rotstein
and Winter, 2004; Kennedy and McNally, 2005).

(70) a. The glass is completely {full / empty}.   FULLY CLOSED SCALE

    b. The floor is completely {dry / ??wet}.   UPPER-CLOSED SCALE

    c. The rod is completely {??bent / straight}.   LOWER-CLOSED SCALE

    d. The rod is completely {??long / short}.   OPEN SCALE

Lexical endpoints are relevant in the calculation of the predicate's standard.
Specifically, adjectives that lexicalize a scale with a maximum or a minimum use
this degree to set their standard. This is regulated by the principle of Interpre-
tative Economy (71) (Kennedy, 2007). For instance, the standard for *dry* is the
maximum degree on the scale. In order for something to count as dry, it must have
a 100% of dryness. The same applies to adjectives with scales closed in the lower
end. For example, for something to be wet, it just need to have a minimal amount
of wetness. On the other hand, open-scale adjectives have context-dependent
standards. For someone to count as tall, no maximal or minimal amount of height
is necessary, but the standard changes across contexts.

(71) **Interpretative Economy**
    Maximize the contribution of the conventional meanings of the elements
    of a sentence to the computations of its truth conditions.
                                        (Kennedy, 2007, 36)

Differences in scale structure also yield different entailments (Rotstein and Winter,
2004; Kennedy and McNally, 2005). The assertion of a maximum-standard
adjective entails that its subject has a maximal amount of the property, as shown
in the contradiction in (72a), whereas denying a minimum-standard adjective
entails that the individual has zero degree of the property (72b). For open-scale
adjectives, none of the entailments hold (72c–d).

(72) a. # The countertop is dry, but there is some water on it.

    b. # The countertop is not wet, but there is some water on it.

    c. The rod is not long, but its length is enough.

    d. The rod is long, but it could be longer.

In the comparative, maximum- and minimum-standard adjectives generate negative and positive entailments to the unmarked form, respectively (73a–b). For open-scale adjectives, none of the entailments go through (73c) (Rotstein and Winter, 2004; Kennedy and McNally, 2005).

(73) a. The floor is drier than the countertop. $\vDash$ The countertop is not dry.

     b. The floor is wetter than the countertop. $\vDash$ The floor is wet.

     c. Rod A is longer than rod B $\nvDash$ Rod A/B is (not) long.

<div align="right">(examples from Kennedy and McNally, 2005)</div>

Before moving on, a note in terminology is in order. Adjectives with a lexical endpoint, either a maximum or a minimum, or both, are known as *absolute adjectives*. Open-scale adjectives are *relative adjectives* (Kennedy and McNally, 2005). Maximum-standard absolute adjectives and minimum-standard absolute adjectives are also referred to as *total adjectives* and *partial adjectives*, respectively. The latter terminology is due to Yoon (1996); Rotstein and Winter (2004).

2.4.2   Gradability in the nominal domain

As mentioned above, gradability is not a property of adjectives alone. Degree phenomena can be observed in the nominal domain as well (Sapir, 1944; Bolinger, 1972; Doetjes, 1997; Morzycki, 2009; a.o.). Applying some of the diagnostics above, (some) nouns seem to have their specific degree morphology. For instance, size adjectives have degree readings with nouns like *idiot* (Bolinger, 1972; Matushansky, 2002; Morzycki, 2009; de Vries, 2010; cf. Constantinescu, 2011). In (74a), Juan is said to hold the property of idiocy to a high degree. Relatedly,

in (74b), Lucía is said to have wisdom to a high degree. Similarly, so called *adnominal degree morphemes* (Morzycki, 2009) seem to also indicate that the properties denoted by the nouns hold to a high degree (75).

(74) a. Juan es un idiota colosal.
          Juan is a idiot colossal
          'Juan is a colossal idiot.'

      b. Lucía tiene una sabiduría enorme.
          Lucía has   a   wisdom   huge
          'Lucía has a huge wisdom.'

(75) a. Lucía es una verdadera artista.
          Lucia is a   true   artist

      b. La fiesta fue un completo desastre.
          the party was a   complete disaster

Nouns can also appear in degree constructions. The comparative in (76a) can be interpreted as Juan having a higher degree of idiocy than his degree of betrayal. The sentence in (76b) could be paraphrased in a similar way, although, in this case, what seems to be compared is the appropriateness of referring to the dessert as pudding, rather than as a soufflé.

(76) a. Juan es más un idiota que un traidor.
          Juan is more a idiot than a traitor
          'Juan is more an idiot than a traitor.'

      b. Esto es más un budín   que un suflé.
          this is more a pudding than a   soufflé

Other tests in the literature include degree readings with operators like *such* (Bolinger, 1972; Matushansky, 2002; a.o.) and syntactic structures such as qualitative nominal constructions (*a disaster of a party*) (Bolinger, 1972; Milner, 1978; a.o.) (for an overview, see Constantinescu, 2011). The question that arises is whether this apparent scalarity of nouns is part of their lexical semantics (and thus a class of gradable nouns can be singled out and equipped with degree

arguments) or rather it is a consequence of some ordering that belongs to the conceptual domain and has no grammatical representation. For instance, in (75a), Lucía is said to be a remarkable artist. However, this degree reading can be derived from phenomena other than degree modification, such as prototypicality (Lucía is a prototypical artist) or even imprecision (Lucía is an artist in a strict sense). In all those cases, an ordering is needed, but it is not necessarily represented in the lexical semantics of the noun.

In the coming chapters, through the analysis of adjectives of veracity and completeness, I discuss the tests for nominal gradability in more detail. The discussion shows that, although quite restricted, there are cases of genuine gradability in the nominal domain.

2.5   Summary and looking ahead

This chapter has provided the background on the main topics covered in this dissertation, namely prenominal position in Romance, adverbial adjectives, and scalarity.

The correlation between position and (non)-restrictive interpretation only holds for qualitative adjectives. Adjectives of veracity and completeness are adverbial adjectives, subsective, and non-predicative. They are thus mostly restricted to prenominal position in Spanish, but receive restrictive interpretations. Their qualitative versions are postnominal and predicative. I assume a two-domain theory of adjectives, whereby attributive adjectives are placed in the functional layers of the NP and predicative ones are generated in a small clause. As for its semantics, the adjectives under consideration are shown to take the noun as its complement, either as second-order properties or degree modifiers.

Regarding the parallelism between adjectival and adverbial modification, the discussion of adjectives of veracity and completeness and their adverbial counterparts will show that they have the same semantics, and their realization as

either adjectives or adverbs is a consequence of the syntactic context. In addition, approaches to adverbial adjectives can be divided into those that postulate arguments in the internal structure of the noun that the adjective modifies, and those that use intensional semantics. The former will be argued to be more suitable for adjectives of completeness, as they combine nouns that are posited to include a degree argument and behave as degree modifiers. The latter is the approach defended for adjectives of veracity, which interact with vagueness and thus possible contexts.

As for gradability, a degree-based approach is adopted. That is, degrees are part of the ontology and are lexically represented. Although vagueness necessarily involves an ordering, vagueness and gradability do not necessarily go together. This is necessary for the study of adjectives of veracity, which are argued to modulate vagueness of the predicate. It will be shown that they combine with vague predicates, a class broader than the one of gradable nouns. Scales associated with gradable predicates differ with respect to their structure, in particular with respect to the presence of endpoints. This distinction will become relevant in the analysis of adjectives of completeness, where some modifier's sensitivity to scale structure will help to detect maximality phenomena in the nominal domain.

The next two chapters discuss adjectives of veracity (chapter 3) and adjectives of completeness (chapter 4) in detail.

Chapter 3

Adjectives of veracity

3.1 Introduction

This chapter focuses on one case study, adjectives of veracity [henceforth, AVs] such as *verdadero* 'true' and *auténtico* 'authentic, real', in order to investigate conceptual gradability in the nominal domain. In particular, it addresses the question of how the intensifying and metalinguistic readings of AVs are derived. Its broader aim is to study how vagueness interacts with typicality and subjectivity in the semantics of nouns, as compared to adjectives.

Veracity has to do with truthfulness and accuracy, and this can be observed in the literal readings of AVs (77). Yet, when AVs appear in prenominal position in Spanish, the interpretation is somewhat different (78). In particular, AVs appear in two contexts. First, they signal that the referent is an outstanding exemplar in the category denoted by the noun, having thus an intensification effect (78a). Second, in a context where the application of the predicate is under discussion, AVs assert that the referent belongs to the extension of the noun (78b). I refer to the latter as a *metalinguistic use*.

(77) a. una historia verdadera
    a   story   true

    'a true story'

   b. una pistola auténtica
     a   gun   authentic

     'a real gun'

(78) a. Paloma es una verdadera artista.
    Paloma is a   true   artist

    'Paloma is a true artist.'   INTENSIFYING

   b. No   son animales intermedios entre   estos dos grupos [reptiles
      NEG are animals   intermediate between these two groups   reptiles
      y   aves], sino auténticas aves.[1]
      and birds   but   authentic   birds.

     'They are not transitional animals between these two groups (reptiles
      and birds), but true birds.'   METALINGUISTIC

The main claim of this chapter is that AVs are quantifiers over possible contexts and, in this sense, they are vagueness quantifiers. Intensification is derived from typicality, an ordering in the denotation of the noun with respect to goodness of example for the category and its influence in category membership. This scalarity in the conceptual structure of nouns is thus shown to have linguistic effects, but it is argued no to be grammatically represented.

The distribution and interpretation of AVs is laid out in section 3.2. Section 3.3 explores AVs sensitivity to vagueness and presents the analysis. Then, section 3.4.2 addresses conceptual gradability in the form of typicality and its interaction with vagueness, on the one hand, and subjectivity, on the other. Section 3.5 extends the analysis to adverbs of veracity. Finally, section 3.6 concludes and discusses some further issues.

---

[1] http://statveritasblog.blogspot.com.es/2010/11/de-reptiles-aves.html [adapted]

3.2   Distribution and interpretation

AVs can appear either in prenominal or postnominal position, with a difference in
meaning. In postnominal position, *verdadero* 'true' and *auténtico* 'authentic, real'
show their literal senses 'not fake or false' (79). In (79a) the story told by this
movie contains true facts, as opposed to fictional ones, leaving aside whether they
are stereotypical or not (cf. 81a). In (79b), the problem, climate change, is real,
not imaginary or feigned. This is also the only meaning available in predicative
position (80).[2]

(79) a. *Jules y   Jim* narra una historia de amor verdadera.
          Jules and Jim tells   a   story   of love true

          '*Jules and Jim* tells a true love story.' (not a false one)

       b. El   cambio climático es un problema auténtico.
          the change climatic is a   problem   authentic

          'Climate change is a real problem.' (not a fake one)

(80) a. La   historia de amor era verdadera.
          the story   of love   was true

          'The love story was true.' (not false)

---

[2]Other adjectives potentially belonging to this class are *real* 'real' (ia) and *genuino* 'genuine' (ib),
which are less frequent. The former, in an intensifying use, is restricted to a few nouns, probably
due to homonymy with *real* 'royal'.

(i) a. Nunca deja de contestar   nuestras plegarias cuando son hechas con real intensidad.
        never stops of answer.INF our   prayers   when   are made   with real intensity

        'He never stops attending our prayers when they are said with real passion.'

                                                       [http://books.google.es/books?isbn=9501701468]
     b. Cuando [...] lo   releí   sentí una genuina admiración por mí mismo.
        when   ACC reread felt a   genuine admiration for myself

        'When I reread it I felt a genuine admiration for myself.'   [Corpus del Español]

In addition, the PP *de verdad* lit. 'of truth' has a contribution similar to that of AVs and it is also
ambiguous between a literal and an intensifying reading, although without the correlation with
position, as PP modifiers only occur postnominally in Spanish. I leave it aside for the discussion, but
the analysis could be extended to cover its modification.

    b. El   problema es auténtico.
       the problem   is authentic
       'The problem is real.' (not fake)

In prenominal position, however, AVs are not interpreted literally. Instead, they become intensifiers: they signal that the referent is an outstanding individual in the denotation of the noun. In (81a), the love story told is a remarkable one, one that contains all the elements expected in a love story (love at first sight, lovers forced to be apart, drama that is finally overcome (or not)), regardless of whether it actually happened in real life. In (81b), climate change is said to be a real problem, a significant one, not simple setback, or a difficulty.

(81) a. *Doctor Zhivago* narra una verdadera historia de amor.
      doctor Zhivago tells a   true   story   of love
      '*Doctor Zhivago* tells a true love story.'

     b. El   cambio climático es un auténtico problema.
       the change climatic is a   authentic problem
       'Climate change is a real problem.'

The difference between the literal and the intensifying readings can also be observed in the fact that some nouns accept the prenominal but not the postnominal version of AVs (82), or vice versa (83), depending on their meaning. For example, (82a) would only make sense in a context where there are fake artists, but not out of the blue (cf. 82b). By contrast, in (83b), identities can be true or false, but it is hard to imagine how an identity would be more outstanding, as an identity, than another (cf. 83a).[3]

(82) a. ?? Conocimos a   una artista verdadera.
        met.1PL   DOM a   artist   true
       'We met a true artist.'   LITERAL

---

[3]Although the correlation between position and reading is strong for AVs, a few speakers reported getting the intensifier reading in postnominal position and the literal interpretation prenominally when only one of the interpretations makes sense, such as with *artist* or *identity* (82–83), and also with evaluative nouns such as *idiot*.

    b. Conocimos a una verdadera artista.
       met.1PL   a true artist

       'We met a true artist.'   INTENSIFYING

(83) a. Usamos una identidad verdadera.
       use.1PL a   true   identity

       'We use a true identity.'   LITERAL

    b. ?? Usamos una verdadera identidad.
        use.1PL a   true   identity

        'We use a true identity.'   INTENSIFYING

In addition to their position, interaction with the determiner and the type of noun causes a difference in the meaning of AVs as well. The intensifier reading of AVs remains with most nouns when they combine with the definite article (84). For example, (84a) refers to the love story that has all the characteristics a love story must have, in the speaker's view, and it is not important whether the love story actually took place or not. However, this intensification seems to be only possible with an indefinite determiner in the case of relative nouns such as *father* or *identity*. With these nouns and in combination with the definite article, AVs receive a literal interpretation (85). For instance, in (85a), Álex is Anna's actual father, so *verdadero* is interpreted in its literal sense; by contrast, in (86), Álex is said to be remarkably fatherly, leaving aside whether he actually has a child. The same applies to *identity* in (85b) (cf. 83b).

(84) a. La verdadera historia de amor es la que cuenta *Jules y   Jim*.
       the true   story   of love is the that tells   Jules and Jim

       'The true love story is the one told in *Jules and Jim*.'   INTENSIFYING

    b. El auténtico problema de Madrid es la contaminación.
       the authentic problem   of Madrid is the pollution

       'Pollution is Madrid's real problem.'   INTENSIFYING

(85) a. Álex es el verdadero padre de Anna.
       Álex is the true   father of Anna

       'Álex is Anna's true father.'   LITERAL

b. Impuso   la condición de que se   ocultara   al   niño su
   Imposed.3SG the condition of that IMPRS hid.SBJV.3SG to.the child his
   verdadera identidad.[4]
   true   identity

   'He imposed the condition that the child should never know his true
   identity.'   LITERAL

(86) Álex es un verdadero padre.
     Álex is a   true   father

     'Álex is a true father.'   INTENSIFYING

AVs, in their intensifier reading, have a wide distribution. They combine with
abstract nouns, such as *coraje* 'courage' (87a); evaluative nouns like *idiota* 'idiot'
(87b); deverbal nouns such as *destrucción* 'destruction' or *derrota* 'defeat' (87c–d);
profession nouns such as *artista* 'artist' (82b), and relational nouns, such as *padre*
'father' (86).[5]

(87) a. Lucía mostró verdadero coraje.
         Lucía showed true   courage

      b. Juan es un auténtico {idiota / desastre}.
         Juan is a   authentic idiot   mess

         'Juan is a real {idiot / mess}.'

---

[4]*Cien años de soledad*, Gabriel García Márquez (1967).

[5]Although I focus here on simple predicates, AVs can also modify complex ones formed by a noun
and an adjective (i).

(i) a. Filipinas   sufre   los efectos de una auténtica tormenta tropical.
        Philippines suffers the effects of a   authentic storm   tropical

        'The Philippines suffer the effects of a real tropical storm.'

     b. Se   está lejos de poder   dar   verdaderas buenas noticias en empleo.
        IMPRS is   far of be.able.to give.INF true   good   news   in employment

        'We are far from being able to give truly good news regarding employment.'

                                                                   [Corpus del español]

   c. El objetivo de la nueva política cultural del Consell es
the objective of the new policy cultural of.the government is
reparar veinte años de auténtica destrucción de los principios
repair.INF twenty years of authentic destruction of the principles
culturales.[6]
cultural

'The purpose of the (Valencian) government's new cultural policy is to

repair twenty years of real destruction of our cultural principles.'

   d. Aquella victoria se ha convertido en una auténtica derrota.[7]
that victory REFL has turned in a authentic defeat

'That victory has become a real defeat.'

The only restriction is that AVs do not usually combine with nouns that denote natural kinds (88a–b) or concrete objects (88c–d). However, as further illustrated in the next section, these nouns become acceptable with AVs when the application of the predicate to a particular individual is under discussion (89) ((78b) is repeated here as (89a)).

(88) a. * Vimos un verdadero pájaro.
     saw.3PL a true bird
     'We saw a true bird.'

   b. * Trajo auténtica agua a la fiesta.
     brought authentic water to the party
     'She brought real water to the party.'

   c. ?? Tiene una verdadera mesa en su despacho.
     has a true table in her office
     'She has a true table in her office.'

   d. ?? Tiene una auténtica pistola en el cajón.
     has a authentic gun in the drawer
     'She keeps a real gun in the drawer.'

---

[6]http://www.diarioinformacion.com/cultura/2016/04/15/consell-quiere-reparar-20-anos/1750068.html

[7]http://www.tonibosch.com/la-lucidez-del-perdedor/

(89) a. No   son animales intermedios entre   estos dos grupos [reptiles
          NEG are animals   intermediate between these two groups reptiles
          y   aves], sino auténticas aves.
          and birds but authentic birds.
          'They are not transitional animals between these two groups (reptiles
          and birds), but true birds.'   METALINGUISTIC

      b. Tráeme   una verdadera silla, no   esa cosa de Ikea que
          bring.DAT.1SG a   true   chair NEG that thing of Ikea that
          compraste.
          bought.2SG
          'Bring me a true chair, not that Ikea thing you bought.' METALINGUISTIC

To sum up, this section has dealt with the basic empirical facts regarding AVs. In particular, AVs intensify the meaning of the noun when they are in prenominal position. They combine with a wide range of nouns, but are not acceptable out of the blue with nouns denoting natural kinds or concrete objects. However, they occur with these nouns in metalinguistic contexts. For relational nouns, the intensifying reading seems to be only possible with indefinite determiners. Next section discusses AVs' interaction with vagueness and puts forward an analysis of these modifiers as quantifiers over possible contexts.

3.3   Vagueness

Vagueness is a type of uncertainty about what properties the terms ascribe to the objects to which they are applied, and about whether those terms can be applied in the first place (Kennedy, 2012a; see Lewis, 1970; Lakoff, 1973; Kamp, 1975; Klein, 1980; Kamp and Partee, 1995; Fara, 2000; Kennedy, 2007; van Rooij, 2011; a.o.; for an overview, see Kennedy, 2012a; Solt, 2015b). Vagueness is a pervasive phenomenon in natural language, although most of the recent work on it has focused on adjectives (Barker, 2002; Kennedy, 2007; van Rooij, 2011; a.o.). In the nominal domain, vagueness has to do with category membership,

that is, with whether an individual falls into the denotation of a predicate or not. Consequently, it interacts with prototypicality and with whether the criteria for application of the noun is objective or subjective, as will become clear in the following sections.

As mentioned above, predicates denoting natural kinds or artifacts are either true or false of (practically) any individual in the real world. For instance, for something to belong to the category of birds, it must have the DNA of that particular biological class. Otherwise, it is not a bird. By contrast, nouns such as *artist* or *problem* do not have such clear boundaries. There is no well defined point of artistry at which an individual starts counting as an artist. Likewise, there is no clear cut criterion to classify something as a problem. In both cases, the definitions are more subject to contextual or even individual variation. As a consequence, there are often objects for which the application of the terms *artist* or *problem* is indeterminate. These are called *borderline cases*.

The lack of sharp boundaries in vague terms is related to the notion of tolerance (Wright, 1975; Kamp, 1981b). Vague predicates appear tolerant of sufficient small changes in the relevant dimensions. A manifestation of this is the so-called Sorites paradox, which is exemplified for *heap* in (90). The two premises of the argument seem clearly true, but the conclusion is unquestionably false.

(90) (P1) 1,000,000 grains of sand make a heap.

(P2) Any heap with 1 grain of sand less is also a heap.

(C) 1 grain of sand makes a heap.

Sorites series are harder to build for the nouns under discussion here because of their multidimensionality, that is, the fact that they do not have a unique criterion (dimension) for classification. But it seems clear that, while there is a point at which the second premise would be false for *bird* (at some point, taking one dimension of birdness out would make the individual not a bird), decreasing Paloma's artistry in very small degrees would never yield the second premise false.

Finally, vague predicates show contextual variability in truth conditions (Klein, 1980; Kamp, 1981a; Kamp and Partee, 1995; Kennedy, 2007). Nouns such as *artist* may be true or false depending on the situation. For instance, Paloma may count as an artist in her craft class but not at the National Gallery in London. Whether something is a problem or not can also vary across contexts. On the contrary, sharp nouns are not context dependent. If an animal is a bird, it is a bird across contexts, no matter whether we are at a natural history museum or close to the North Pole, where few bird species live. Note however that, although they often co-occur, context dependence is not restricted to vague terms. For example, *left* and *right* are context-dependent, but not (very) vague (Kamp and Partee, 1995).

To sum up, vague predicates, the ones AVs occur with, are characterized by not having a clear boundary between their positive and negative extension, their context dependence, and giving rise to the Sorites paradox.

The examples in (88) showed that AVs combine neither with natural kind concepts such as *bird* nor with artifacts such as *table*. What these concepts have in common is that they have clear boundaries between their positive and negative extension. In other words, they are not vague (Pinkal, 1995; Kamp and Partee, 1995). This section is devoted to investigate the role of vagueness in the modification performed by AVs. It is organized as follows. Next section argues that AVs are sensitive to the vagueness of the predicate. Section 3.3.2 puts forward an analysis of AVs as manipulating the contextual parameters that determine the interpretation of predicates, in the spirit of the one in Barker (2002), and derives the intensifying and metalinguistic readings from it. Before turning to typicality, section 3.3.3 discusses three phenomena related to vagueness and the analysis defended here, namely imprecision (section 3.3.3.1), domain widening (section 3.3.3.2), and epistemic modality (section 3.3.3.3).

3.3.1 Adjectives of veracity are sensitive to vagueness

So far, AVs have been shown to combine only with vague nouns. The very specific contexts where AVs are acceptable with natural kind terms and nouns denoting artifacts provide further evidence for this generalization. Example (91a) discusses whether a couple of Jurassic animals must be classified as birds or reptiles. Similarly, (91b) comes from a report on whether the astronomical object Ceres qualified as a planet, and (91c) is a description of a transformable table from a furniture store. What these three contexts have in common is that the object's membership in the category is under discussion and AVs are used to assert that the object does belong to the denotation of the predicate.

(91) a. El Archaeopteryx y   el Archaeornis no son animales intermedios
The Archaeopteryx and the Archaeornis NEG are animals   intermediate
entre   estos dos grupos [reptiles y   aves], sino auténticas aves.[8]
between these two groups reptiles and birds but authentic birds.

'Archaeopteryx and Archaeornis are not transitional animals between these two groups (reptiles and birds), but true birds.'

   b. Ceres fue considerado demasiado pequeño para ser un verdadero
Ceres was considered   too   small   to be a true
planeta.[9]
planet

'Ceres was considered too small to be a real planet.'

   c. Consola   ampliable   con plano de cristal modelo Etico de Bontempi;
sideboard expandable with top   of glass model Etico by Bontempi
se   transforma en una verdadera mesa de comedor.[10]
REFL transforms in a   true   table of living room

'Etico expandable sideboard with glass top by Bontempi. It changes into a real dinner table.'

---

[8]http://statveritasblog.blogspot.com.es/2010/11/de-reptiles-aves.html
[9]https://es.wikipedia.org/wiki/Ceres_%28planeta_enano%29
[10]http://www.arredaclick.com/es/mesas-sillas/consolas/consolas-ampliables/consola-ampliable-cristal-etico.html

Nouns displaying figurative uses, such as *father* or ethnic nouns, also constitute evidence for AVs' sensitivity to vagueness of the noun. For instance, *padre* 'father' is a sharp noun: someone is a father if he is male and has children. As a consequence, the cutoff point between the positive and the negative extension is almost completely clear (with maybe adoptive fathers being borderline cases). When *padre* combines with an AV (92a), the reading is not one in which Álex is an outstanding individual in being a biological father. Rather, the AV targets the figurative, or stereotypical, sense of the noun (see section 3.4.1.2). In this case, the one related to being fatherly, for which actually having a child is not a prerequisite. This sense of *father* is vague: it is not very clear at which point of having a fatherly behavior one can be referred to as a *father* in the figurative sense. It is also context-dependent. Álex may count as a father (in the figurative sense) when interacting with his little nephew, but not when displaying the same behavior with his co-workers, where he would be downright patronizing. The same applies to ethnic nouns. Being French is not a graded category (someone either has a French passport or not), but when *francesa* 'French woman' combines with an AV (92b), the reading obtained is a stereotypical one. For instance, someone sophisticated and somewhat chauvinistic, who drinks wine and would go on strike to fiercely defend her rights.[11]

(92) a. Álex es un verdadero padre.
          Álex is a true   father

          'Álex is a true father.'

      b. Irene es una auténtica francesa.
          Irene is a   authentic French.woman

          'Irene is a real French woman.'

---

[11]The fact that these nouns have two different readings has a morphological reflect in their related adjectives. For instance, *padre* 'father' has a relational adjective *paterno* 'paternal' and a qualificative adjective *paternal* 'fatherly'. As expected, only the latter are possible with adverbs of veracity (i) (see section 3.5.1).

  (i) Álex es verdaderamente {paternal / *paterno}.
        Álex is truly   fatherly   paternal

Before moving on to the analysis, it is important to note that AVs do not reduce the vagueness of the whole proposition. Rather, they have a local effect in the noun. In other words, they are not sentence modifiers but predicate modifiers. The intended paraphrases for (93) in (94) using the adjectives as propositional modifiers do not have the same meaning. To begin with, AVs have only their literal interpretation in predicative position, so the only reading for the sentences in (94) is one in which the proposition they express is not false. But to say that it is true, for instance, that Paloma is an artist (94a) is not the same as saying that she is a true artist (cf. fn. 30).[12]

(93) a. Paloma es una verdadera artista.
          Paloma is a   true   artist
      b. Narra una auténtica historia de amor.
          tells a   authentic story   of love
          'It tells a real love story.'

(94) a. Es {verdad / ?verdadero} que Paloma es una artista.
          is truth   true   that Paloma is an   artist
          'It is true that Paloma is an artist.'
      b. Es {verdad / ??auténtico} que narra una historia de amor.
          is truth   authentic that tells a   story   of love
          'It is true that it tells a love story.'

In short, the relevant factor for combination with AVs is that the cutoff point for the category denoted by the noun is not fixed, i.e. that the noun is vague. This happens in several cases, namely with inherently vague nouns, such as *artist* or *problem*, in metalinguistic contexts, where the application of the predicate is under discussion, and for figurative senses of otherwise sharp nouns. In all those cases, AVs are used to assert that the individual undoubtedly belongs in the extension of the noun. In this sense, they affect the interpretation of the predicate they combine with, and consequently its vagueness. Next section formalizes this idea.

---

[12]Note also that, for the propositional use, the noun *verdad* 'truth' is preferred over the adjectives.

3.3.2   Analysis

AVs have been shown to interact with vagueness, affecting the interpretation of the predicate and resolving uncertainty regarding its application. In this section I argue that AVs operate over the contextual parameters of the predicate they combine with.

AVs combine with almost any noun, as long as it is vague. Their semantic effect is different depending on the noun and the discourse context. Whenever the individual is already an instantiation of the category denoted by the noun, AVs have an intensifying effect (81). But in situations where the application of the predicate is under consideration, AVs resolve the uncertainty about the membership in the category, without any intensification (91). In order to account for this behavior, I draw upon Barker's (2002), McNabb's (2013) and Beltrama and Bochnak's (2015) analyses for modifiers with similar properties. In particular, the idea is that AVs universally quantify over the contextual parameters that affect the interpretation of the predicate they modify.

The analysis is implemented as follows. The interpretation of vague nouns is contextually determined and, in particular, I assume that it is subject to a contextual parameter c. AVs take a predicate f and an individual x in c and return true if, and only if, the property holds of the individual in all the contexts that stand in a relation R with c (95).

(95) $[\![AV]\!]^{w,g,c} = \lambda f_{\langle e,t \rangle} \lambda x. \forall c'[cRc' \rightarrow f(x) \text{ in } c']$

The interpretation of expressions is relativized to a context. This is modeled as a context parameter c in the interpretation function. The function of the parameter c is to resolve the indeterminacy of interpretation of vague predicates. In the case of nouns, the contextual factors involved in calculating their interpretation are the set of dimensions associated with the noun and comparison classes.[13] For

---

[13] For adjectives, c applies to comparison classes (see section 3.5).

instance, in order to determine what counts as an artist, we need to look at the ideal values in the dimensions associated with the noun, and probably, to other individuals in the domain (see section 3.4). If the noun is sharp, the denotation is constant across contexts and adding an AV does not add any information. In other words, *AV N* is true of the same individuals as *N*, triggering thus unacceptability.

I assume that c operates over semantic but not pragmatic uncertainty. That is, the level of granularity or amount of imprecision allowed in a context is not regulated by c, but by another parameter (cf. McNabb, 2013; Beltrama and Bochnak, 2015), such as the granularity parameter *gran* proposed by Sauerland and Stateva (2011), or the degree-of-precision parameter d, as in Morzycki (2011). This is in line with the view of vagueness adopted here, which keeps it separate from imprecision (see section 3.3.3.1 below). The consequence of this for the analysis is that terms used imprecisely are in fact sharp, and quantifying over possible contexts would not have any effect.[14] It is also important to note that c is different from the assignment function g, which assigns values to open variables such as pronouns. Indexicals may also be sensitive to changes in context (Schlenker, 2003; Anand and Nevins, 2004), but I assume their are not affected by c as conceived here. World variables w are also different from contextual variables (see section 3.3.3.3 below for arguments against AVs affecting world variables by comparing them to epistemic adjectives).

The predicate f holds in every possible context c' that stands in a relation R with c. The relation R is left vague, but basically holds between c and c' if c' is like c except for the relevant values they assign to the contextual parameters that affect the interpretation of the predicate. For instance, in order to determine what a true artist is, it is necessary to look at contexts identical to the actual one except with respect to what makes someone count as an artist and the different extensions of *artist* across those contexts. If an individual counts as an artist in all those contexts, she is a true artist. Thus, by quantifying over contexts, AVs serve

---

[14]For instance, saying that a statue is in the center of a square when it is actually a few centimeters to the left is acceptable in some contexts, but strictly speaking false in all of them. That is, *center* is a sharp predicate, although it may allow for imprecision. I expand on this in section 3.3.3.1.

to find a clear case of the category denoted by the noun, someone who qualifies as a member of the category even in the strictest contexts.

The semantics in (95) capture the fact that AVs regulate the vagueness of a property of individuals and have thus a local effect in the noun, rather than over the whole proposition (see (94)), as is the case of other vagueness quantifiers such as *definitely* (see Williamson, 1999; Barker, 2002). In section 3.5, I generalize the semantics of AVs to account for the modification of adverbs of veracity.

The analysis presented here is close to other proposals in the literature that deal with similar phenomena. Barker (2002) argues that, in order for someone to be *definitely tall* one needs to look at the context as a whole, that is, at all the contexts candidates with different comparison classes. This is the intuition I have tried to adopt in my analysis. However, Barker's account makes reference to degrees, because it is intended for uses of *definitely* with gradable adjectives. This would not work for AVs, as they modify nouns and, even if we were to accept that nouns are grammatically gradable, this seems not to be the relevant factor for occurrence with those modifiers (see section 3.4.3). McNabb (2013) argues that the Hebrew modifier *mamaš* 'really' takes a property (of individuals, eventualities, or propositions) and returns a property that is true of an individual in case it is true of that individual in all relevant possible contexts. Beltrama and Bochnak (2015) propose that the semantic core of Washo *šemu* and Italian *-issimo* is also universal quantification over the contextual parameters that contribute to the interpretation of context-sensitive predicates. In particular, they specify that the context-sensitive predicate holds in all contexts that bear a particular relation with the current context. Depending on the relevant contextual parameter, different semantic effects (from degree boosting to slack regulation and intensification) arise. My proposal resembles the latter two analyses, except for the fact that they allow pragmatic uncertainty (imprecision) to be part of the contextual parameter.

In a nutshell, AVs are modifiers that apply to a property and return a property that is true of an individual in all contexts that stand in a particular relation with the actual context. By modifying contextual parameters, AVs reduce the

uncertainty about the application of the predicate. The next sections address how the different readings are derived from the analysis presented here.

3.3.2.1 Intensification effect

This chapter started with the observation that AVs often have an intensifying effect when occur prenominally. The sentences in (96) can be interpreted as Paloma being an outstanding individual in the set of artists, and pollution as qualifying as a problem in Madrid without doubt.

(96) a. Paloma es una verdadera artista.
     Paloma is a   true   artist

 b. La contaminación es un auténtico problema en Madrid.
    the pollution   is a authentic problem in Madrid
    'Pollution is a real problem in Madrid.'

These nouns are vague, and as such have no clear boundaries. In addition to this, there are individuals that are better examples of the category than others. Worse examples or borderline cases may not be in the extension of the predicate in contexts stricter than the actual one. Best examples, on the other hand, always qualify as an instantiation of the property, no matter how strict the context.

The role of AVs is to quantify over possible contextual interpretations of the predicate and ensure that the property holds of the individual for any value of the contextual parameter. The modifier selects a clear case of the category denoted by the noun. When applied to an individual that was already in the denotation of the noun, the intensification reading arises. AVs reinforce that the predicate does apply to the referent, even in stricter contexts. For instance, for *artista* 'artist', the modifier selects an individual who qualifies as an artist in all the relevant contexts. As such, it is an outstanding individual of the category (97).

(97) $[\![$*Paloma es una verdadera artista*$]\!]^{w,g,c} = 1$ iff
     $\forall c'[cRc' \rightarrow \textbf{artist}(\textbf{Paloma})$ in $c']$

By universally quantifying over possible contexts, AVs pick up a prominent individ-
ual in the denotation of the noun. In principle, nothing prevents other referents
to be more outstanding or rank higher as good examples of the category, as long
as all of them are in the denotation in all the relevant possible contexts. AVs thus
do not target the best example of the category, although such expectation seems
to be present as part of the intensified meaning. Observe that examples such as
(98), which make this explicit, are felicitous when used with *but* but they are odd
when *and* is used instead. Thus, the expectation seems to be canceled by means
of the adversative connective (see Anscombre and Ducrot, 1977, Winterstein,
2012; a.o.).

(98) a. Paloma es una verdadera artista, {pero / ??y}   Lucía lo es más.
          Paloma is a   true   artist   but   and Lucía CL is more
          'Paloma is a true artist, {but / and} Lucía is more of an artist than her.'

      b. Es un verdadero placer   tenerla   entre   las manos. {Pero / ??Y}
          is a   true   pleasure have.ACC between the hands.   but   and
          todavía lo es más   disfrutar de sus resultados.[15]
          still   it is more enjoy.INF of its results
          'It's a true pleasure having it in your hands. {But / And} it is even more
          to enjoy its results.'

Individuals in the extension of the noun can be ordered with respect to how good
examples of the category they are. In my analysis, the ordering may be created
from the number of contexts in which the individual belongs to the denotation
of the noun. It is ultimately determined by how close this individual is to the
best exemplar of the category and many elements factor in in establishing this
ordering for noun, including prototypicality, stereotypicality, and subjectivity. I
discuss these factors and their significance to the intensification performed by
AVs in detail below, in section 3.4.

---

[15]http://www.finepix-x100.com/es/reviews/others/all?page=20

3.3.2.2 Metalinguistic readings

AVs do not modify sharp nouns such as natural kind nouns. Since their denotation is constant across contexts and all the exemplars are members of the category to the same extent, applying an AV has no effect. This is the case unless the application of a natural kind term to a particular individual is being discussed. Recall example (91a), adapted here as (99), where the classification of a couple of prehistoric animals, borderline cases between reptiles and birds, was being examined.

(99) El   Archaeopteryx y   el Archaeornis no   son animales intermedios,
      The Archaeopteryx and the Archaeornis NEG are animals   intermediate
      sino auténticas aves.
      but authentic birds.
      'Archaeopteryx and Archaeornis are not transitional animals, but true birds.'

Using a vague predicate affects subsequent context (Kamp, 1975; Klein, 1980; Barker, 2002). In a metalinguistic use of a sentence like *Feynman is tall*, the speaker is providing information about the standard for tallness in the context and eliminates some candidates for that standard from further consideration (e.g., all the standards of tallness that are higher than Feynman's height) (Barker, 2002). *Mutatis mutandi*, the use of a sentence like (99) updates the context by adjusting the limits of the predicate (*bird* in this case).

Therefore, AVs main contribution here is not to add descriptive information (that a particular individual clearly possesses a particular property, as in (96)), but metalinguistic information, namely that the predicate applies to a particular individual. By using an AV, the speaker is asserting that the individual is a member

of the category in every context, so the interpretation of the predicate needs to accommodate that case.[16],[17]

The contribution of AVs to set the limits of the predicate can be also observed in the examples in (100) regarding negation. Once *x is a N* is asserted, *x is not an AV N* is an infelicitous continuation. If Paloma is already in the extension of *artist*, it seems contradictory to deny that she is a true artist, with the intended clear-case reading. This is not the case with degree modifiers such as *very*, where it is acceptable to assert that someone is tall without qualifying as very tall (101).

(100) a. ?? Paloma es una artista, pero no   una verdadera artista.
               Paloma is an artist but NEG a   true   artist
           'Paloma is an artist, but not a true artist.'

       b. ?? La   contaminación es un problema, pero no   un auténtico
               the pollution   is a problem but NEG a   authentic
               problema.
               problem
           'Pollution is a problem, but not a real problem.'

(101) Marina es alta, pero no   muy alta.
       Marina is tall but NEG very tall
       'Marina is tall but not very tall.'

AVs have a metalinguistic contribution, especially in discussing the boundaries of otherwise sharp predicates. In particular, they serve to indicate that the individual in question is part of the extension of the noun. Before discussing literal readings and the determiner, I exemplify another use of AVs' metalinguistic contribution: generic sentences.

---

[16]Note that saying that those animals are *true birds* does not imply that they are clear cases of birds, that is, prototypical birds. This shows that AVs affect vagueness and category membership and but not typicality directly, see section 3.4.1.1 below.

[17]In my analysis, the potential of AVs to change the context is not implemented and constitutes an interesting issue for future work. Neither does it incorporate yet the role of the speaker, which is the topic of section 3.4.2.

Generic sentences

AVs' metalinguistic contribution makes them especially suitable for definitional generic sentences. Generic statements can be descriptive or definitional (Lawler, 1973; Dahl, 1975; Burton-Roberts, 1977), depending on whether they express an empirical generalization, a fact about the world, or an essential property or a law-like statement. The distinction has a linguistic manifestation. Indefinite singular generics are restricted to definitional generics (102a) (cf. (103a), which has only an existential reading), whereas definite plurals in Romance (and bare plurals in English) can be used both in definitional and descriptive generics (102b, 103b) (for recent analyses, see Cohen, 2001; Greenberg, 2003; Mari, 2008; Dobrovie-Sorin and Beyssade, 2012; Krifka, 2012; a.o.). The contrast between definitional and descriptive generic statements corresponds to the classic distinction between analytic and synthetic judgments.

(102) a. Un madrigal es polifónico.
  a madrigal is polyphonic
 b. Los madrigales son polifónicos.
  the madrigals are polyphonic
  'Madrigals are polyphonic.' DEFINITIONAL

(103) a. # Un madrigal es popular.
  a madrigal is popular
 b. Los madrigales son populares.
  the madrigals are popular
  'Madrigals are popular.' DESCRIPTIVE

AVs are used in definitional generic statements, according to their metalinguistic use (in Barker's (2002) definition). In this sense, they restrict the interpretation of the predicate itself, rather than restricting the set of worlds where the proposition would be true. Introducing an AV turns an indefinite singular generic into a rule-like statement, and as such, it becomes acceptable (104a, 104c) (cf (103a, 104b)), which only have an existential reading). Note also that adding an AV to a already definitional generic sounds redundant (105).

(104) a. Un verdadero madrigal es popular.
           a   true   madrigal is popular

           'A true madrigal is popular.'

       b. # Un artista expone sus obras en galerías.
             a   artist   exhibits his work in galleries

             'An artist exhibits their work in galleries.'

       c. Un auténtico artista expone sus obras en galerías.
           a   authentic artist   exhibits his work in galleries

           'A real artist exhibits their work in galleries.'

(105) ? Un verdadero madrigal es polifónico.
         a   true   madrigal is polyphonic

Finally, it has been observed that modification, among other restrictive strate-
gies, improve the acceptability of indefinite singular generics (see, e.g., Cohen,
2001; Heyd, 2003; Mari, 2008). However, there is a difference between regular
adjectives and AVs. Adding an adjective such as *buen* 'good' or *famoso* 'famous'
improves the definitional statements with indefinite singulars, but the properties
are understood not as part of the definition of *madrigal* and *artist*, but of *good
madrigal* and *famous artist* (106). So an artist who does not exhibit her work
in galleries is not considered to be a *famous* artist, but she is still an artist. By
contrast, after asserting (104b), an individual who does not show her work is no
longer considered an artist, at least in the speaker's opinion.[18]

(106) a. Un buen madrigal es popular.
           a   good madrigal is popular

       b. Un artista famoso expone sus obras en galerías.
           a   artist   famous exhibits his work in galleries

           'A famous artist exhibits their work in galleries.'

---

[18]See Mari (2008) for an account of indefinite generics in which the truth of the proposition they
express is relative to *points of view*, modeled as world-judge pairs (Ross, 1997), introducing thus
subjectivity into their semantics.

To sum up, AVs' metalinguistic contribution can be observed in definitional generic sentences, where they are used to restrict the denotation of the predicate to the best exemplars and signal that the sentence is to be interpreted as definitional.[19]

3.3.2.3 Literal readings and the determiner

It was observed in section 3.2 that, in combination with the definite determiner, AVs receive a literal interpretation with some particular nouns such as *padre* 'father' or *identidad* 'identity' (85). For instance, the preferred interpretation of (85a) (repeated here as (107a)) is not one in which Álex is remarkably fatherly to Anna, but one in which he is her biological father. For most nouns, however, AVs maintain their intensifying reading in combination with the definite article. For example, (84b) (repeated as (107b)) is interpreted as the most outstanding problem of Madrid, the only one that deserves to be considered a problem.

(107) a. Álex es el verdadero padre de Anna.
          Álex is the true   father of Anna

        'Álex is Anna's true father.'

      b. El auténtico problema de Madrid es la   contaminación.
          the authentic problem   of Madrid is the pollution

        'Pollution is Madrid's real problem.'

---

[19]An interesting rhetorical use of AVs in generic sentences is the *No true Scotsman* fallacy (Flew, 1975; Dowden, 2010), which is employed to deflect counter-examples to a general claim. The classic version of the fallacy is as in (i). The AV is used to redefine the concept of Scotsman in order to exclude individuals who add sugar to their porridge. However, the fallacy fails to apply if the criteria for membership is objective or part of the definition of the noun (For *Scotsman*, for instance, would be something like 'having born or being a resident in Scotland').

  (i) A: No Scotsman puts sugar on his porridge.
      B: But my cousin Angus, who is from Scotland, likes sugar with his porridge.
      A: Ah yes, but no true Scotsman puts sugar on his porridge.

I suggest that the apparent literal reading is an effect of the interaction of the semantics of AVs with the uniqueness requirement of the definite determiner. The combination of an AV and a noun returns the set of individuals that are part of the denotation of the noun in every relevant context. For instance, *auténtico problema* 'true problem' is the property of being a clear case of a problem. When the property composes with the definite determiner, *el auténtico problema* denotes the unique (relevant) individual that is a problem in every relevant context. By asserting (107b), pollution is interpreted as the only relevant problem of Madrid for the conversation. In a sense, the rest of situations considered *problems* before in the context (traffic congestion, not enough bike lanes), become irrelevant and thus excluded from the denotation of the noun for the conversational purposes. In a sense, they are considered fake problems.

Likewise, *verdadero padre de Anna* 'true father of Anna' denotes a property of individuals who are considered fathers of Anna in every context and excludes borderline cases. The definite determiner introduces the requirement that there be only one individual for which the predicate is true (as in, e.g., Heim and Kratzer, 1998). This usually corresponds to her biological father, but nothing in the semantics forces this to be the case (108). In fact, in a specific context, for instance one in which Anna was raised by her big brother and her father was not present, it is felicitous for her to utter (109) to her brother.

(108) ⟦*el verdadero padre de Anna*⟧ $= \iota x \forall c'[cRc' \rightarrow$ **father**(**Anna**)(x) in $c']$

(109) Tú eres   mi verdadero padre.
      You are.2SG my true   father
      'You are my true father.'

To sum up, the apparent literal interpretation that AVs receive in combination with some nouns and the definite determiner is the result of the interaction of the semantics of the modifier with the uniqueness requirement of the article. Therefore, these cases can receive a uniform analysis with the ones in which AVs have an intensifier reading.

3.3.3 Related notions

Vagueness bears similarities to other phenomena affecting the interpretation of predicates. In this section, I discuss the relation between vagueness and imprecision (section 3.3.3.1), domain widening (section 3.3.3.2), and epistemic modality (section 3.3.3.3) and argue that an analysis of AVs in terms of quantification over possible contexts is more appropriate to account for their type of modification.

3.3.3.1 Imprecision

Imprecision is a type of linguistic uncertainty that shares some properties with vagueness but is distinct from it (Lakoff, 1973; Lewis, 1979; Pinkal, 1995; Lasersohn, 1999; Krifka, 2002, 2007; Kennedy, 2007; Sauerland and Stateva, 2011; van Rooij, 2011). Whereas vagueness has to do with uncertainty about the location of cutoff points, imprecision is related to ignorable deviances from the precise meaning of an expression. For instance, (110a) can describe a statue that is a few centimeters away from the exact center of the square. Similarly, (110b) can be acceptably asserted if Maria actually arrived at 3:02. However, these expressions are, strictly speaking, false in those contexts.

(110) a. La estatua está en el   centro de la   plaza.
   the statue   is   in the center of the square
  b. Maria llegó   a las tres.
   Maria arrived at the three
   'Maria arrived at three o'clock.'

The distinction between vagueness and imprecision is thus based on whether there is a precise concept or definition of an expression. Although some authors have applied the same mechanism to both phenomena (e.g., Lakoff, 1973), most of the literature has argued, based on their different linguistic behavior, for two distinct analyses (Pinkal, 1995; Kennedy, 2007; Sauerland and Stateva, 2011; for specific approaches to imprecision, see Lasersohn, 1999; Krifka, 2002, 2007;

Morzycki, 2011). In this section, I review the arguments for keeping vagueness separated from imprecision and show that AVs do not regulate the latter.

The main difference between vague and imprecise expressions lies in whether the sentences they appear in are technically true or false in a specific context. Imprecise expressions are strictly speaking false (Lasersohn, 1999; see also Lauer, 2012). Even if (110a) is true enough in a loose context, it is literally false. Thus, adding that it is deviated a few centimeters, yields a contradiction (111a). That is not the case for vague expressions. Saying that Paloma is an artist when she is not very original (111b), in the same way that saying that Homer is bald when he has three hairs left, is not false and thus coherent with the continuation in (111c).

(111) a. # Aunque   la   estatua está en el   centro de la   plaza,   está unos
              although the statue is   in the center of the square is   some
              centímetros hacia la   izquierda.
              centimeters to   the left
              'Although the statue is in the center of the square, it is a few centime-
              ters to the left.'

       b. Aunque   Paloma es una artista, no   es muy original.
          although Paloma is a   artist   NEG is very original
          'Although Paloma is an artist, she's not very original.'

       c. Homer is bald, he has, like, three hairs left.   (Lauer, 2012)

A second difference is that imprecise expressions can be made precise whereas vague expressions cannot. That is, the former allow for natural precisifications (Pinkal, 1995; Kennedy, 2007) while the latter do not. It is possible to build a context where *the center of the square* distinguishes between points in the square on the basis of potentially very small differences in position, such that an object that is situated a few centimeters from the center could not be described as being in that position (112a). By contrasts, it seems almost impossible to construct a context for *artist* in which borderline cases are eliminated, by, for instance,

establishing that to be an artist someone has to have exhibited her art at a gallery
(112b).

(112) a. The statue needs to be in the center of the square. Now it is two
          centimeters to the left, so it has to be fixed.

       b. # We need an artist for this project, but Paloma hasn't shown at a
          gallery, so unfortunately she could not do it.

Finally, the amount of imprecision or pragmatic slack available in a context can be
regulated by a variety of expressions (Lakoff, 1973; Lasersohn, 1999; Sauerland
and Stateva, 2011; Anderson, 2013; a.o.). For example, *en sentido estricto* 'strictly
speaking' or *exactamente* 'exactly' require a precise interpretation of the predicate
so that an example like (113a) would not be true if the statue is a few centimeters
to the left. Other slack regulators, such as *aproximadamente* 'approximately' or
más o menos 'more or less, roughly', increase the degree of imprecision allowed
(113b).

(113) a. La estatua está {justo / exactamente} en el   centro de la   plaza.
          the statue is   right   exactly   in the center of the square
          'The statue is {right / exactly} in the center of the square.'

       b. La estatua está {más o menos / aproximadamente} en el   centro
          the statue is   more or less   approximately   in the center
          de la   plaza.
          of the square
          'The statue is {more or less / approximately} in the center of the square.'

Sauerland and Stateva (2011) show that there are distributional differences
between imprecision regulators and vagueness regulators (*scalar* and *epistemic
approximators* in their terms). In Spanish, *exactamente* 'exactly', just like its En-
glish translation, is restricted to regulate imprecision. By contrast, *definitivamente*
'definitely' and *claramente* 'clearly' and their English counterparts are sensitive to
vagueness (see also Barker, 2002).

Observe that expressions that are subject to imprecision (and are not (very) vague) are odd with *definitivamente* (114). The only reading available for (114a) is that, after some discussion, it has been confirmed that the statue was in the center of the square (with the adverb having scope over the whole proposition).[20] Likewise, vague nouns, such as *artista* or *problema*, do not usually combine with imprecision regulators (115). To assert, for instance, that Paloma belongs without doubt to the category *artist*, a vagueness regulator must be used instead (116).

(114) a. # La estatua está definitivamente en el   centro de la   plaza.
                the statue is   definitely   in the center of the square

       b. # Maria llegó   claramente a las tres.
             Maria arrived clearly   at the three
           'Maria clearly arrived at three o'clock.'

(115) a. ?? Paloma es exactamente una artista.
              Paloma is exactly   a   artist
           'Paloma is exactly an artist.'

       b. ?? Esto es aproximadamente un problema.
              this is approximately   a   problem
           'This is approximately a problem.'

(116) Paloma es {definitivamente / claramente} una artista.
       Paloma is definitely   clearly   a   artist
       'Paloma is {definitely / clearly} an artist.'

Adjectives of veracity are not imprecision regulators

Adverbs and adjectives of veracity pattern with vagueness regulators (117). The AV in (117a) does not reduce the slack allowed for what counts as the center of the square. Rather, it entails that some other point was mistakenly considered the center of the square. The contribution of the adverb in (117b) is different from that of an imprecision regulator as well. The sentence may still be true in

---

[20]*Definitivamente* has another reading, 'permanently, for good', which is not relevant here.

a context where Maria arrived at 3:02, but it implies that someone cast doubt about Maria's arrival time (see section 3.5.3).

(117) a. ? La estatua está en el   auténtico centro de la   plaza.
     the statue is   in the authentic center of the square

    'The statue is in the real center of the square.'

  b. Maria verdaderamente llegó   a las tres.
    Maria truly   arrived at the three

   'Maria truly arrived at three o'clock.'

Vagueness and imprecision are not mutually exclusive. However, since they are closely related, the presence of one type of regulator has consequences for the other phenomenon. Although somewhat odd, it is possible to have an AV and a slack regulator, regardless of whether it is a hedge (118a) or it is used to reduce imprecision (118b). That is not that readily available for the combination of two imprecision regulators (119). In particular, (119a) is a contradiction and (119b) sounds redundant.

(118) a. ? En términos generales, Paloma es una verdadera artista.
    in terms   general   Paloma is a   true   artist

    'Loosely speaking, Paloma is a true artist.'

  b. ? En sentido estricto, Paloma es una verdadera artista.
    in sense   strict   Paloma is a   true   artist

   'Strictly speaking, Paloma is a true artist.'

(119) a. # En términos generales, Maria llegó   exactamente a las tres.
    in terms   general   Maria arrived exactly   at the three

    'Loosely speaking, Maria arrived at exactly three o'clock.'

  b. ?? En sentido estricto, Maria llegó   exactamente a las tres.
    in sense   strict,   Maria arrived exactly   at the three

   'Strictly speaking, Maria arrived at exactly three o'clock.'

Besides their distribution, there is a final difference between imprecision regulators and AVs, which is central to my analysis. The reading of nouns with

stereotypical uses in combination with slack regulators is always the literal one (120a), whereas AVs target the figurative or subjective reading (92a). Imprecision is uncertainty based on objective grounds: there is a precise, non-subjective, concept of what a father is and the approximator forces the context to exclude alternatives that where considered close enough to the truth (in a Lasersohn (1999)-like view) or to use a finer level of granularity (in a Krifka (2009)-like approach). Vagueness, on the other hand, interacts with and can be incremented by multidimensionality and subjectivity (see, e.g., Lasersohn, 2005; Sassoon, 2013c; Bylinina, 2014; and section 3.4.2). In fact, it is possible for someone to be strictly speaking an artist (for instance, a painter) but not qualify to be a true artist (if the speaker does not consider her especially artistic) (120b).

(120)   a. Álex es un padre en sentido estricto.
           Álex is a   father in sense   strict

           'Álex is a father in a strict sense.'

        b. En sentido estricto, Paloma es una artista. Pero no   es una verdadera
           in sense   strict   Paloma is a   artist but NEG is a   true
           artista.
           artist

           'Strictly speaking, Paloma is an artist. But she is not a true artist.'

To sum up, vagueness should be keep separated from imprecision. Although the two phenomena are closely related, AVs have been shown to be sensitive to the vagueness of the predicate and not to regulate its imprecision (cf. Masià, 2014). Next section examines the similarities between the analysis proposed above and domain widening.

3.3.3.2   Domain widening

The analysis put forward here bears similarities to domain widening, as understood in Kadmon and Landman (1993). According to their proposal, *any* extends

the interpretation of the predicate along a contextual dimension to add individuals that were previously excluded from the denotation. For instance, (121b) is stronger than (121a) because, by means of *any*, *lawyer* has widened its domain so as to include lawyers that were considered less relevant or less typical in some respect (e.g., trainee lawyers, or non-practicing ones).

(121) a. A lawyer could tell you that.

b. Any lawyer could tell you that.

One possibility is that AVs had the opposite effect as domain wideners, that is, that they restrict the denotation of the noun and exclude some individuals that belonged to it before. Thus, by adding an AV to a sentence like (121a), we would be incorporating restrictions to be considered a lawyer (122), instead of removing them, as in (121b). In this case, only those individuals who have the relevant properties to be considered lawyers are left in the denotation of the noun.

(122) (Only) a true lawyer could tell you that.

This sort of approach has the advantage of connecting to an analysis of so-called privative adjectives like *fake*, which are antonyms of AVs. Partee (2010) argues that these adjectives do not actually entail the negation of the noun property, but rather they are a subtype of subsective adjectives that coerce the denotation of the noun to include fake entities (see also Landman, 2001; cf. Cinque, 2014). In particular, according to Partee, in the absence of *fake*, all referents of the predicate are understood to be real. *Fake* then coerces the denotation of the noun into a looser interpretation so it includes fake entities and thus avoids an empty extension of the *fake* + N combination. In other words, it expands the denotation along a dimension related to authenticity.[21] Therefore, although it seems true

---

[21]This sort of dimension, which *a priori* seems to go against the Maxim of Quality (be truthful, i.e., do not call something a gun if it is not a gun) is also relevant for cases of constitutive material modifiers, such as in *stone lion* or *toy train*, where the meaning shifts from literal to "representation of x" (see Kamp and Partee, 1995; Partee, 2010; Oliver, 2014).

that a fake gun is not a gun, the well-formedness of (123) shows that, by adding a privative adjective, non-true guns are included in the denotation of *gun*.

(123) Is that gun real or fake?

This applies to AVs. Unless guns can be fake, it would be redundant to say that a gun is real. Note, however, that these are literal readings of *real* and *fake* and, consequently, they occur postnominally in Spanish (124).[22]

(124) a. una pistola {falsa / auténtica}
            a   gun   false   authentic
       b. ?? una {falsa / auténtica} pistola
             a   false   authentic gun

          'a {fake / real} gun'

The question is whether an analysis based on domain restriction would capture the intensifying and metalinguistic readings of AVs in prenominal position.[23]

---

[22]For the different processing costs of these modifiers, see Schumacher (2015).

[23]*Falso* 'fake' does appear in prenominal position in Spanish with a non-subsective, privative reading. However, it does not seem to have an attenuating function (the opposite of intensifying) in addition to the metalinguistic one, as *true* does. Example (i) means that her colleagues' behavior is not an instance of heroism, although it may seem so, not that it is a bad example of heroism. The contrast between prenominal and postnominal *fake* is illustrated for Italian in (ii).

  (i) Criticó   el   falso heroísmo de sus compañeros.
       criticized the fake heroism of her colleagues

       'She criticized her colleagues' fake heroism.'

  (ii) a. Un falso quadro ornava la parete.   Italian
          a fake painting adorned the wall

          'A fake painting was adorning the wall.' (= not a real painting; something painted on the wall to resemble a real painting)

       b. Un quadro falso ornava la parete.
          a painting fake adorned the wall

          'A fake painting was adorning the wall.' (= a forged painting)

                                                            (examples from Cinque, 2014)

One of the differences between an approach along these lines and one based on quantification over contexts lies in their quantificational force. Restricting the domain of the predicate can be done to various degrees depending on the number or strength of the restrictions adopted, but universally quantifying over possible contexts adds stricter restrictions (the ones from stricter contexts). The intensified or clear-case reading of AVs picks up an outstanding individual of the category, thus requiring a stronger restriction of the denotation by looking at different context candidates and making the analysis presented here more suitable to derive these readings (see also (98)).

However, the main shortcoming of an account in terms of domain restriction is deriving the metalinguistic use of AVs. In this case, the applicability of the predicate is discussed and the denotation of the predicate is not restricted in any way. Rather, if anything, it is expanded to include the new individual. In order to cover this reading, a second entry for metalinguistic AVs would be needed.

To sum up, although an analysis in terms of domain restriction for AVs has some points in common with the one put forward here, an analysis in terms of quantification over contexts is more adequate to account for the intensifying and the metalinguistic uses of AVs (cf. Masià, 2015).

3.3.3.3 Epistemic modals

Expressions similar to AVs have been analyzed as epistemic operators (Paradis, 2003; McCready and Ogata, 2007; Constantinescu, 2011, 2013; Sauerland and Stateva, 2011). Focusing on English *real* and *true*, Constantinescu (2011, 2013) argues that the contribution of these adnominal modifiers is to emphasize the speaker's commitment to the claim that the properties characteristically associated

with the modified noun undoubtedly apply to the individual in question.[24],[25] This section discusses an epistemic analysis of AVs and argues against it by comparing the ability to be embedded and distribution of AVs and epistemic modals.

The core idea of Constantinescu's (2011; 2013) analysis is that the speaker divides up the domain of the predicate P into those objects that, according to her, undoubtedly have the properties associated with P (*real Ps*) and those that do not. Formally, *x is a real P* is true if, and only if, x is in the positive extension of P in all the speaker's belief worlds (125a–b). According to this view, an object would be a *real car* if it falls into the denotation of *car* in all the worlds consistent with the holder's (usually the speaker's) doxastic alternatives (125c).[26] The intensification is derived from the restriction in the domain. The individuals that are Ns in all the worlds consistent with the speaker's beliefs are those to which the defining properties undoubtedly apply.

(125)   a. $\llbracket real \rrbracket = \lambda P \lambda x \lambda w.(\mathbf{real}(P))(x)$

      b. $\forall w' \in \mathrm{Dox}_{w,holder}[P(x) \text{ in } w']$

      c. $\llbracket real\ car \rrbracket = \lambda x \lambda w.\forall w' \in \mathrm{Dox}_{w,holder}[\mathbf{car}(x) \text{ in } w']$

<div align="right">(Constantinescu, 2013, 195)</div>

A desirable consequence of an epistemic analysis of AVs is that it accounts for the subjectivity they introduce (as discussed below, in section 3.4.2), in as much as the denotation of the predicate is redefined according to the speaker's beliefs. In

---

[24]Constantinescu (2011) refers to the intensifier use of AVs both as *evidential* and *epistemic*, because, by using an AV, the speaker emphasizes that she has good reasons to assert that the individual is N. The connection between epistemic modals and evidentials is still a matter of debate, although there is some evidence that epistemic modals have some evidential component (Dubrig, 2001; von Fintel and Gillies, 2007; Portner, 2009, and references therein). Since the source of information is not encoded in her analysis, I will refer to it as epistemic, rather than evidential.

[25]This connects with a view of vagueness different from the one advocated here, namely epistemic uncertainty (Williamson, 1994). According to this theory, vague predicates are in fact sharp, with clear boundaries between their positive and negative extensions, but that limit is not epistemically accessible. In other words, vagueness is ignorance about what determines the extension of a predicate (for a review and criticism, cf. Fara, 2000; Kennedy, 2012a).

[26]Constantinescu (2013) refers to the *holder*'s beliefs because *real* can be embedded and accepts shifts of perspective.

other words, the characteristics associated with the noun used for categorization are based on the speaker's view of what counts as an N (Constantinescu, 2013). Relativizing the denotation of the noun to an individual's opinion would account for the subjective behavior of *AV + N* regarding faultless disagreement and embeddability under subjective attitude verbs (see section 3.4.2.1).[27]

However, equating AVs with epistemic modals predicts that they behave alike. Yet, two facts set AVs and epistemic modals apart, namely their behavior with respect to being embedded in some environments and their distribution (for Hebrew *mamaš* 'really', see McNabb, 2013).

Subjective epistemic modals, which are taken to rely on the speaker's personal and subjective evidence, are restricted in some embedding environments.[28] In particular, it has been claimed that they cannot occur in the antecedent of a conditional (126a) or in the complement of factive verbs (126b) or verbs of telling (126c) (cf. Papafragou, 2006; Stephenson, 2007; von Fintel and Gillies, 2007; Hacquard and Wellwood, 2012).

(126) a. ? If Max may be lonely, his wife will be worried.

   b. ? It is surprising that Superman must be jealous of Lois.

   c. ? Spiderman told me that Superman must be jealous of Lois.

(examples from Papafragou, 2006)

Regarding antecedents of conditionals and factive predicates, there is a difference in the acceptability of Spanish epistemic adjectives such as *probable* 'probable',

---

[27]Despite the similarities in behavior of epistemic modals and predicates of personal taste in attitude reports and disagreement (i.e., in their judge dependence), there are some fundamental differences between them (see Stephenson, 2007; Bouchard, 2012, §II.3.2). I leave the comparison between the subjectivity of AVs and epistemic modals for future work, but see section 3.4.2 for discussion on the subjectivity of AVs.

[28]Objective epistemic modals, which rely on more objective grounds, are not subject to this restriction. It is still controversial whether, and why, the resistance to be embedded correlates with the subjective/objective distinction (see Lyons, 1977; Papafragou, 2006; Portner, 2009; von Fintel and Gillies, 2007; Hacquard and Wellwood, 2012; Anand and Hacquard, 2013, and references therein), but it has been taken as an argument in favor of subjective epistemic modals lacking truth-conditional content (see, e.g., Lyons, 1977; Palmer, 2001).

posible 'possible', and *seguro* 'certain, definite' and AVs. Examples in (127) illustrate that epistemic adjectives, just as epistemic modals in English (126), are degraded in Spanish in the antecedent of a conditional (127a) and in the complement clause of a factive predicate (127b). On the contrary, AVs are acceptable in these environments (128) (see also McNabb, 2013).

(127) a. ?? Si el   niño tiene un {posible   / probable / seguro}   problema de
              if the child has   a   possible   probable   certain   problem of
              atención, debería   ver   a   un especialista.
              attention, should.COND.3SG see.INF DOM a   specialist

              'If the child has a {possible / probable / definite} attention problem,
              he should see a medical specialist.'

       b. ?? Es sorprendente que el   niño tenga   un {posible   / probable /
              is surprising   that the child has.SBJV a   possible   probable
              seguro}   problema de atención.
              certain   problem of attention

              'It is surprising that the child has a {possible / probable / definite}
              attention problem.'

(128) a. Si el   niño tiene un {verdadero / auténtico} problema de atención,
             if the child has   a   true   authentic problem of attention,
             debería   ver   a   un especialista.
             should.COND.3SG see.INF DOM a   specialist

             'If the child has a {true / real} attention problem, he should see a
             medical specialist.'

       b. Es sorprendente que el   niño tenga   un {verdadero / auténtico}
            is surprising   that the child has.SBJV a   true   authentic
            problema de atención.
            problem   of attention

            'It is surprising that the child has a {true / real} attention problem.'

As for the distribution of epistemic modals in the complement of attitude verbs, Anand and Hacquard (2013) show, through a survey conducted in three Romance languages, that it is not uniform: epistemics (*must*, *might*, and *probable*) are

markedly degraded in the complement of desideratives and directives in Italian, French, and Spanish (129).[29]

(129) a. # Lluís {quiere / ha exigido}   que Vanessa deba de   haber conocido
              Lluís wants   has demanded that Vanessa must.SBJV have known
              a   su asesino.
              DOM her killer

              'Lluís {wants / demanded} that Vanessa must have known her killer.'

       b. # Lluís {quiere / ha exigido}   que sea   probable que Vanessa
              Lluís wants   has demanded that is.SBJV probable that Vanessa
              haya   conocido a   su asesino.
              has.SBJV known   DOM her killer

              'Lluís {wants / demanded} that it is probable that Vanessa knew her killer.'

In these examples, the epistemic adjective *probable* takes a propositional complement. The test can be replicated with the epistemic modal adjectives in attributive position.[30] Examples in (130) show that, whereas *probable* and *seguro* do not occur in the complement of desideratives and directives, AVs are licensed in these contexts (131).

(130) a. Lluís quiere que su película sea   un {??probable / ?seguro} éxito
              Lluís wants that his movie   is.SBJV a   probable   certain success
              de crítica.
              of critique

              'Lluís wants his film to be {probably / definitely} acclaimed by critics.'

---

[29]Anand and Hacquard (2013) only provide French examples. I have reconstructed the Spanish versions in (129).

[30]Recall that AVs, unlike modal adjectives (i), do not take propositional complements in the relevant reading (see (94a) in section 3.3.1).

  (i) Es {probable / posible} que la película sea   un éxito de crítica.
       is probable   posible that the movie   is.SBJV a success of critique

       'It is {probable / possible} that the movie will be a success among the critics.'

b. Lluís ha   exigido   que Vanessa sea   una {??probable / ??segura}
   Lluís has demanded that Vanessa is.SBJV a   probable   certain
   competidora para el puesto de presidente.
   competitor   for the position of president

   'Lluís demanded that Vanessa is a {probable / definite} competitor for

   the president's position.'

(131) a. Lluís quiere que su película sea   un auténtico éxito   de crítica.
         Lluís wants that his movie   is.SBJV a authentic success of critique

         'Lluís wants his film to be really acclaimed by critics.'

     b. Lluís ha   exigido   que Vanessa sea   una verdadera competidora
        Lluís has demanded that Vanessa is.SBJV a   true   competitor
        para el puesto de presidente.
        for   the position of president

        'Lluís demanded that Vanessa is a true competitor for the president's

        position.'

To sum up, epistemic adjectives and AVs behave differently with respect to their embeddability in some environments. In particular, the former are degraded to different degrees in the antecedent of conditionals, under factive predicates, and in the complement of attitude verbs, whereas the latter are acceptable in all those contexts.

A second problem for an analysis of AVs as epistemic modals in Constantinescu's (2011; 2013) terms is their distribution. In her analysis, an individual is a *real P* if it is a *P* in all the worlds compatible with the speaker's beliefs. If this is so, it would be expected that AVs do not show any restriction in their distribution, as any predicate would be able to be relativized to the speaker's doxastic alternatives. However, AVs do not usually occur with natural category and concrete nouns (see (88)). This contrasts with the behavior of epistemic modal adjectives. In (132a), the object seen in the sky is described as a possible bird, that is, the speaker is not sure whether it is a bird or not but it being a bird is consistent with her knowledge and beliefs at the time. In a situation where the speaker were sure that it is a bird, and moreover she thought that it is a particularly clear case of a bird, the

sentence in (132b), including an AV, would not be felicitous. The same applies to examples in (133), about pre-Hispanic remains found in Peru.

(132) a. Minuto 0:52 – un extraño objeto hace   aparición   en lo   que se
           minute 0:52 – a   strange object makes appearance in the that IMPRS
           describe   como un posible   pájaro.[31]
           describes as   a   possible bird

           'Minute 0:52 – a strange object appears, which is described as a possible
           bird.'

       b. # Minuto 0:52 – un extraño objeto hace   aparición   en lo   que
             minute 0:52 – a   strange object makes appearance in the what
           se   describe   como un auténtico pájaro.
           IMPRS describes as   a   authentic bird

           'Minute 0:52 – a strange object appears, which is described as a real
           bird.'

(133) a. Hay   una probable mesa de sacrificio, dos columnas de forma
           there.is a   probable table of sacrifice, two columns of shape
           romboidal y   hasta un canal que desemboca en una pequeña
           rhomboidal and even a   canal that flows-into in a   small
           poza.[32]
           pool

           'There is a probable sacrifice table, two rhomboidal columns and even
           a canal that flows into a small pool.'

       b. # Hay   una verdadera mesa de sacrificio, dos columnas de forma
             there.is a   true   table of sacrifice, two columns of shape
           romboidal y   hasta un canal que desemboca en una pequeña
           rhomboidal and even a   canal that flows-into in a   small
           poza.
           pool

           'There is a true sacrifice table, two rhomboidal columns and even a
           canal that flows into a small pool.'

---

[31]http://ultimosavistamientosextraterrestres.blogspot.com.es/2014/04/enjambre-ovni-grabado-en-la-luna-desde.html
[32]http://www.rumbosdelperu.com/hallan-ciudad-prehispanica-subterranea-en-ayacucho-V547.html

An additional fact that seems to contravene an epistemic analysis of AVs is their
co-occurrence with modal adjectives. Although not very common, it is possible to
have an epistemic adjective and an AV modifying a noun attributively, in any order
(134). For instance, if AVs were epistemic modifiers, it would be contradictory to
have two modifiers contributing respectively that something is a love story in all
and in some worlds compatible with the speaker's belief, as in (134a).

(134) a. La   historia del   otro lado de la   infidelidad, que da   paso a una
           the story   of.the other side of the infidelity   that gives step to a
           posible verdadera historia de amor [...].[33]
           possible true   story   of love
           'The story of the other side of the infidelity, that yields to a possible
           true love story [...].'

       b. Veían   en [el   comunismo] una auténtica posible alternativa al
           saw.3PL in the communism a   authentic possible alternative to.the
           capitalismo.[34]
           capitalism
           'They saw [in communism] a real possible alternative to capitalism.'

Finally, another fact that sets epistemic modals and AVs apart is that the former
are gradable, as shown by the fact that they accept degree modifiers (135a) (for
English, see, e.g., Lassiter, 2011; Klecha, 2014). By contrast, degree modification
of AVs is not acceptable under the relevant reading (135b).

(135) a. El   Manchester United solo será   desplazado por una {poco / muy}
           the Manchester United only is.FUT ousted   by a   little   very
           posible goleada   del   Bayern de Múnich.
           possible hammering of.the Bayern of Munich
           Manchester United will only be ousted by a {not very / very} possible
           hammering of Bayern Munich.'

---

    b. El Manchester United solo será   desplazado por una {*poco / *muy}
       the Manchester United only is.FUT ousted   by a   little   very
       verdadera goleada   del   Bayern de Múnich.
       true   hammering of.the Bayern of Munich

       'Manchester United will only be ousted by a {not very / very} true
       hammering by Bayern Munich.'

In sum, AVs do not possess the properties of run-of-the-mill epistemic modals. Hence, an epistemic analysis of these modifiers, although able to account for their subjectivity, cannot be sustained.

3.3.4   Summary

This section has dealt with vagueness in the modification performed by AVs. It has been argued that AVs have an effect on the uncertainty about the application of a predicate by affecting the contextual parameters related its interpretation. In the case of nouns, vagueness is related to category membership, and indirectly to typicality and subjectivity, which are the topics of the next section. Specifically, AVs have been analyzed as universal quantifiers over possible contexts.

The different readings AVs receive in prenominal position in Spanish are derived from their semantics. Depending on whether the noun is vague or sharp, the effect is intensification or reinforcement of category membership. In the former case, AVs pick up an individual that is in the extension of the noun even in the strictest contexts, i.e., an outstanding individual. In the latter, in metalinguistic contexts, AVs assert that the individual is in the denotation in all contexts, and thus the predicate must apply to it. Finally, the apparent literal readings with the definite article and some relational nouns is an effect of the interaction of the semantics of AVs and the uniqueness requirement of the definite determiner.

Three phenomena related to vagueness have been discussed. First, imprecision has been argued to be different from vagueness, and AVs have been shown to

be regulators of the latter, but not the former. Second, domain widening and quantification over contexts have some properties in common. However, although an analysis in terms of domain widening would connect AVs to the analysis of privative adjectives, it is not able to account for the metalinguistic reading of these modifiers. Third, AVs' modification bears similarities to that of epistemic modals regarding the role of the speaker, but it has been shown that AVs and epistemic adjectives have too different properties to justify a unified analysis.

The intensification reading of AVs has been argued to be a consequence of their semantics and an ordering in the denotation of the noun. Next section is devoted to this ordering, typicality, and its interaction with vagueness and subjectivity. It ends with a discussion about conceptual gradability.

3.4 Typicality

It is an established fact in cognitive psychology that speakers consider certain entities better examples of categories than others (Rosch, 1973; Rosch et al., 1976; Rips et al., 1973; Armstrong et al., 1983; a.o.). This is known as *typicality effects*. For instance, a robin is usually judged as a better example of a bird than a penguin, or a painter is seen as more representative of artists than a designer. In addition to affecting a number of psychological processes such as categorization and learning (for an overview, see Murphy, 2002, §2-5; Sassoon, 2013c, §2.2), typicality effects have purely linguistic manifestations. Examples of these are degree constructions such as the ones in (136). The metalinguistic comparison in (136a) asserts that a particular object is a better example of a chair than of a table (see McCawley, 1988; Giannakidou and Stavrou, 2009; Morzycki, 2011; a.o.) and (136b) is used to set the level to which Paloma qualifies as an artist.

(136) a. This is more a chair than a table.

      b. Paloma is {pretty much / almost} an artist.

Typicality effects also affect the acceptability of some reinforcements and hedges (137) (Lakoff, 1973; Sassoon, 2013c). For instance, *par excellence* requires the individual be a typical member of the category (137a), and *loosely speaking* that it be close to the category but not a member of it (137b).

(137) a. A {robin / ??penguin} is a bird par excellence.

b. Loosely speaking, a {tomato / ??carrot} is a vegetable.

From this perspective, entities in the denotations of a noun are ordered with respect to their resemblance to the prototype or best example of the category. In this sense, most nouns are gradable. This section examines how this scalarity in the conceptual structure of nouns interacts with vagueness in the modification performed by AVs. I show that typicality plays a role in AVs' modification of nouns in as much as the referent of *AV N* in the intensification reading has to be in the higher end of the ordering of individuals in the denotation of the noun (section 3.4.1). Two qualifications are in order and are discussed in this section. First, typicality is to be understood in a broad sense, as an ordering with respect to representativeness of the category (how good examples of the category the individuals are). Many factors influence this order, such as similarity to the prototype, but also stereotypes and subjectivity, and it does not require having an actual prototype (sections 3.4.1.1 and 3.4.1.2). Subjectivity is explored in more detail in section 3.4.2. Second, this ordering is conceptual and it is not grammatically represented (section 3.4.3).

3.4.1   Typicality and vagueness

Typicality and vagueness are related notions, but cannot be equated (Armstrong et al., 1983; Osherson and Smith, 1981; Kamp and Partee, 1995; cf. Hampton, 2007; for discussion and a proposal that connects the two, see Sassoon, 2013c, §3-4, §7.2.3). The existence of a prototype does not correspond with fuzzy boundaries, although it seems that, for nominal concepts, graded membership very

often correlates with typicality. This said, at least for some concepts, resemblance to the prototype does determine membership.[35]

A typology of nominal concepts based on these observations is provided in table 3.1 (cf. Kamp and Partee, 1995; Sassoon, 2013c; de Vries, 2010). First, there are nouns with a clear prototype, such as *bird*, for which categorization under them is not a matter of degree (a penguin is as much a bird as a robin). Second, some sharp nouns, such as mathematical concepts, do not seem to have a prototype. As for vague nominal concepts, they tend to have a prototype, which provides an ordering in the extension and, thus, the graded membership. For instance, there is a more or less clear image of what a prototypical artist would look like (a painter who has her studio in an attic in Paris) and whether someone qualifies as such is a matter of degree. Nouns like *heap* and *crowd* are clearly vague (in fact, they are the classical examples of vague nouns and form Sorites series very easily, see (90)). I have included them as members of the category of vague nouns without a prototype because they seem to be unidimensional, and not have a representative member (how many grains of sand does the prototypical heap have? how many people constitute a typical crowd?), although, admittedly, they may show typicality effects in some contexts (the typical crowd in a Justin Bieber concert is rather different from that in a Bob Dylan one, but here we are introducing dimensions other than 'number of people').[36]

	HAS A PROTOTYPE	NO PROTOTYPE
VAGUE	*artist* *problem*	*(heap)* *(crowd)*
NOT VAGUE	*bird* *table*	*not a cat* *plain geometry figure*

TABLE 3.1: Types of concepts based on their typicality and vagueness

---

[35]This connects with Wittgenstein's (1953) observation that most natural language concepts cannot be defined in terms of necessary and sufficient conditions, but of patterns of family resemblances.

[36]These nouns are the closest to dimensional adjectives because they seem to be unidimensional (number of grains, number of people) and objective. In fact, for vague concepts without a prototype, Kamp and Partee (1995) cite *tall* and *heavy*, which are dimensional adjectives.

Prototype is understood here in the classic sense of the best exemplar of a category based on similarity to other members (e.g., Rosch and Mervis, 1975). However, whether there exist concepts without a prototype is an issue more having to do with an ongoing debate about the structure of concepts than with cognitive reality (for discussion and an overview, see, e.g., Murphy, 2002). As mentioned above, typicality effects (i.e., the fact that certain entities are better exemplars than others of the category they belong to) are pervasive, even for concepts without a clear prototype. Common examples of such concepts in the psychology literature are complex concepts built up by Boolean operators, such as *not a cat*, and mathematical concepts (see, e.g., Fodor, 1981; Fodor and Lepore, 1996; Hampton and Jönsson, 2012).

As for the former, there is certainly not a representative of the category non-cat, because there is nothing that non-cats have in common with each other, apart from not being a cat. But this is not the same as to deny that this category shows typicality effects: a chair is a better member of non-cats than a dog (Fodor, 1998, 101). As for mathematical concepts such as *prime number* or *plain geometry figure*, they do not seem to be represented as prototypes (Hampton and Jönsson, 2012), but, as Armstrong et al. (1983) demonstrated, subjects still feel that a square is a better example of the latter than a trapezoid.

For this reason, I understand typicality effects as the ordering in the denotation of the noun with respect to exemplariness, being the best exemplar the most representative individual. As will become clear below (section 3.4.1.2), many factors other than similarity between instantiations help calculating the best exemplar. Before that, in the next section, I show that AVs are not sensitive to whether the category referred to by the noun has a prototype or not. Again, this does not mean that typicality effects do not play a role in the modification by AVs.

3.4.1.1   Adjectives of veracity are not typicality modifiers

In some cases, the individual denoted by a noun in combination with an AV seems
to be a prototypical exemplar. For example, the adventure referred to in (138)
appears to have involved challenges, exoticism, and danger, the prototypical
characteristics associated with adventures. An analysis of AVs in terms of pro-
totypicality would mean that they return an individual that is close to the best
exemplar of the category denoted by the noun. This section reviews one analysis
in this line (Morzycki, 2012b), and argues against it based on distributional facts.

(138) Vivieron una auténtica aventura   en Zambia.
       lived.3PL a   authentic adventure in Zambia
       'They had a real adventure in Zambia.'

Morzycki (2012b) proposes that English *real* and *true* manipulate scales of pro-
totypicality. In particular, an individual would be a *real N* if it is sufficiently
similar to the prototype for the category denoted by N. This is built as a function
prototype that maps a noun's denotation to its most prototypical exemplar, and
two context-sensitive functions, $\textbf{similar}_c$ and $\textbf{large}_c$, that measure the distance
between an entity and the prototype of the category (139a). The intensification
reading derives from manipulating degrees of similarity to the prototype, which
are provided by the $\textbf{similar}_c$ function and not by the noun itself. For instance,
a real sportscar would be an object that is a sportscar and it is largely similar
to the prototype for sportscars in a particular context (139b). An advantage of
this is that it dispenses with postulating degree arguments as part of the internal
structure of nouns (see section 3.4.3; cf. Morzycki, 2009; section 4.5).

(139) a. $[\![real]\!]^c = \lambda f_{<e,t>} \lambda x. f(x) \wedge \textbf{large}_c(\textbf{similar}_c(x, \textbf{prototype}(f)))$

       b. $[\![real\ sportscar]\!]^c = \lambda x.\textbf{sportscar}(x) \wedge$
           $\wedge\ \textbf{large}_c(\textbf{similar}_c(x, \textbf{prototype}(\textbf{sportscar})))$

                                                                    (Morzycki, 2012b, 191)

A prediction of this analysis is that AVs may combine with any noun, as long as it has a prototype. Morzycki (2012b) provides examples such as *male nurse* or *resident*, based on Kamp and Partee's (1995) classification, which are not compatible with AVs (140).

(140) Floyd is a real {??male nurse / #resident}.   (Morzycki, 2012b)

As mentioned above, the most likely candidates for not having a clear prototype are nouns denoting complex concepts built up by Boolean operators, such as *not a cat*, and mathematical concepts (Fodor, 1981; Fodor and Lepore, 1996; Hampton and Jönsson, 2012; a.o.).[37] AVs combine with concepts formed using Boolean operators such as non-smoker or non-news as well (141), even if its not clear what the prototype for those categories would be. By contrast, mathematical concepts do not occur with AVs (142). But, given that these are definitional concepts and, as such, not vague, this is expected (see section 3.3).

(141) a. Become a true non-smoker (not just a smoker who is courageously
            resisting cigarettes).[38]

---

[37]Nevertheless, recall that these concepts do show typicality effects, as can be seen by their combination with typicality modifiers, such as *typical* (ia) (Sassoon, 2013c). This adjective is also acceptable with *male nurse* or *resident* (ib–ic).

  (i) a. ...pretty much typical of a non-fan, non-entertainment, smart, upmarket British paper.
            [http://m.whedonesque.com/comments/5280, cited by Sassoon (2013c)]
      b. Vestía   como un típico   enfermero.
         dressed as   a typical nurse.M
         'He dressed like a typical male nurse.'
                                      [http://www.potterfics.com/historias/185747/capitulo-14]
      c. El Dr. Hannibal Lecter no   es el típico   residente de un centro psiquiátrico.
         the Dr Hannibal Lecter NEG is the typical resident   of a   center psychiatric
         'Dr. Hannibal Lecter is not the typical resident of a psychiatric institution.'
                                      [www.conectate.com.do/articulo/mejores-villanos-del-cine/]

[38]http://mobilehypnosis.co/become-a-true-non-smoker-quit-smoking-for-good/

    b. Lo   de Kaliningrado, desde un principio, ha   sido una auténtica
       the of Kaliningrad   since a   beginning has been a   authentic
       no-noticia.[39]
       non-news

       'From the beginning, that information about Kaliningrad has been real
       non-news.'

(142) a. * El   7 es un verdadero número primo.
       the 7 is a   true   number prime

       '7 is a true prime number.'

    b. * Ha dibujado una auténtica figura geométrica.
       has drawn   a   authentic figure geometric

       'She has drawn a real geometry figure.'

As for vague nouns without clear prototypes, such as *pila* 'heap, pile' or *multitud*
'crowd', AVs are also acceptable with them. The resulting reading is not related
to prototypicality as much as reinforcing category membership. For instance,
in (143a), the pile of books deserves to be referred to as a *pile* (in fact, the
text is illustrated by a picture showing a stack of 16 books) rather than being
representative of the category. The same applies to (143b).

(143) a. Tengo   una pila (una auténtica pila) de libros a medio leer, en una
       have.1SG a   pile a   authentic pile of books to half   read in a
       cantidad tal   que hasta a mí me   está pareciendo exagerada.[40]
       amount   such that even to me DAT.1SG is   seeming   excessive
       'I have a pile (a real pile) of books read halfway, in an amount that
       seems excessive even to me.'

---

[39]http://blog.rtve.es/desderusia/2009/09/de-escudos-militares-y-payasos-espaciales.html
[40]http://viejossonlostrapos.blogspot.com.es/2012/01/no-creas-que-no-estoy-haciendo-nada.html

b. El   domingo 22 una verdadera multitud, calculada en más de   un
   the Sunday 22 a   true   crowd   estimated in more than a
   millón de personas, colmó   las calles de Madrid.[41]
   million of people   overfilled the streets of Madrid
   'On Sunday 22, a true crowd, including an estimated over 1 million
   people, filled the streets of Madrid.'

The opposite case is that of nouns denoting concepts with a prototype, which
AVs would be predicted to appear with by an approach in terms of typicality
modification. One particularly relevant case is that of nouns denoting natural
kinds such as *bird* or *vegetable*. These nouns usually have a clear prototype, in
the sense that subjects agree with one another to a high rate on which are the
best examples of the categories denoted by them.[42] However, AVs do not usually
occur with natural category nouns (144) (see also (88a–b)). For example, (144a)
is not acceptable to convey that what there is in the garden is a prototypical bird,
such as a robin or a sparrow.

(144) a. * Hay   un verdadero pájaro en el   jardín.
              there.is a   true   bird   in the garden
              'There is a true bird in the garden.'
       b. * Cogimos   auténticas verduras.
              picked.1PL authentic   vegetables
              'We picked real vegetable.'

Moreover, when AVs occur with natural category nouns, the expression fails to
pick up a prototypical instance of the category. Recall example (91a), adapted
here as (145a), which is used to discuss the categorization of two types of Jurassic

---

[41]http://crdelcomunismorevolucionario.blogspot.com.es/2014/03/espana-marcho-contra-el-
ajustazo.html
[42]For instance, Rosch (1975) carried out an experiment in which participants were asked to rate the
extent to which each instance of a category represented their idea of the meaning of the category
term. In a 7-point scale, where 1 means that the exemplar is a very good example, *robin* obtained a
mean score of 1.02 for the category *bird*, and *carrot* scored 1.15 for *vegetable* (for details, see Rosch,
1975).

animals as birds, despite the fact that the animals are actually not prototypical birds. The same applies to (145b), which includes three particular species of mushrooms in the category of vegetable, even though mushrooms are far from being prototypical vegetables.

(145) a. El   Archaeopteryx y   el Archaeornis no   son animales intermedios,
           The Archaeopteryx and the Archaeornis NEG are animals   intermediate
           sino auténticas aves.
           but authentic birds.

           'Archaeopteryx and Archaeornis are not transitional animals, but true birds.'

       b. Las setas   son más   un condimento sabroso y   delicado que
          the mushrooms are more a   condiment   tasty   and delicate than
          una auténtica verdura,   salvo los ceps, los rebozuelos y   los
          a   authentic vegetable, except the porcini the chanterelle and the
          champiñones, que pueden constituir una guarnición o un plato por
          portobello   that can.3PL constitute a   garnish   or a dish by
          sí   mismos.[43]
          self only

          'Mushrooms are more a tasty and delicate condiment than a real vegetable, except for porcini, chanterelle, and portobello mushrooms, which may constitute a garnish or a main course by themselves.'

The fact that nouns modified by AVs do not refer to a prototypical instance of the category can be observed with other nouns as well. For example, in (146a) saying that Paloma is a true artist is felicitous, even if she is not a prototypical one (e.g., a painter who has her studio in an attic in Paris), but someone who crochets beautiful accessories. This can be made explicit by using the adjective *prototípico* 'prototypical' (146b).

---

[43] http://mi-partida.blogspot.com.es/2008/03/las-setas.html

(146) a. Paloma es una verdadera artista: hace   unas flores   de ganchillo
          Paloma is a   true   artist   makes a.PL flowers of crochet
          preciosas.
          beautiful
          'Paloma is a true artist — she makes beautiful crochet flowers.'

     b. Paloma es una verdadera artista, pero no   es una artista prototípica.
          Paloma is a   true   artist but NEG is a   artist prototypical
          'Paloma is a true artist, but not a prototypical one.'

To sum up, this section has shown that an analysis in terms of typicality modifica-
tion for AVs does not cover all the data. First, they combine with nouns that have
been argued not to have a prototype. Second, they seldom occur with nouns that
have clear prototypes. When they do, however, they are used for categorization
purposes, rather than for referring to a prototypical exemplar. Nevertheless,
typicality effects play a role in the modification performed by AVs, especially in
their intensifying reading. That is the focus of next section.

3.4.1.2   Determining the best exemplar: prototypes, stereotypes, and sub-jectivity

So far, it has been argued that the intensification reading of AVs is a consequence
of universal quantification over possible contexts together with an ordering in the
denotation of the noun with respect to representativeness of the category. Last
section was devoted to show that AVs do not pick up one of the individuals closest
to the prototype of the category, in the classic sense. In what follows, I discuss
the factors that determine the calculation of the best exemplar and the ordering
that gives rise to typicality effects, namely prototypicality, stereotypicality, and
subjectivity.

A prototype can be understood as an entity that qualifies as the best exemplar
in a category on the basis of comparison or similarity to other members (Rosch,
1975; Osherson and Smith, 1981; Kamp and Partee, 1995; a.o.). However, in the

determination of the best exemplar of a category, similarity to other members or representativity is not the only factor. For instance, Barsalou (1985) cites down jacket as the best example of the category *clothes to wear in the snow*, not based on similarity to other members, but on goal-oriented dimensions (such as how warm they keep people).

Stereotypes, conventional beliefs about a group of individuals, also have to do with organization of knowledge and being salient within a category, but from a social or cultural perspective (see Putnam, 1975; Hamilton, 1981; Macrae et al., 1996; Schneiden, 2004; and references therein. For the differences between prototypes and stereotypes see, e.g., Verkuyl, 2000; Geeraerts, 2008). For this reason, they are tightly linked to a community of speakers and in constant change. Stereotypes have also been argued to have a linguistic effect, especially in the interpretation of kind referring expressions (Carlson, 1977; Dayal, 2003; Espinal and McNally, 2011; Aguilar Guevara, 2014). Although they are not sufficient to adequately characterize the category as a whole (Kamp and Partee, 1995; Geeraerts, 2008), they serve to identify the best exemplar, or the clearest case, in some contexts.

The set of properties or dimensions associated with a predicate that contribute to calculate the ordering of individuals in the denotation, and the denotation itself is also subject to individual and cultural variation. Dimensions can be objective or subjective, and the weight assigned to each of them can be influenced by context, culture, and even, individual differences (see, e.g., McCready and Ogata, 2007; for a explicit model of how standards of predicates are calculated based on dimensions, see Sassoon, 2013b,c).[44] For example, what someone considers typical of teachers, or even expected of them, varies across contexts and individuals (see, e.g., the faultless disagreement that arises from asserting that someone is a *real teacher* in example (156)).

---

[44]In fact, Lynch et al. (2000) found that the relevant dimensions for determining the goodness of an example of in a natural kind category (for trees) are related to familiarity for novices, but to ideals for experts.

AVs target the stereotypical, figurative sense of some otherwise sharp nouns such as *pájaro* 'bird' or *payaso* 'clown' (147).[45] For these senses, categorization is based on subjective dimensions and membership is graded. In other words, these senses are vague.[46]

(147) a. Juan es un auténtico pájaro.
          Juan is a   authentic bird

          Lit. 'Juan is a real bird.' (=he's wily)

---

[45]By *figurative sense* I mean the reading of some nouns based on the stereotypical dimensions associated with them, rather than on their objective criteria for category membership. For instance, Spanish *pájaro* lit. 'bird' has a figurative reading 'sneaky, wily', which takes into account the stereotypical features associated with birds. The individual of which the figurative reading is predicated usually does not belong to the category. For instance, example (ia) does not entail that Juan is an actual bird. The two readings are different, as shown by the oddness of anaphoric *también* 'too' (ib) (see Verkuyl, 2000).

  (i) a. Juan es un pájaro.
          Juan is a   bird

          'Juan is wily.'

       b. # Piolín es un pájaro y   Juan también.
            Tweety is a   bird   and Juan too

[46]Bolinger (1972) mentions that, in contrast to English *real*, *true* requires that the entity already belong to the category and thus does not "embrace metaphorical extensions" (see also Constantinescu, 2011, §4.4). For example, (ia) presupposes that he is actually a lawyer, while (ib) does not. A similar opposition is reported for Japanese *rashii*, and *mitai* and *yoo* by McCready and Ogata (2007). As far as I can tell, this contrast does not apply to Spanish AVs, and both *verdadero* and *auténtico* accept figurative interpretations (ii).

  (i) a. He is a true lawyer, a credit to his profession.

       b. He is a real lawyer [actually he may be just a student], the way he goes about proving his case.

                                                        (examples from Bolinger, 1972)

  (ii) a. Juan es un {auténtico / verdadero} payaso.
          Juan is a   authentic   true   clown

       b. Su   casa es un {auténtico / verdadero} palacio (pero no es un palacio de verdad).
          their house is a   authentic   true   palace but not is a palace of truth

          'Their house is a real palace, but it's not an actual palace.'

    b. Juan es un verdadero payaso.
       Juan is a   true   clown
       'Juan is a real clown' (=he's playful, silly)

Some authors have argued that the figurative interpretations of these nouns are to be analyzed as gradable properties (Bolinger, 1972; Matushansky and Spector, 2005; Espinal, 2013; cf. Constantinescu, 2011; Sassoon, 2017b).[47] In fact, some of them are acceptable with degree modifiers in Spanish and Catalan (148) (see also the discussion around (363) in section 4.5.2.1). The same extension of the meaning based on stereotypical features can be observed in the coercion of ethnic adjective (relational) into gradable properties by means of *muy* 'very' (149a) (see, e.g., Bosque, 1989, §5). Note that the stereotypical interpretation is also achieved by adding an AV to the ethnic noun (92b), repeated here as (149b).

(148) a. Juan es muy pájaro
       Juan is very bird

       Lit. 'Juan is very bird.' (=he's very wily)

    b. És molt pallaso.   Catalan
       is very clown

       'He behaves very much like a clown.'   (Espinal, 2013)

(149) a. Irene es muy francesa.
       Irene is very French

    b. Irene es una auténtica francesa.
       Irene is a   authentic French.woman

       'Irene is a real French woman.'

In short, members of a category are ordered with respect to how representative they are; that is, categories have a graded structure. This ordering is important for

---

[47]Note that some of these nouns (profession nouns (*payaso* 'clown', *artista* 'artist'), nationality nouns (*francesa* 'French woman'), etc.) appear bare in argument position when they have their literal, objective, sharp meanings. The figurative, stereotypical interpretations are only possible if a determiner is present. The presence of modification (when it is not at kind level, see McNally and Boleda, 2004), triggers insertion of the determiner. For different proposals regarding the role of the indefinite article, see Déprez (2005); Matushansky and Spector (2005); Munn and Schmitt (2005); de Swart et al. (2007); Zamparelli (2008). See also section 4.5.2, page 242.

the intensification reading of AVs, in as much as it helps define a clear case of the category. In order to determine the best exemplar, different types of dimensions factor in. In particular, we have seen that not only typical, but also social, cultural, and ideal dimensions (which can be speaker-dependent) have an impact in the ordering. Two properties have been singled out as influencing the figurative, vague, interpretations of predicates often targeted by AVs: speaker dependence, or subjectivity, and gradability. I explore the interaction between the two and the modification by AVs in turn in the following two sections.

3.4.2   Subjectivity

Subjective predicates are those for which their truth is relativized to the perspective of a judge. Grammar is sensitive to this feature, for instance, as shown below, in the subjectivity restriction on the complement of some attitude verbs. The discussion about subjectivity in the literature has mainly focused on adjectives, concretely on predicates of personal taste such as *tasty* or *fun* (Lasersohn, 2005, 2009; Stephenson, 2007; Stojanovic, 2007; Bylinina, 2014; Kennedy, 2013, 2016; Gutzmann, 2016; a.o.). This section deals with the subjectivity involved in modification by AVs as a way to explore subjectivity in the nominal domain. First, section 3.4.2.1 shows that AVs target the subjective dimensions of the noun and that most combinations of a noun and an AV pass the diagnostics for subjective predicates. Then, I discuss the source of subjectivity in the case of nouns, specifically, when they are modified by AVs, in section 3.4.2.2.

3.4.2.1   Adjectives of veracity target the subjective dimensions of the noun

Faultlessness in disagreement and embeddability under subjective attitude verbs are two of the tests provided in the literature for subjectivity. In this section, the tests are applied to nouns modified by AVs. I show that adding an AV turns the expression into a subjective predicate, with some restrictions. Namely, the noun has to be associated with some subjective dimensions and AVs need to be

in prenominal position, arguing thus against AVs being subjective expressions themselves.

Faultless disagreement

Subjective predicates are involved in statements whose truth is more a matter of opinion than a matter of fact. In (150) and (151), speaker A asserts p and speaker B asserts $\neg p$, but they do not contradict each other. Rather, both seem to be saying something true. This kind of disagreement has been referred to as *faultless disagreement* (Kölbel, 2002; Lasersohn, 2005, 2009; a.o.) and poses serious problems for classic truth-conditional semantics, which assumes that all assertive sentences are either true or false (what Kölbel (2002) calls *the problem of excessive objectivity*).[48]

(150)   A: Esta tarta está rica.
            this cake is   tasty
            'This cake is tasty.'

        B: No,   no   lo está.
            NEG, NEG CL is
            'No, it's not.'   FAULTLESS DISAGREEMENT

(151)   A: Esther es un cielo.
            Esther is a   sky
            'Esther is an angel.'

        B: No,   no   lo es.
            NEG, NEG CL is
            'No, she's not.'   FAULTLESS DISAGREEMENT

---

[48]Some authors reject the idea that disagreement can be faultless. Stojanovic (2007) argues that, when the judge is not overtly expressed, subjective statements are ambiguous between a generic or a personal reading. Therefore, the discourse participants either genuinely disagree (when the claim made by A was meant to be generic) or are both right (when the claim was about A's personal opinion), and their apparent disagreement boils down to a misunderstanding (see also Umbach, 2016). If this is so, faultless disagreement could not serve as an argument for either the contextualist or the relativist view of subjectivity, but it still provides a diagnostic for subjectivity (see also fn. 53).

This contrasts with objective statements, which do not give rise to this kind of disagreement, but to contradiction. For instance, in (152), the speakers are discussing an objective fact, something that is not a matter of opinion but whose truth can be checked (whether the cake is vegan or not). As a consequence, only one of the speakers is asserting something true, and the other one is wrong. The same applies to the examples in (153–155) including objective nouns (i.e., nouns for which categorization under them is based on objective, clear-cut criteria).[49] For example, in (153), Esther's occupation is an objective fact: she is either a teacher or a journalist (and this can ultimately be verified). Therefore, only A or B, but not both, are saying something true.

(152) A: Esta tarta es vegana.
           this cake is vegan
           'This cake is vegan.'

       B: No, no lo es.
           NEG, NEG CL is
           'No, it's not.'   CONTRADICTION

(153) A: Esther es profesora.
           Esther is teacher
           'Esther is a teacher.'

       B: No, no lo es. Es periodista.
           NEG, NEG CL is. is journalist
           'No, she isn't. She's a journalist.'   CONTRADICTION

(154) A: Irene es francesa.
           Irene is French
           'Irene is a French woman.'

       B: No, no lo es. Es holandesa.
           NEG, NEG CL is. is Dutch
           'No, she isn't. She's Dutch.'   CONTRADICTION

---

[49]*Francesa* 'French/French woman' could be an adjective or a noun in that position, as nationality nouns in predicative position in Spanish appear without determiner (see fn. 47), but, for the sake of the argument, I am assuming that it is a noun. Once the AV is added (157), it is clearly a noun.

(155) A: Ese animal es un ave.
           this animal is a   bird
           'This animal is a bird.'

       B: No, no lo es. Es un reptil.
           NEG, NEG CL is. is a   reptile
           'No, it's not. It's a reptile.'   CONTRADICTION

However, some of these nouns show a different behavior when modified by AVs. In particular, if the nouns are associated with stereotypical or other sort of non-objective properties, AVs target this reading and the modified predicates give rise to faultless disagreement. In (156), speaker A considers Esther a real teacher because she is inspiring, and always proposes creative activities, close to John Keating from *Dead Poets Society*. Speaker B disagrees, as her ideal of a teacher resembles more Mrs. Rottenmeier from *Heidi*, so Esther is too passionate and unorthodox to be a real teacher in B's opinion. However, both interlocutors seem to be speaking truthfully when saying that Esther is or is not a real teacher. A similar story holds for (157), where speakers A and B have different ideals of what a real French woman should be.

(156) A: Esther es una auténtica profesora.
           Esther is a   real   teacher
           'Esther is a real teacher.'

       B: No, no lo es.
           NEG, NEG CL is
           'No, she isn't.'   FAULTLESS DISAGREEMENT

(157) A: Irene es una verdadera francesa.
           Irene is a   true   French.woman
           'Irene is a true French woman.'

       B: No, no lo es. No bebe vino.
           NEG, NEG CL is. NEG drinks wine
           'No, she isn't. She doesn't drink wine.'   FAULTLESS DISAGREEMENT

Subjectivity, however, has to be provided by the noun. Utterances including objective nouns, such as nouns denoting natural kinds or concrete objects, do not display faultless disagreement effects, even when modified by AVs. Example (158), based on (91a), shows a context where AV + natural category nouns are acceptable. That discussion shows a real contradiction, as only one of the speakers can be right: these Late Jurassic animals are either birds or reptiles, and that is not a matter of opinion.[50]

(158) A: El Archaeopteryx y   el Archaeornis no son animales intermedios,
         The Archaeopteryx and the Archaeornis NEG are animals intermediate
         sino auténticas aves.
         but authentic birds.
         'Archaeopteryx and Archaeornis are not transitional animals, but true birds.'

      B: No, no lo son.
         NEG, NEG CL are
         'No, they aren't.'   CONTRADICTION

In short, faultless disagreement provides a first test for subjectivity. It has been shown that a noun associated with stereotypical or subjective properties modified by an AV behaves in the same way as other subjective predicates regarding disagreement. Next section examines the second test for subjectivity, occurrence under subjective attitude verbs.

Subjective attitude verbs

Subjective attitude verbs such as English *find* require that their complement clause express a subjective statement (Sæbø, 2009; Bouchard, 2012). The corresponding

---

[50]It is not a matter of opinion once the exact extension of the term has been established. In the case of natural kind terms, their denotation is fixed by convention by a community of experts and there can be some discussion when new evidence is found. For common uses of the predicates, however, they behave as objective and sharp. The debate about the reference of natural kind terms originates especially from the work of Kripke (1972) and Putnam (1975) (for an overview, see Beebee and Sabbarton-Leary, 2010).

verbs in Spanish are *encontrar* 'find' and *parecer* 'seem' when takes a small clause complement and a dative argument.[51] The examples in (159) and (160) show that the subjective predicate *rico* 'tasty' is acceptable in this construction, but not an objective adjective such as *vegano* 'vegan'. Note that the subjective predicates are relative to a judge, realized as the subject of *encontrar* (159), or a experiencer, expressed as a dative for *parecer* (160).

(159) a. Encuentro esta tarta rica.
           find.1SG   this cake tasty

           'I find this cake tasty.'

       b. ?? Encuentro esta tarta vegana.
             find.1SG   this cake vegan

             'I find this cake vegan.'

(160) a. Esta tarta me   parece   rica.
           this cake DAT.1SG seem.3SG tasty

           'I find this cake tasty.' (lit. 'This cakes seems tasty to me.')

       b. ?? Esta tarta me   parece   vegana.
             this cake DAT.1SG seem.3SG vegan

             'I find this cake vegan.' (lit. 'This cake seems vegan to me.')

As a consequence of the subjectivity requirement on the complement, objective predicates, such as the nouns in examples (153–155), cannot be embedded

---

[51]*Parecer* without a dative argument is a perception verb and can thus appear with objective nouns and adjectives (i, ii) (see Fernández Leborans, 1999; for English *seem*, cf. Matushansky 2002).

(i) a. Anna parece enfermera.   b. Eso parece un ordenador.
         Anna seems nurse   that seems a   computer

         'Anna looks like a nurse.'   'That looks like a computer.'

                                                   (examples from Fernández Leborans, 1999)

(ii) Anna parece {enferma / embarazada}.
      Anna seems   sick   pregnant

      'Anna looks {sick / pregnant}.'

under subjective attitude verbs (161–162). Note that, subjective nouns such as evaluative nouns (see section 4.5) are acceptable (163).[52]

(161) a. ?? Encuentro que Esther es {profesora / francesa}.
           find.1SG   that Esther is teacher   French

           'I find Esther to be a {teacher / French woman}.'

       b. ?? Encuentro que ese animal es un pájaro.
           find.1SG   that that animal is a   bird

           'I find that animal to be a bird.'

(162) a. ?? Anna me   parece   enfermera.
           Anna DAT.1SG seem.3SG nurse

           'I find Anna to be a nurse.' (lit. 'Anna seems a nurse to me.')

       b. ?? Eso me   parece   un ordenador.
           that DAT.1SG seem.3SG a   computer

           'I find that to be a computer.' (lit. 'This seems a computer to me.')

                                        (examples from Fernández Leborans, 1999)

(163) a. Encuentro que Juan es un idiota.
           find.1SG   that Juan is a idiot

           'I find Juan to be an idiot.'

---

[52]For adjectives, Torrego (1996); Fernández Leborans (1999) argue that the relevant distinction for acceptability with *parecer* 'seem' is individual- vs. stage-level predicates. However, this does not seem to hold in all cases. On the one hand, *vegano* 'vegan' is acceptable in this construction (160b), but it is individual level, as shown by incompatibility with the copula *estar* but not *ser* (ia), and with the verb *seguir* 'continue'. On the other hand, *rico* 'tasty' is a stage-level predicate (ib, ic), but can be in the complement of *parecer* (160a). (For an overview of the *ser/estar* alternation and its interaction with individual/stage-level predicates, see Fernández Leborans, 1999; Arche, 2006). For nouns, Fernández Leborans (1999) mentions that they have to have some "nuance of personal appreciation" to be allowed as the complement of *parecer*, which boils down to being subjective.

  (i) a. La tarta {es   / *está} vegana.
           the cake is$_{ser}$ is$_{estar}$ vegan

       b. La tarta {??es   / está} rica.
           the cake is$_{ser}$ is$_{estar}$ tasty

       c. Después de dos días, la tarta sigue   {rica / *vegana}.
           after   two days the cake continues   tasty   vegan

           'After two days, the cake continues to be {tasty / vegan}.'

    b. Esta tarta me   parece   una maravilla.
       this cake DAT.1SG seem.3SG a   marvel

       'I find this cake wonderful.'

Turning now to nouns modified by AVs, it can be observed that, in a parallel way with what happened regarding disagreement, adding an AV makes the sentences with profession and nationality nouns perfectly acceptable (164a), but not those with natural category nouns (164b).

(164) a. Esther me   parece   una verdadera {profesora / francesa}.
        Esther DAT.1SG seem.3SG a   true   teacher   French.woman

        'I find Esther to be a true {teacher / French woman}.'

      b. ?? Ese animal me   parece   un auténtico pájaro.
         that animal DAT.1SG seem.3SG a   authentic bird

         'I find that animal to be a real bird.'

To sum up, nouns that are objective and thus do not pass the tests for subjectivity become subjective when modified by an AV. This has been argued for based on the two tests for subjectivity discussed in the literature: faultless disagreement and embeddability under subjective attitude verbs such as *encontrar* 'find' or *parecer* 'seem' with a dative argument. In the next subsection, AVs are compared to evaluative adjectives with respect to their position and the type of noun they modify.

Position and type of noun

One way of making an objective predicate acceptable in the complement of subjective attitude verbs is by adding an evaluative adjective. Evaluative adjectives (e.g., Bierwisch, 1989) such as *beautiful* or *evil* are subjective predicates and, as such, they satisfy the subjective requirement imposed by those verbs (see section 4.5.2.2). As expected, any noun modified by an evaluative adjective,

either in prenominal or postnominal position is felicitous under *encontrar* 'find'
or *parecer* 'seem' + dative (165), including natural category nouns (165c).

(165) a. Encuentro que Esther es {una buena profesora / una profesora
         find.1SG   that Esther is a   good teacher   a   teacher
         terrible}.
         terrible

         'I find Esther to be {a good / a terrible} teacher.'

    b. Irene me   parece {una bella   francesa   / una
       Irene DAT.1SG seem.3SG a   beautiful French.woman   a
       francesa   pretenciosa}.
       French.woman pretentious

       'I find Irene to be a {beautiful / pretentious} French woman.'

    c. Piolín me   parece {un gran pájaro / un pájaro malvado}.
       Tweety DAT.1SG seem.3SG a big bird   a bird   evil

       'I find Tweety to be {a great / an evil} bird.'

The behavior of AVs is, however, different. The modified noun only becomes
subjective when they occur in prenominal position (166a–b). In other words, the
literal readings of AVs do not add any evaluative information. Also, note that the
noun has to be already associated with subjective dimensions (166c) (cf. 158 and
164b).

(166) a. La   contaminación DAT.1SG seem.3SG un {auténtico problema /
         the pollution   DAT.1SG seem.3SG a   authentic problem
         ??problema auténtico}.
           problem   authentic

         'I find pollution to be a real problem.'

    b. *Doctor Zhivago* me   parece una {verdadera historia de amor /
       doctor Zhivago DAT.1SG seem.3SG a   true   story   of love
       ??historia de amor verdadera}.
         story   of love true

       'I find *Doctor Zhivago* to be a true love story.'

c. ?? Piolín   me   parece   un {auténtico pájaro / pájaro
      Tweety DAT.1SG seem.3SG a   authentic bird   bird
   auténtico}.
   authentic

   'I find Tweety to be a real bird.'

The data presented in this section indicates that AVs are not subjective predicates themselves, in the way evaluative adjectives are. Nevertheless, the combination of an AV in prenominal position and a (certain) noun results in a subjective predicate. Next section explores the source of subjectivity in the AV + noun combination.

3.4.2.2 The source of subjectivity in the adjective of veracity + noun combination

There are at least two ways in which a predicate may be subjective, based on their patterns of distribution (e.g., Sæbø, 2009; Bouchard, 2012; Bylinina, 2014; Kennedy, 2016). A predicate may be subjective with respect to where the threshold for its application is, which is related to vagueness. In addition, predicates may display subjectivity associated with the ordering of the individuals in their extension. This can be illustrated by a subjective predicate like *tasty*. *Tasty* is subjective with respect to its standard. You may consider that licorice counts as tasty, but I may set the boundary for tastiness higher, so licorice's degree of tastiness does not meet my standard. Moreover, *tasty* is subjective with respect to the ordering along the scale. For instance, I may consider that the ordering of tastiness for the set {gummy bears, licorice, marshmallows} is ⟨gummy bears, marshmallows, licorice⟩, while, for you, the ordering might be ⟨licorice, gummy bears, marshmallows⟩. In this case, subjectivity is not an issue of where the standard of tastiness is, but of what degree of tastiness each judge assigns to the objects. This is different from the question of how subjectivity should be represented in the linguistic theory and where the source of the subjectivity of these predicates is to be located. In this section I review the empirical data

regarding the two types of subjectivity for adjectives and nouns that combine with AVs and discuss the possible source of their subjectivity.

The first source of subjectivity is related to vagueness. Two speakers can disagree about what counts as tall or young in a context, without either of them being wrong. This gives rise to faultless disagreement (Richard, 2004; Bylinina, 2014; Kennedy, 2016). For example, in (167), the speakers place the standard for tall and young at different degrees. Even if Laura's height and age are objective and measurable, the dialog is not a contradiction, because they both are saying something true according to their standards for the predicates. The subjectivity of dimensional adjectives can also be observed in their embeddability under subjective attitude verbs (Sæbø, 2009; Bylinina, 2014; cf. Kennedy, 2016), such as *parecer* 'seem' with a dative argument in Spanish (168).

(167) A: Laura es {alta / joven}.
        Laura is   tall   young

        'Laura is {tall / young}

    B: No, no lo es.
       NEG NEG CL is

       'No, she's not.'   FAULTLESS DISAGREEMENT

(168) a. Laura me   parece {alta / joven}.
       Laura DAT.1SG seems tall   young

       'I find Laura {tall / young}.

    b. Encuentro esta maleta {pequeña / nueva}.
       find.1SG   this suitcase small   new

       'I find this suitcase {small / new}.

However, since the measurement is objective, the order between the individuals is not subject to variation among judges. This is manifested by the fact that faultless disagreement does not arise from a dialog containing dimensional adjectives in the comparative form (169) and its unacceptability under subjective attitude verbs (170). In (169), speakers A and B are contradicting each other and only

one of them can be right (either Laura is taller than Marina or the other way around).

(169) A: Laura es más   {alta / joven} que   Marina.
           Laura is more tall   joven than Marina

          'Laura is {taller / younger} than Marina.

       B: No, Marina es más   {alta / joven} que   Laura.
           NEG Marina is more tall   young than Laura

          'No, Marina is {taller / younger} than Laura.'   CONTRADICTION

(170) ?? Laura me   parece más {alta / joven} que   Marina.
          Laura DAT.1SG seems more tall   young than Marina

          'I find Laura {taller / younger} than Marina.'

Nouns that combine with AVs are vague, and thus, subjective in this sense. Recall from section 3.4.2.1 (examples (161–163)) that not all nouns are subjective without adding an AV (171–172). For example, natural kind nouns can never be embedded under subjective attitude verbs (171a); profession and nationality nouns can when modified by an AV that targets their figurative senses (171b); by contrast, other vague nouns such as *problema* 'problem' or *artista* 'artist', are acceptable in this construction (172).

(171) a. ?? Ese animal me   parece   un (auténtico) pájaro.
              that animal DAT.1SG seem.3SG a   authentic bird

              'I find that animal to be a (real) bird.'

       b. Esther me   parece   ??(una verdadera) {profesora / francesa}.
           Esther DAT.1SG seem.3SG a   true   teacher   French

           'I find Esther to be a (true) {teacher / French woman}.'

(172) a. La contaminación me   parece   un problema.
           the pollution   DAT.1SG seem.3SG a   problem

           'I find pollution to be a problem.'

       b. Paloma me   parece   una artista.
           Paloma DAT.1SG seem.3SG a   artist

           'I find Paloma to be an artist.'

In the case of dimensional adjectives, since they are only subjective in the positive form, their subjectivity has been located in the POS morpheme (Bouchard, 2012; Bylinina, 2014; Kennedy, 2016). There are several possibilities for the source of the judge dependence in these adjectives. It can come from the speakers using different comparison classes (Richard, 2004; Bouchard, 2012), or from the standard-calculation function itself (Fara, 2000; Richard, 2004; Kennedy, 2007, 2016).

For vague nouns, the source of this type of subjectivity is similar. Comparison classes restrict the domain in which the boundary for the predicate is calculated. As mentioned in the discussion of vague nouns (section 3.3), different comparison classes yield different extensions of the predicate. In addition to this, speakers can have different comparison classes in mind. For instance, I may be comparing Paloma to her classmates when saying that she is an artist, but you may be comparing her to your favorite painters and thus conclude that she is not an artist. Also, I would consider pollution a problem compared to other problems of Madrid, but for someone using a larger comparison class including gun violence or human rights violations, pollution would not count as a problem.

The point where the threshold for satisfying the predicate is situated can also be subject to speaker variation. Two people can have different standards of artistry to consider someone an artist. This is easily illustrated in a view of standards as interest-relative (see Fara, 2000). For example, Paloma may be an artist for someone who is looking for an artist to design the cover of her book, but not for someone who needs an artist to organize an exhibition at a gallery.

This dependence of the standard on individual variation can be represented as these predicates being interpreted with respect to a judge index, regardless of whether the judge dependence comes from subjective comparison classes or from the calculation of the standard function. If the role of subjective attitude verbs like *find* is to set the value of the judge of the complement clause to the matrix subject (173a) (Sæbø, 2009), the interpretation of the nouns in question must be relative to a judge, as well as a world and a time (173b), given that they are

embeddable under *encontrar* 'find' and *parecer* 'seem' with a dative argument in Spanish (172).[53,54]

(173) a. $[\![find]\!]^{w,t,j} = \lambda\phi\,\lambda x.\ \phi^{w,t,x}$ (Sæbø, 2009)

       b. $[\![artista]\!]^{c;w,t,j} = \lambda x.\ x$ is an artist to j in w at t

The second source of subjectivity has to do with the ordering in the extension of the noun itself. Evaluative adjectives show this kind of subjectivity. In this case, not only the positive form is acceptable with subjective attitude verbs (174) and triggers faultless disagreement (175), but the comparative passes the tests for subjectivity as well (176–177). For instance, in (177), the speakers assess differently what makes someone intelligent or funny, and thus the ordering of individuals with respect to their intelligence or funniness is different. Consequently, they are not contradicting each other.

(174) Laura me   parece {inteligente / divertida}.
       Laura DAT.1SG seems   smart   funny

       'I find Laura {smart / funny}.'

(175) A: Laura es {inteligente / divertida}.
          Laura is   smart   funny

          'Laura is {smart / funny}.'

---

[53]I am assuming here a relativist account of subjectivity (which Sæbø (2009) finally rejects for subjective attitude verbs), whereby the judge is introduced as a parameter in the index of evaluation (Lasersohn, 2005, 2009). That is, a subjective predicate like *tasty* is interpreted with respect to a world, a time, and a judge. Non-subjective predicates are constant across judges. A competing view, contextualism (Glanzberg, 2007; Stojanovic, 2007; see also Stephenson, 2007), introduces the judge as an argument of the subjective predicate, which can be filled contextually (for discussion, see Bouchard, 2012; Bylinina, 2014).

[54]This is not uncontroversial. The acceptability of dimensional adjectives under *find* in English has been argued to be caused by a purpose reading, which would bring the subjectivity in. For instance, *I find John tall* is interpreted as 'taller than the cutoff point for what is appropriate in this situations' (e.g., for a role in a play) (see Fleisher, 2013; Kennedy, 2016; cf. Sæbø, 2009; Bouchard, 2012; Bylinina, 2014). In the Spanish examples in (168), this purpose-relative standard reading seems to be present more often with *encontrar* 'find' than with *parecer* 'seem' with a dative argument. However, it is not the interpretation for these verbs with nouns as complements (172). For approaches that derive the vagueness-related subjectivity from uncertainty about the discourse and not from judge dependence, see Sassoon (2010); Barker (2013); Fleisher (2013); see also Kennedy (2016).

> B: No, no   lo es.
>   NEG NEG CL is
>
>   'No, she's not.'   FAULTLESS DISAGREEMENT

(176) Laura me   parece más {inteligente / divertida} que Anna.
      Laura DAT.1SG seems more smart   funny   than Anna

      'I find Laura {smarter / funnier} than Anna.'

(177) A: Laura es más   {inteligente / divertida} que Anna.
         Laura is more smart   funny   than Anna

         'Laura is {smarter / funnier} than Anna.'

      B: No, Anna es más   {inteligente / divertida} que Laura.
         NEG Anna is more smart   funny   than Laura

         'No, Anna is {smarter / funnier} than Laura.'   FAULTLESS DISAGR.

In the case of evaluative adjectives, their source of subjectivity has been related to their multidimensionality (e.g., Bylinina, 2014; see Sassoon, 2013b; cf. Kennedy, 2016). For instance, in order to determine what counts as smart, we can be considering dimensions such as being good at math, knowing classic literature, and having good memory. However, the importance given to each of the dimensions can vary across speakers leading to different values in the scale of intelligence for the same individual. For example, Laura has a really good memory and has read all the Russian classics, but she's not that good at math. For a judge for whom the two former dimensions have a higher weight in calculating the degree of intelligence, Laura would be smarter than Anna (who has lower values in those dimensions). But a different judge might weight the dimensions in a different way leading to a different ordering of individuals along the scale.

Can nouns also be subjective with respect to the ordering in their denotation? Intuitively, it seems that they can. Although there is a more or less clear definition of what a teacher is, when adding an AV, which targets the stereotypical sense, speakers seem to be able to disagree with respect to the weight each dimension has in determining the cutoff point for the predicate. This can be seen in the

faultless disagreement of (156), repeated here as (178) (see McCready and Ogata, 2007 for a similar effect of Japanese *rashii*).

(178) A: Esther es una auténtica profesora.
           Esther is a   real   teacher
           'Esther is a real teacher.'

       B: No, no lo es. Nunca sigue el temario.
           NEG, NEG CL is never follow the syllabus
           'No, she isn't. She never follows the syllabus.'   FAULTLESS DISAGR.

However, nouns differ from adjectives in the accessibility of their dimensions (Sassoon, 2013b,c). For instance, a multidimensional adjective such as *healthy* accepts *with respect to* phrases expressing dimensions (179a), whereas a noun such as *bird* does not (179b). Yet, this is a matter of degree. According to Sassoon (2017b), nouns expressing social concepts such as human traits have more accessible dimensions than natural-kind concepts as a consequence of their type of categorization (180) (for details, see Sassoon, 2017b and references therein).

(179) a. Maria is healthy with respect to blood pressure.

       b. # Tweety is a bird with respect to {flying / size}.

                                              (examples from Sassoon, 2013c)

(180) a. ? This girl is a genius except with respect to literature.

                                              (Sassoon, 2017b)

       b. ? Paloma es una (verdadera) artista en cuanto a   la combinación
             Paloma is a   true   artist with regard to the combination
             de colores.
             of colors
             'Paloma is a (true) artist with respect to combining colors.'

    c. ? Esther es una auténtica profesora con respecto a su capacidad de
           Esther is a   authentic teacher   with respect to her capacity   to
           motivar a   sus alumnos.
           motivate DOM her students

           'Esther is a real teacher with respect to her ability to motivate her
           students.'

Dimension accessibility correlates with the possibility of appearing in comparative constructions (Sassoon, 2017b). As soon as one of the dimensions is subjective, subjectivity may enter the picture. Some of these nouns are acceptable in comparatives (181).[55] These examples, although colloquial, provide a way to test whether they are subjective with respect to the ordering in their extension. In fact, they are, as shown by the fact that the disagreement in (181) is subjective, or faultless. These nouns can also be embedded in the comparative under subjective attitude verbs (182).

(181) A: Andrea es más artista que Shakira, además   se sabe el   himno.[56]
        Andrea is more artist   than Shakira moreover knows the anthem

        'Andrea is more of an artist than Shakira, moreover, she knows the
        anthem.'

    B: No, Shakira es más artista que Andrea.
      NEG Shakira is more artist   than Andrea

      'No, Shakira is more of an artist than Andrea.'   FAULTLESS DISAGR.

(182) ? Andrea me   parece más {artista / desastre / genio} que Shakira.
     Andrea DAT.1SG seems more   artist   mess   genius than Shakira

     'I find Andrea to be more of a(n) {artist / mess / genius} than Shakira.'

---

[55]Natural kind nouns are also multidimensional, and the dimensions used for calculating the best exemplar can be subject to individual variation (Lynch et al., 2000), but these dimensions are objective, and their type of categorization is different (Sassoon, 2017b, and references therein). For this reason, their dimensions are not accessible and there is no space for subjectivity in their multidimensionality.

[56]http://www.kienyke.com/historias/me-parece-horrible-que-en-esta-sociedad-nadie-tiene-canas-ni-arrugas/2/

Hence, at least for the most adjective-like nouns, subjectivity can arise from their multidimensionality and the different weight given to the different dimensions by different judges. The more subjective their dimensions, the more accessible, and consequently the more room for subjectivity. This correlates with grammatical gradability for some nouns (sections 3.4.3 and 4.5.2.1). These are the senses AVs target, because they are the most vague.[57],[58]

In sum, subjectivity in the nouns modified by AVs is a consequence of their

---

[57]Cf. Sassoon (2013c, §7.5.2) for an analysis of *typical of* as a modifier that can access typicality dimensions.

[58]Multidimensionality is not the only source for the second type of subjectivity. Predicates of personal taste (Lasersohn, 2005, 2009; Stephenson, 2007; Stojanovic, 2007; Bylinina, 2014; Kennedy, 2016; a.o.) are sometimes included in the class of evaluative adjectives (Bouchard, 2012; Kennedy, 2016), but differ from them in that they have an experiencer argument manifested, for instance, in the presence of *to/for*-phrases in English (i) (Bylinina, 2014; McNally and Stojanovic, 2017) or a dative argument corresponding to the judge in Russian (ii).

(i)   a. This book is interesting for me.
      b. This cake is tasty to Laura.

(ii) Mne   etot fil'm byl neinteresen   Russian
      DAT.1SG this film PST not.interesting

      'This film wasn't interesting for me.'   (Bylinina, 2014)

The source of their subjectivity is related to their experiencer argument, which has the value of the judge parameter set to the same individual (for details, see Bylinina, 2014). In the case of nouns, they do not take arguments expressing the judge either in English or Russian (iii). This does not mean that the opinion holder cannot be expressed by other means of introducing perspective (iv).

(iii) a. * Tweety is {a bird / an artist} to me.
       b. * Eto zhivotnoe mne   (nastoiashchii) ptitsa.   Russian
            this animal   DAT.1SG true   bird

            'To me, this animal is a (true) bird.'
       c. * Ivan mne   (nastoiashchii) khudozhnik.
            Ivan DAT.1SG true   artist

            'To me, Ivan is a true artist.'   (L. Bogatyreva, p.c.)
(iv) a. En mi opinión, este animal es un pájaro.
          in my opinion this animal is a   bird
      b. Para mí, Paloma es una artista.
          for me Paloma is a   artist

          'For me, Paloma is an artist.'

vagueness. The elements that influence the calculation of the cutoff point for the application of the predicate (comparison class, the standard-calculation function itself) are subject to individual variation. For some nouns (mostly figurative senses of some nouns and evaluative nouns), subjectivity also arises from their multidimensionality. This latter subjectivity favors grammatical gradability, which is the topic of next section. Finally, AVs have been shown not to be subjective themselves, but to target the subjective senses of nouns because of their correlation with vagueness.

3.4.3 Gradability

At the beginning of this section, typicality effects were introduced as a conceptual ordering in the denotation of the noun that has linguistic manifestations, such as metalinguistic comparisons and the acceptability of some modifiers (136), repeated here as (183).

(183)   a. This is more a chair than a table.

   b. Paloma is {pretty much / almost} an artist.

The question here is whether the ordering in the extension of the noun with respect to their exemplariness of the category is a grammatical property. In other words, the fact that nouns show typicality effects, does it constitute evidence for nouns lexicalizing a degree argument? In this section I show that most nouns with typicality effect do not pass the tests for grammatical gradability and discuss the relation between gradability and vagueness in the nominal and adjectival domain.

As opposed to what happens in the adjectival domain, nominal gradability is a controversial issue (Sapir, 1944; Bolinger, 1972; Doetjes, 1997; Constantinescu, 2011; Sassoon, 2013c; a.o.). Some of the tests in the literature for gradability in nouns are degree readings with size adjectives (Bolinger, 1972; Morzycki,

2009; de Vries, 2010; cf. Constantinescu, 2011, 2013) and downward entailing modifiers (de Vries, 2010). Nouns such as *bird* (sharp) or *artist* (vague), which show typicality effects (see section 3.4), do not receive the relevant reading when modified by adjective like *enorme* 'huge' or *increíble* 'unbelievable' (184). Example (184a) cannot be used to convey that Tweety is a representative individual in the class of birds. The same applies to (184b). This contrasts with an evaluative noun such as *idiota* 'idiot', which refers to the degree of idiocy of Juan.[59]

(184) a. # Piolín   es un pájaro {enorme / increíble}.
               Tweety is a bird   huge   unbelievable

           'Tweety is a(n) {huge / unbelievable} bird.'   NON-DEGREE

       b. # Paloma es una artista {enorme / increíble}
               Paloma is a   artist   huge   unbelievable

           'Paloma is a(n) {huge / unbelievable} artist.'   NON-DEGREE

       c. Juan es un idiota {enorme / increíble}.
               Juan is a idiot   huge   unbelievable

           'Juan is a(n) {huge / unbelievable} idiot.'   DEGREE

Further evidence comes from degree interrogatives with *cómo de* 'how' in Spanish. Gradable adjectives such as *tall*, as well as evaluative nouns (185c) are acceptable in this construction. By contrast, nouns such as *pájaro* or *artista* are not.

(185) a. * ¿Cómo de pájaro es Piolín?
                 how   of bird   is Tweety

           'How much of a bird is Tweety?'

       b. ?? ¿Cómo de artista es Paloma?
                 how   of artist is Paloma

           'How much of an artist is Paloma?'

---

[59]Note that for Juan to be a huge idiot, he does not need to be representative of the class. See de Vries (2010, 2015) for arguments against evaluative nouns having a prototype at all. I argue in section 4.5.2.1 that these nouns are in fact gradable.

    c. ¿Cómo de {alto / idiota / desastre} es Juan?
       how of tall   idiot   mess   is Juan
    '{How tall / How much of a mess / idiot} is Juan?'

These tests show that conceptual gradability does not correspond with grammatical gradability. Not all nouns showing typicality effects have corresponding degree arguments using the typicality scale in their lexical semantics. Rather, most do not. Constantinescu (2011) shows that the tests for nominal gradability in the literature fail to delimit a consistent set of nouns. Moreover, the nouns that do not pass any of the tests are precisely the nouns with clearer prototypes (natural kind nouns). Even if all nouns are gradable at the conceptual level, this ordering is not grammatically represented (or, at least, is not grammatically accessible, see Sassoon, 2011, 2013c, 2017b).[60]

Graded membership in the category, the fact that the noun is vague, and typicality, the ordering with respect to exemplariness, are two separate things. In the adjectival domain, gradability is connected to vagueness (Lewis, 1970; Kamp, 1975; Klein, 1980; Bierwisch, 1989; Kennedy, 2007; van Rooij, 2011; Burnett, 2012; a.o.). Only gradable adjectives can be vague. In the nominal domain, conceptual gradability, or typicality, does not correspond with vagueness (see the beginning of section 3.4). Kamp (1975) relates the multidimensionality of nouns (the fact that, in order to satisfy a noun denotation, a cluster of criteria must be met) to their vagueness and lack of grammatical gradability. Specifically, the fact that no unique dimension can be selected as the scale associated with the noun makes impossible to compare objects along a specific scale (cf. Morzycki, 2009). Sassoon (2011, 2013c) restates this idea in terms of the different mechanisms for categorization employed by nouns and adjectives (similarity- vs. rule-based).

As a summary, this section has discussed conceptual gradability in the nominal domain. It has been argued that, although typicality effects play a role in the

---

[60]Observe that the distinction between gradable and non-gradable nouns is orthogonal to modification by AVs (they combine with a gradable nouns such as *idiota* 'idiot' (87b) and a non-gradable one such as *artista* 'artist' (78a), but not with natural kind nouns (88a), which are non-gradable as well). This argues against an analysis of AVs as degree modifiers (cf. Morzycki, 2009).

semantics of nouns and can even be accessed by certain linguistic expressions, they are not grammatically represented as degree arguments are in the case of adjectives.

3.4.4   Summary

Nouns show typicality effects, that is, that some individuals in the denotation of the noun are better examples of the category than others and this is relevant for the intensifying uses of AVs. This section has dealt with the factors that influence the ordering and with whether it is to be grammatically represented.

First, it was shown that typicality and vagueness are two different phenomena, although they interact. AVs were argued not to be typicality modifiers, that is, they do not pick a prototypical individual in the denotation of the noun. Rather, by quantifying over contexts, they return an individual that satisfies the predicate even in the strictest contexts, and this corresponds with one that is high in the representativeness ordering.

Several elements may influence the ordering, such as prototypicality, stereotypicality and subjectivity. AVs were shown to target figurative senses of the nouns they modify, the ones including stereotypical or subjective dimensions, which correspond with vague senses. This had consequences for the acceptability of the modified noun under subjective attitude verbs and for faultless disagreement. Subjectivity of the nouns modified by AVs has its source in their vagueness, and, for some nouns, also in their multidimensionality.

Finally, typicality was argued not to correspond with grammatical gradability. In other words, the conceptual ordering in the denotation of the noun is not lexically represented in the noun. In addition, AVs were shown not to be sensitive to the nouns having a degree argument.

3.5   Extending the analysis: Adverbs of veracity

Adverbial counterparts of AVs such as *verdaderamente* 'truly' and *realmente* 'really' (also, *autenticamente* 'authentically', which is used to a much lesser extent) have a similar effect to that of AVs as modifiers of adjectives, VPs and propositions (186) (for English *really*, see, e.g., Paradis, 2003; McNabb, 2013). In the two former cases, the adverbs have an intensifying effect. For instance, the property of being tall holds to a high degree (186a) and the event of missing someone is either very intense or a clear case (186b). In the latter case, what is reinforced is the truth of the proposition (186c).

(186) a. Marina es realmente alta.
           Marina is really   tall

       b. Alicia realmente echa de menos a   Will.
           Alicia really   misses   DOM Will

           'Alicia really misses Will.'

       c. Realmente no quiero   que vengas   a la fiesta.
           really   NEG want.1SG that come.SBJV.2SG to the party

           'Really, I don't want you to come to the party.'

In this section, I present the data regarding adverbs of veracity and discuss how the analysis for AVs defended above (section 3.3.2) can be extended to account for their modification in the different positions in which they can appear.

3.5.1   Adjectives

Adverbs of veracity modify adjectives with a degree-boosting interpretation. Extending the analysis for AVs as manipulating the contextual parameters that affect the interpretation of predicates, adverbs of veracity would be expected to combine only with context-sensitive adjectives. For adjectives, the relevant contextual value is the comparison class used to calculate the standard (see Klein, 1980;

Kennedy and McNally, 2005; Kennedy, 2007). Relative adjectives such as *tall* or *expensive* are vague; that is, depending on the set of individuals the individual in question is compared to, it may qualify as tall or not. For example, Marina may count as tall compared to her colleagues but not compared to basketball players. For this type of adjectives, the effect of adding an adverb of veracity is degree boosting (187). For instance, in (186a), repeated as (187a), Marina must count as tall with respect to any comparison class, even the strictest ones (188).

(187) a. Marina es realmente alta.
           Marina is really   tall

       b. El regalo fue verdaderamente caro.
           the present was truly   expensive

(188) $[\![realmente(alta)(Marina)]\!]^{c} = 1$ iff $\forall c'[cRc' \rightarrow \textbf{tall}(\textbf{Marina})$ in $c']$

Adverbs of veracity also occur with absolute adjectives such as *full* or *wet* (189). In contrast to relative adjectives, which use contextual standards, absolute adjectives lexicalize scales with endpoints that serve as the standard (Kennedy and McNally, 2005; Kennedy, 2007). They have been thus argued not to be vague. Evidence for this comes from the distribution of *for*-phrases that make the comparison class explicit. Relative adjectives accept them (190), whereas absolute adjective do not (191).

(189) a. El cine   está verdaderamente lleno.
           the theater is   truly   full

           'The movie theater is truly full.

       b. La toalla está realmente mojada.
           the towel is   really   wet

(190) Para ser jugadora de baloncesto, Marina es alta.
       for be player   of basketball Marina is tall

       'Marina is tall for a basketball player.'

(191) ?? Para ser de vino, esta copa está llena.
           for   be of wine this glass is   full
       'This glass is full for a glass of wine.'

The context dependence of absolute adjectives (the fact that a movie theater with two empty seats can be felicitous said to be *full*) is often treated as imprecision (Pinkal, 1995; Kennedy and McNally, 2005; Kennedy, 2007). However, absolute adjectives have been argued to also be context dependent in the way relative adjectives are (McNally, 2011; Toledo and Sassoon, 2011; Sassoon and Toledo, 2012). The difference lies in their comparison classes. For instance, McNally (2011) argues that classification for the application of absolute adjectives is ruled based. That is, it involves comparing a representation associated with a specific individual and strictly matching the classification criteria. In contrast to this, relative adjectives are classified via similarity, which only requires a partial match and involves comparing a representation of a specific individual against representations of other individuals. This explains, for instance, why *for*-phrases are acceptable when the degree of the property the individual possesses is compared to other instances of the same individual (192), but not to other individuals (191).

(192) Para ser un lunes   por la tarde,   el   cine   está lleno.
       for be a Monday in   the afternoon the theater is   full
       'The movie theater is full for a Monday afternoon.'

Now we can account for the effect of adverbs of veracity with absolute adjectives. These modifiers expand the comparison class to all possible relevant comparison classes. In the case of the movie theater being full, for instance, the relevant comparison classes would include other instances of this movie theater or similar ones. Thus, (189a) is true if the movie theater is full in all the relevant contexts, including the strictest ones (e.g., on a Saturday evening or when we went to watch *Star Wars: Episode VII*) (193). Note that the effect is not slack regulation: *verdaderamente lleno* 'truly full' is not equivalent to 'strictly speaking full'.

(193) $[\![verdaderamente(lleno)(el\ cine)]\!]^c = 1$ iff
$\forall c'[cRc' \rightarrow \textbf{full}(\textbf{the-movie-theatre})$ in $c']$

Finally, non-gradable adjectives are usually sharp. For example, adjectives such as *embarazada* 'pregnant' or relational adjectives (*geopolítico* 'geopolitical' or *hexagonal* 'hexagonal') are not context dependent. As expected, adverbs of veracity are not acceptable with them (194). This shows that they are different from degree modifiers such as *very,* which is able to coerce some of these adjectives into a relative interpretation (*muy embarazada* 'very pregnant' means 'in her last months of pregnancy', but that is not a possible interpretation for (194a)). Some of these adjectives can be used imprecisely, as in *Francia es hexagonal* 'France is hexagonal'. The ill-formedness of (194c) shows that these modifiers, like their adjectival counterparts, do not affect pragmatic uncertainty (as a precisifier like *exactly* would do, see section 3.3.3.1).[61]

(194) a. ?? Vanessa está verdaderamente embarazada.
            Vanessa is   truly   pregnant
       b. ?? Es un problema realmente geopolítico.
            is a problem   really   geopolitical
       c. ?? Esta forma es realmente hexagonal
            this figure is really   hexagonal

In short, adverbs of veracity have been analyzed as quantifiers over possible contexts. As expected, they combine with semantically context-dependent adjectives (both relative and absolute adjectives), with a degree-boosting effect, but not with sharp predicates, such as non-gradable adjectives. We turn to adverbs of veracity modifying events.

---

[61]For some speakers, these sentences can be acceptable with the adverbs interpreted as modifying the whole proposition and not just the adjective (e.g., 'Truly, Vanessa is pregnant', and so on).

3.5.2   VPs

Adverbs of veracity modify VPs with an intensifying or clear-case reading. For instance, in (186b), repeated here as (195a), the event of missing someone is intense. In (195b), the reading is rather one in which the event is a clear case or a typical instance of a concerning event, one that deserves its name.

(195) a. Alicia realmente echa de menos a   Will.
           Alicia really   misses   DOM Will
           'Alicia really misses Will.'

       b. El   ayuntamiento verdaderamente se preocupa por el
           the city.council   truly   concerns   for the
           medio ambiente.
           environment
           'The city council is truly concerned about the environment.'

These verbs are vague. For instance, there is no clear boundary for what counts as missing someone, and whether the predicate applies or not in a given situation is also subject to contextual and even individual variation. The analysis proposed for adverbs of veracity with adjectives can be extended to cover the modification of events. As formalized in (196), (195a) is true if, and only if, Alicia misses Will in any context c' that is in a relation R with the actual one. Since the event must hold in even the strictest contexts, the result is intensification of the property.

(196) $[\![verdaderamente(echar\ de\ menos)(Will,\ Alicia)]\!]^c = 1$ iff
       $\forall c' \exists e[cRc' \rightarrow \mathbf{miss}(e, \mathbf{Alicia}, \mathbf{Will})$ in $c']$

Note that with non-vague verbs, the effect of adverbs of veracity is different. For instance, *venir* 'come' is a sharp predicate: either someone came to the party or not. In (197), *realmente* is not intensifying the verb, but rather has scope over the whole proposition. It emphasizes that it is true that she came to the party.

(197) Realmente vino a la fiesta.
        really   came to the party
       'She really came to the party.'

In short, the analysis for AVs can be extended to uses of adverbs of veracity where
they modify VPs. As predicted, when they combine with vague properties of
events, the result is intensification. Next section is devoted to propositional uses
of adverbs of veracity.

3.5.3   Propositions

In addition to their use as modifiers of adjectives and VPs, adverbs of veracity
can also take scope over the whole proposition (198).

(198) a. Realmente Carles acabó   su libro.
            really   Carles finished his book
       b. Verdaderamente, no   quiero   que vengas   a la fiesta.
            truly   NEG want.1SG that come.SBJV.2SG to the party
           'Truly, I don't want you to come to the party.'

Under my analysis, the contribution of adverbs of veracity would be to assert
that the proposition is true in all the contexts which bear a relation R with the
actual one. That amounts to reinforcing the truth of the proposition and the
speaker's commitment to it. In this sense, it is close to an epistemic analysis of
these modifiers (e.g., Paradis, 2003). However, the propositional use of adverbs
of veracity seems to have a more conversational contribution. First, by adding
one of these adverbs, there seems to be the implication that the complementary
proposition ($\neg p$) was believed or expected (Romero and Han, 2004). For instance,
by asserting (198a), the speaker needs to reinforce that Carles finished his book.
This can be more clearly observed in questions. Example (199) carries the belief
or expectation that Carles did not finish his book.

(199) ¿{Realmente / De verdad} Carles ha   acabado su libro?
      really   of truth   Carles has finished his book

    'Did Carles really finish his book?'

Moreover, note that the contribution of these adverbs appears not to be truth conditional (Gutzmann, 2011), as opposed to their uses with adjectives and VPs (sections 3.5.1 and 3.5.2), and to AVs' modification of nouns (section 3.3.2). In the conversation in (200), the proposition expressed by what B says is true in the same contexts in which the same sentence without the adverbs is (i.e., situations where Carles finished his book). In addition to this, it is not possible to deny the contribution of *realmente*. Observe that C's denial can only target the inner proposition (that Carles finished his book) and not the proposition including the operator (that the speaker is certain about the truth of p) (see Gutzmann, 2011).

(200) A: Me   pregunto si Carles llegó a acabar su libro.
          REFL ask.1SG if Carles got   to finish   his book

          'I wonder whether Carles managed to finish his book.'

     B: {Realmente / De verdad} Carles acabó   su libro.
          really   of truth   Carles finished his book

          'Really, Carles finished his book.'

     C: No, no es verdad. (#No estás segura de que lo   acabó)
          NEG NEG is truth   NEG are   sure   of that ACC finished

          'No, that's not true. (#You're not sure that he finished it).'

These instances of *really* have been analyzed as realizations of the epistemic operator VERUM. The contribution of this operator is to assert that the speaker is sure that the proposition should be added to the common ground (for different analyses, see Romero and Han, 2004; Gutzmann, 2011). In this sense, *really* is a conversational operator. Extending the analysis for AVs put forward here to the propositional use of adverbs of veracity does not directly account for their conversational use. In a way, by being certain of the truth of the proposition in every context, it can be implied that the speaker is certain to add the proposition

to the common ground, but this does not explain their non-truth-conditional contribution. Integrating this into the analysis is left for future work (for other modifiers that have suprapropositional and property uses and a difference in whether their contribution is truth-conditional, see McCready and Kaufmann, 2013; Beltrama, 2015).

3.5.4   Final semantics

This section has shown that adverbs of veracity have a similar effect to that of their adjectival counterparts and that the analysis proposed for AVs can be extended to account for their modification of adjectives and VPs. Now the semantics for these modifiers can be generalized to cover the cases discussed above.

In particular, both adjectives and adverbs of veracity are analyzed as quantifiers over possible contexts (201). Their domain includes properties (gradable or not) f of individuals and eventualities, and individuals and eventualities (represented as the variable σ). A proposition containing these modifiers is true if, and only if, the property f holds of σ in all the contexts c' that stand in a relation R with the actual one. R is a relation that holds between two contexts if they are alike, except for the relevant values they assign to the contextual parameters that affect the interpretation of f.

(201) $[\![verdadera(mente)]\!]^{w,g,c} = \lambda f \lambda \sigma . \forall c'[cRc' \rightarrow f(\sigma) \text{ in } c']$

To sum up, the analysis for AVs as modifiers that interact with the contextual parameters devoted to the interpretation of predicates can be extended to intensifier uses of their adverbial counterparts. In particular, it has been shown that this proposal accounts for their modification of adjectives and VPs. This shows that adjectives and adverbs of veracity have the same semantics, and their difference is syntactic.

3.6   Concluding remarks

This chapter has provided an account for the intensifying and metalinguistic readings of AVs in prenominal position as vagueness quantifiers. Specifically, I have argued that these modifiers operate over the contextual parameters involved in the determination of the interpretation of the predicate they combine with. The analysis also accounts for the modification of adverbs of veracity.

AVs have been shown to be sensitive to vagueness. Their contribution depends on the type of noun and whether the context is metalinguistic or not. In the case of vague nouns, their intensification results from the typicality effects of the noun and derives from a clear-case reading. As for usually sharp nouns in metalinguistic contexts, AVs reinforce the applicability of the predicate to a particular individual.

Typicality, the ordering of entities in the denotation of the noun according to their exemplariness of the category has been suggested to play a role in the intensification performed by AVs. In determining this ordering, stereotypical and subjective dimensions have been shown to factor in, in addition to prototypical dimension. Regarding subjectivity, nouns modified by AVs are subjective as a result of their vagueness. Some nouns, the most adjective-like, are subjective with respect to the ordering as well. Although typicality is relevant in the intensification of AVs and other modifiers, it has been argued that it is not lexically represented. In other words, nominal gradability is conceptual.

The proposal defended here connects with analyses of AVs and similar adjectives in terms of evaluation of property assignment given in the previous literature (Demonte, 1999a, 2008; Bouchard, 2002). However, it relates their intensification to vagueness and typicality effects instead of the degree to which the referent satisfies the predicate. The discussion of the different factors that determine the best exemplar in the denotation of the nouns has revealed that a more thorough investigation of subjectivity and its interaction with vagueness and typicality in the nominal domain is needed.

Next section presents a few issues connected to the ideas examined in this chapter.

3.6.1 Further issues

Another modifier related to the notion of veracity is *claro* 'clear'. This adjective also receives a clear-case reading in prenominal position in Spanish (202). For instance, in (202a), the breakup with the European Union is said to be a breakup without any doubt, one that really deserves its name. However, the distribution of this modifier is much more restricted than that of AVs and its use as an intensifier is marginal. Examples (203) show that *claro* is not compatible with the figurative or stereotypical readings of the nouns in question (cf. 92b).

(202) a. Un triunfo del   Brexit con un apoyo   superior al   55%
         a victory of.the Brexit with a   support over   to.the 55%
         sería   una clara ruptura con la   UE.[62]
         be.COND.3SG a   clear breakup with the EU
         'A victory of Brexit with a support higher than 55% would mean a clear
         breakup with the EU.'

      b. La candidata demócrata es la   clara vencedora del   debate de
         the candidate democratic is the clear winner   of.the debate of
         anoche.
         last.night
         'The democratic candidate is the clear winner of last night's debate.'

(203) a. ?? Paloma es una clara artista.
            Paloma is a   clear artist

      b. * Irene es una clara francesa.
           Irene is a   clear French.woman

Barker and Taranto (2003) argue that English *clear*, when taking a propositional complement (204a), has a metalinguistic contribution whereby the speaker judges

---

the likelihood of the proposition being true as very high. In this sense, it deals with vagueness and also judge dependence. Adnominal uses of this modifier can be paraphrased with the propositional one (204b) (cf. 94), showing that it may have scope over the whole proposition in all the cases and an analysis in the terms in Barker and Taranto (2003) can be extended to them.

(204) a. It is clear that Mary is a doctor.   (Barker and Taranto, 2003)

       b. Está claro que es la   vencedora del   debate.
          is   clear that is the winner   of.the debate
          'It is clear that she is the winner of the debate.'

In addition, a structure that bears similarity to the type of effect AVs have in the noun is contrastive focus reduplication (Horn, 1993; Roca and Suñer, 1998; Ghomeshi et al., 2004; Song and Lee, 2011). The phenomenon consists in the copy of a constituent (usually a single lexical item, but also phrases) and its juxtaposition (205). The semantic effect is to focus the denotation of the reduplicate item on a prototypical entity, in contrast to other less representative ones (for different analyses, see Roca and Suñer, 1998; Ghomeshi et al., 2004; Song and Lee, 2011).

(205) a. Quiero   CAFÉ-café.
          want.1SG coffee-coffee
          'I want COFFEE-coffee.'   (Roca and Suñer, 1998)

       b. Oh, we're not LIVING-TOGETHER-living-together.

                                        (Ghomeshi et al., 2004)

The intensification resulting from contrastive focus reduplication is similar to the effect of AVs (Escandell Vidal, 1991; Roca and Suñer, 1998) in that they shrink the denotation to representative instances of the category. In fact, they cannot co-occur (206).

(206) a. ?? Quiero   auténtico CAFÉ-café.
              want.1SG authentic coffee-coffee

           'I want real COFFEE-coffee.'

       b. ?? La   tarta está verdaderamente RICA-rica.
              the cake is   truly   tasty-tasty

The modification performed both by *claro* 'clear' and contrastive focus reduplication involves pointing to a representative entity in the denotation of the noun, and thus, typicality. Together with AVs they form a class of modifiers that may shed light on the conceptual structure of nouns and how it can be accessed by linguistic means.

Chapter 4

Adjectives of completeness

4.1 Introduction

After exploring manifestations of conceptual gradability in the nominal domain through adjectives of veracity in the previous chapter, in this chapter I address grammatical gradability by investigating Spanish adjectives of completeness [henceforth, ACs], such as *completo* 'complete', *total* 'total' and *absoluto* 'absolute', whose adverbial counterparts are degree modifiers sensitive to scale maximums. In particular, this chapter examines the question of whether these adjectives are degree modifiers in the nominal domain.

The notion of completeness has to do with boundedness, including of scales. In particular, ACs are related to maximums. To say that something is complete is to say that it has all its (relevant) parts (a maximal amount of them). Adverbial correlates of ACs, such as *completely*, are maximizers of adjectives. That is, they only combine with adjectives whose scale has a maximum. In the nominal domain, some maximality phenomena may be found as well, based on the distribution and properties of ACs. First, property concept nouns such as *libertad* 'freedom'

are mass and would be expected to be unbounded, but an example such as (207a) conveys that the press has a maximal amount of freedom. Second, telic events, such as *destruir la ciudad* 'to destroy the city', are bounded and their nominalizations seem to be so as well. Example (207b) is interpreted as the destruction event having reached its end. Third, evaluative nouns such as *idiota* 'idiot' denote gradable properties themselves, one that seems unbounded. Yet, according to (207c), Juan is said to have hit some idiocy ceiling.

(207)   a. La   prensa tiene completa libertad.
            the press   has   complete freedom
        b. la   total destrucción de la   ciudad
            the total destruction of the city
        c. Juan es un absoluto idiota.
            Juan is an absolute idiot

The main claim of this chapter is that ACs are degree modifiers whenever a degree argument is provided by the modified noun. This happens in the three cases mentioned above: property concept nouns, eventive nominalizations, and evaluative nouns. In particular, they are maximizers. That is, similarly to their adverbial counterparts, ACs assert that the maximal degree (of a property, of the development of an event) has been reached.

The picture that emerges from this chapter is one in which the meaning of the adjective is not completely specified, but rather depends on the noun it modifies. Only evaluative nouns are argued to denote gradable properties. In the other cases, the degree argument is introduced by an external head that measures the amount of the property an individual possesses or the part of the object affected by an event. Finally, position also plays a role, as degree uses of ACs are preferred in prenominal position.

The structure of this chapter is as follows. Section 4.2 introduces maximizers and their properties. Section 4.3 deals with property concept nouns. Section 4.4 turns to eventive nominalizations of incremental theme verbs and degree achievements.

Then, section 4.5 focuses on evaluative nouns. Finally, section 4.6 concludes and introduces some further issues.

4.2   Maximality modifiers of adjectives

Gradable adjectives differ in the structure of their scales (Yoon, 1996; Rotstein and Winter, 2004; Kennedy and McNally, 2005; a.o.). The set of degrees that constitutes their scale may include a maximal or a minimal value, both or neither. If the scale includes a maximal or a minimal element (if it is closed), the standard of the adjective is fixed to one of those values and the adjective has an absolute interpretation.

Certain degree modifiers are sensitive to the scale structure of adjectives (Rotstein and Winter, 2004; Kennedy and McNally, 2005). Maximality modifiers, or maximizers, such as Spanish *completamente* 'completely', *totalmente* 'totally', and *absolutamente* 'absolutely' are acceptable only with adjectives whose scale has a maximum value (208a–b) (cf. (208c–d)).

(208) a. El   avión está completamente lleno.
           the plane is   completely   full
       b. El   suelo está {totalmente / absolutamente} seco.
           the floor is   totally   absolutely   dry
       c. ?? Isabel es completamente alta.
              Isabel is completely   tall
       d. ? El   suelo está absolutamente mojado.
             the floor is   absolutely   wet

The role of the modifier in (208a–b) is to indicate that the referent has a maximal degree of the property denoted by the adjective. In technical terms, maximizers are degree modifiers that restrict the value of the degree argument of the adjective G to a maximum on the adjective's scale S_G (209a) (Kennedy and McNally, 2005). The function **max** returns the unique degree in a scale S such that every degree

in S is smaller than (or else identical to) it (209b). Since this function only yields a value if the scale has a maximum degree defined, *completely* can only combine with adjectives that lexicalize scales closed on the upper end.

(209) a. $\llbracket completely \rrbracket = \lambda G \lambda x . \exists d[d = \mathbf{max}(S_G) \wedge G(d)(x)]$

(Kennedy and McNally, 2005, 369)

      b. $\mathbf{max}(S) \stackrel{\text{def}}{=} \iota d[d \in S \wedge \forall d' \in S[d' \preceq d]]$ (Morzycki, 2015)

Before presenting the properties of maximizers, note that absolute adjectives with a maximum standard already require that the object have a maximal degree of the relevant property (Kennedy and McNally, 2005). For instance, for something to be full, it needs to be full to the top. This is problematic, because, since both G and *completely G* have the scale's maximum as their standard, the contribution of maximizers may seem vacuous.

However, despite having maximum standards, total adjectives readily allow for readings in which something less than a maximum standard is required (Kennedy and McNally, 2005; for experimental evidence, see Syrett and Lidz, 2010; Foppolo and Panzeri, 2013). For instance, (210) shows that *full* can be felicitously predicated of its argument if it is near the maximal value on the fullness scale.

(210) El   depósito está lleno, pero todavía puedes llenarlo un poco más
      the tank   is   full   but   still   can.2SG fill.ACC a   bit   more
      'The gas tank is full, but you can still fill it a bit more.'

The question is whether these readings of total adjectives are part of their semantics, that is, their standard is not the absolute maximum (Rotstein and Winter, 2004; see also McNally, 2011; Toledo and Sassoon, 2011) or they are imprecise uses of the predicates (Kennedy and McNally, 2005). Put differently, maximizers may have a truth-conditional contribution or, alternatively, they may be slack regulators and thus have a pragmatic effect (Sassoon and Zevakhina, 2013). Two facts argue in favor of the former option.

First, it is possible to tease apart the meaning of a total adjective *G* from the meaning of *completely G*, so that the former is true while the latter is false in the same situation. For instance, in (211a), *cerrado* 'closed' can be truthfully predicated of the building, but not *completamente cerrado* 'completely closed'. The same applies to *lleno* 'full' in (211b) (Rotstein and Winter, 2004). This is consistent with the behavior of other degree modifiers, such as *muy* 'very' (212a). Slack regulators, by contrast, have a trivial truth-conditional effect (Lasersohn, 1999). This is illustrated in (212b), where saying that something is *x* but not *exactly x* results in a contradiction (see also (111) in section 3.3.3.1).

(211) a. [El   centro] se encontraba cerrado; pero no   completamente ya que
      the center was.3SG   closed   but NEG completely   since
      había   una reja que, aunque   no   dejaba pasar más gente,
      there.was a grille that although NEG let.PST pass more people
      se   podía   ver   hacia   su interior.[1]
      IMPRS can.3SG.PST see.INF towards its interior

      '[The center] was closed, but not completely, since there was a grille
      not letting people in, but through which one could see inside.'

   b. [El   estadio] sí   estaba lleno, pero no   totalmente; según vi
      the stadium yes was   full but NEG totally   as   saw.1SG
      [en] las imagenes, no   estaba   tan lleno como lo   del   Frente.[2]
       in the images   NEG was.3SG so full as   the of.the Front

      '[The stadium] was indeed full, but not totally; according to what I saw
      in the pictures, it wasn't as full as in the Front's convention.'

(212) a. Isabel es alta, pero no   muy alta.
      Isabel is tall but NEG very tall

      'Isabel is tall, but not very tall.'

   b. # Isabel llegó   a las seis, pero no   exactamente a las seis.
       Isabel arrived at the six   but NEG exactly   at the six

      'Isabel arrived at six o'clock, but not exactly at six o'clock.'

---

[1]http://sociocultura-santalucia.blogspot.com.es/2009/04/2-observacion-en-la-feria-artesanal.html
[2]http://www.ayvevos.com/foros/archive/index.php/t-31741.html

A second argument for a semantic analysis of maximizers comes from their sensitivity to the scale structure of the adjective. In principle, all expressions are subject to imprecision (see, e.g., Lasersohn, 1999 and section 3.3.3.1). Precision levels can be understood as degrees forming a scale (see Morzycki, 2011). This scale is bounded at both ends. It has a maximal and a minimal degree of precision. If maximizers were slack regulators, they would thus be expected to show no restriction in their distribution. However, as shown above (208), maximizers only combine with (upper-)closed scale adjectives.

Therefore, maximizers have a truth-conditional contribution. In particular, they set the degree of the property denoted by the modified adjective to its maximum value. A few properties can be derived from their semantics, which are introduced next.

4.2.1   Properties of maximality modifiers

Since maximizers require that their arguments have a maximal degree of the relevant property, the construction *maximizer G* is a total construct, in the sense that it has the distribution and properties of an upper-closed scale adjective (Rotstein and Winter, 2004). In this section, I review the properties of maximality modifiers. These constitute the basis for the quest for maximality phenomena in the nominal domain in the next sections.

First, *x is G_{max}* entails that x has a maximal amount of *G*-ness (Kennedy and McNally, 2005). As a consequence, it is contradictory to assert that x can be G_{max}-*er*. Maximality modifiers also entail that the end of the scale has been reached. In (213a), the plane has a maximal amount of fullness and it is a contradiction to assert that it can have more. The same applies to (213b).

(213) a. # El avión está completamente lleno; hay   un asiento libre en la
          the plane is completely   full   there.is a seat   free in the
          parte de atrás.
          part   of back

          'The plane is completely full. There is an empty seat in the rear.'

    b. # El   suelo está totalmente seco; queda   un charquito   en ese
          the floor is   totally   dry remains a   puddle.DIM in that
          rincón.
          corner

          'The floor is totally dry. There is a small puddle in that corner.'

Second, *almost* is only acceptable with adjectives whose scale has a maximum
value (214) (see Cruse, 1986; Rotstein and Winter, 2004). Maximizers are also
compatible with that modifier.

(214) a. casi   seco; casi   recto; casi   lleno
          almost dry   almost straight almost full

    b. ?casi   mojado; ?casi   doblado; ?casi   alto
          almost wet   almost bent   almost tall

(215) a. El avión está casi   completamente lleno.
          the plane is   almost completely   full

    b. El   suelo está casi   totalmente seco.
          the floor is   almost totally   dry

Third, total adjectives (216) accept exceptive phrases (Rotstein and Winter, 2004).
As a total construct, *maximizer G* is also compatible with the construction *except
for* (217).

(216) El   avión está lleno, excepto por un par de asientos.
          the plane is   full,   except for a   pair of seats

          'The plane is full, except for a couple of seats.'

(217) a. El   avión está completamente lleno, excepto un asiento en la   primera
           the plane is   completely   full   except a seat   in the first
           fila.
           row

           'The plane is completely full, except for a seat in the first row.'

       b. El   suelo está totalmente seco, menos en este rincón.
           the floor is   totally   dry   except in this corner

           'The floor is totally dry, except for this corner.'

To sum up, maximizers are degree modifiers restricted to maximum-standard
adjectives that set the degree argument of the adjective to its maximal value. As
such, they share properties with total adjectives such as the entailment that the
end of the scale has been reached, and their acceptability with *almost* and with
exceptive phrases. In the next section, I use these properties to support the claim
that ACs, the adjectival counterparts of the modifiers in this section, behave as
maximizers when modifying property concept nouns.

4.3   Property concept nouns

Adjectives of completeness modify nouns denoting property concepts [PC] such as
libertad 'freedom' or *opacidad* 'opacity'. These nouns are abstract mass nouns and
usually have a related adjective. The distribution of ACs with these nouns is not
completely free (218); rather it seems to parallel that of adverbs of completeness
modifying adjectives (219).

(218) a. La   prensa tiene completa libertad.
           the press   has   complete freedom

       b. la   total opacidad del   material.
           the total opacity   of.the material

       c. la   (??completa) altura de Isabel
           the   complete height of Isabel

      d. la (??total) impureza de la muestra
         the   total impurity of the sample

(219) a. La prensa es completamente libre.
         the press is completely   free

      b. El material es totalmente opaco.
         the material is totally   opaque

      c. Isabel es (??completamente) alta.
         Isabel is   completely   tall

      d. La muestra es (??totalmente) impura.
         the sample is   totally   impure

This raises a series of questions about the semantics of PC nouns. First, mass nouns (either abstract, like PC nouns, or concrete, like *water*) have cumulative reference and do not have clear boundaries that may constitute a maximum for ACs. Yet, the ACs in (218) seem to indicate that the property has reached some sort of maximal degree. Second, the reading of ACs in (218) appears to be related not to the amount of freedom of the press, but to its degree.

This section deals with the semantics of PC nouns, in particular, their gradability, and their combination with ACs, in the light of the modification of adjectives by maximizers. It is argued that PC nouns denote substances and that ACs are degree modifiers that have the same semantics as their adverbial correlates. Exploring these issues will help to unravel the correspondence between measurement of amounts in the nominal domain and measurement of degree in the adjectival realm (Bartsch and Vennemann, 1973; Cresswell, 1977; Doetjes, 1997; a.o.).

The distribution and properties of ACs when modifying property concept nouns are laid out in section 4.3.1. The semantics of these nominals is discussed in section 4.3.2, to finally adopt an approach where PC nouns denote substances, and the relation between the property and its holder is one of possession. Finally, ACs are given semantics of maximality modifiers in section 4.3.3.

4.3.1   Adjectives of completeness with property concept nouns

Adjectival counterparts of maximizers are able to modify PC nouns (220). They
show a preference for prenominal position, but are also possible postnominally
(221). In this section, I show that ACs, just like their adverbial correlates, behave
as maximality modifiers.

(220) a. La prensa tiene total libertad para informar   y   expresar
         the press   has   total freedom for   inform.INF and express.INF
         opiniones.
         opinions

         'The press has total freedom to inform and express opinions.'

      b. La completa opacidad de este material impide   pasar   la luz
         the complete opacity   of this material prevents pass.INF the light
         ultravioleta
         ultraviolet

         'The complete opacity of this material prevents ultraviolet light from
         passing through.'

(221) a. La prensa tiene libertad total.
         the press   has   freedom total

         'The press has total freedom.'

      b. ? la   opacidad completa del   material
           the opacity   complete of.the material

           'the complete opacity of the material'

ACs modifying these nouns display the properties of maximality modifiers. First,
the construction *AC + PC noun* entails that the end of the scale has been reached.
In (222a), the press has a maximal degree of freedom, so it is a contradiction
to assert that it could be freer by not having to pass any inspection. The same
applies to (222b) (cf. 213).

(222) a. # La   prensa tiene total libertad; {solo tiene que pasar un pequeño
               the press   has   total freedom   only has.to   pass a small
           control   del   gobierno   / pero podría   tener   más}.
           inspection of.the government   but   could.3SG have.INF more

           'The press has total freedom. {It just has to pass a small inspection

           from the government / but it could have more freedom}.'

       b. # El   material ha llegado a la   completa opacidad; puedes hacerlo
               the material has arrived to the complete opacity   can.2SG make.ACC
           más   opaco.
           more opaque

           'The material has reached complete opacity. You can make it more

           opaque.'

Second, *AC + PC noun* is compatible with *casi* 'almost' (223) (cf. 215), and third,
it accepts exceptive phrases (224) (cf. 217).

(223) a. La   prensa tiene casi   total libertad para informar.
           the press   has   almost total freedom for   inform.INF

           'The press has almost total freedom to inform.'

       b. La casi   completa opacidad del   material impide   pasar   la
           the almost complete opacity   of.the material prevents pass.INF the
           luz   ultravioleta.
           light ultraviolet

           'The almost complete opacity of the materials prevents ultraviolet light

           from passing through.'

(224) a. La   prensa tiene total libertad, salvo   en asuntos religiosos.
           the press   has   total freedom except in issues   religious

           'The press has total freedom except for religious issues.'

       b. El   material tiene completa opacidad, excepto con respecto a la
           the material has   complete opacity   except   with respect to the
           luz   ultravioleta.
           light ultraviolet

           'The material has complete opacity, except regarding ultraviolet light'

Yet not every PC noun is acceptable with ACs. The nouns in (225) are compatible with ACs, but those in (226) are not. The relevant factor is the scale associated with the cognate adjective. The nouns in (225) are related to adjectives whose scales have a maximum: Upper-closed scale adjectives such as *libre* 'free' (225a) and totally-closed scale adjectives such as *opaco* 'opaque' (225b). By contrast, the nouns in (226) derive from open-scale adjectives like *alto* 'tall' (226a) and lower-closed scale adjectives such as *impuro* 'impure' (226b). Hence, the distribution of ACs parallel that of their adverbial counterparts (208) inasmuch as they only combine with the nouns in (225).[3] This shows that the scale associated with the adjective plays a role in the semantics of the noun.

(225) a. Upper-closed scale adjectives

completa aridez	*absoluta libertad*	*total oscuridad*
complete aridity	absolute freedom	total darkness
total claridad	*completa lealtad*	*absoluta rectitud*
total clarity	complete loyalty	absolute rectitude

   b. Totally-closed scale adjectives

completa opacidad	*absoluta soledad*
complete opacity	absolute loneliness
total transparencia	*completa visibilidad*
total transparency	complete visibility

(226) a. Open-scale adjectives

??*completa altura*	?*absoluta belleza*	?*total estrechez*
complete tallness	absolute beauty	total narrowness
??*total anchura*	?*completa ligereza*	??*absoluta sabiduría*
total wideness	complete lightness	absolute wisdom

---

[3]This correlation is noted for English by Constantinescu (2011, fn. 298).

b. Lower-closed scale adjectives

??*absoluta suciedad*	??*total inseguridad*	??*completa impureza*
absolute dirtiness	total insecurity	complete impurity

This does not mean, however, that these nominals are the nominal equivalents of (upper-) closed scale adjectives in the sense that they set their standard to the maximum in the scale. Put differently, for the nouns in (225), it is not the case that, in order for something to qualify as N, it must have a maximal amount of the property. Compare *libre* 'free', a total adjective, and its cognate noun, *libertad* 'freedom'. For something to be free, it must have a maximal amount of freedom; that is, it must be 100% free. This is shown in the contradiction in (227a) (cf. (213)). By contrast, for something to have freedom, a minimal amount is enough (cf. Fábregas, 2016, §III.2.2).[4] Example (227b) is thus not contradictory.

(227)   a.   # La prensa es libre. Solo tiene que pasar un pequeño control
             the press is free   only has to   pass a small   inspection
             del   gobierno.
             of the government

        'The press is free. It just has to pass a small inspection from the
        government.'

      b.   La prensa tiene libertad. Solo tiene que pasar   un pequeño
           the press has   freedom only has to   pass.INF a small
           control   del   gobierno.
           inspection of.the government

        'The press has freedom. It just has to pass a small inspection from the
        government.'

More evidence comes from the entailments of the comparative constructions. In the comparative, a maximum-standard adjective entails that the individual

---

[4]This is not necessarily the case crosslinguistically. For instance, in Ulwa, the way of predicating the property of being full is by using a PC root and possessive morphology (roughly, *x has fullness*), but the predicative sentences show the context dependence found in the English gradable adjective. So for truthfully predicating fullness of an object it must have a maximal amount of fullness (A. Koontz-Garboden, p.c.; see Francez and Koontz-Garboden, 2015).

in the *than*-clause does not have the property. By contrast, comparatives with relative adjectives do not give rise to positive or negative entailments (Kennedy and McNally, 2005). *Libre* 'free', a maximum-standard adjective, generates the expected entailments, that is, that the national press does not have the property of being free (228a). The entailment does not seem to be present for the noun *libertad* 'freedom' (228b). In other words, having less freedom does not entail not having freedom at all.

(228)   a.   La   prensa local es más   libre que   la   prensa nacional. ⊨ La   prensa
             the press   local is more free than the press   national   the press
             nacional no   es libre.
             national NEG is free

             'The local press is freer than the national press.' ⊨ 'The national press
             is not free.'

        b.   La   prensa local tiene más   libertad que   la   prensa nacional. ⇏ La
             the press   local has   more freedom than the press   national   the
             prensa nacional no   tiene libertad.
             press   national NEG has   freedom

             'The local press has more freedom than the national press.' ⇏ 'The
             national press does not have freedom.'

To sum up, the scale structure of an adjective plays a role in the semantics of its cognate noun. In particular, adjectival counterparts of maximizers only modify PC nouns when they are related to an upper- or a totally-closed scale adjective. Therefore, a degree analysis of ACs can be imported to the nominal domain. The next question is which bounded scale is being accessed by these modifiers. In order to give an answer to this question, the semantics of PC nouns is discussed in the next section.

4.3.2   The semantics of property concept nouns

Nouns like *libertad* 'freedom' or *belleza* 'beauty' denote property concepts (Dixon, 1977; Francez and Koontz-Garboden, 2015). They are abstract mass nouns and have been referred to in the literature as *quality nouns* (Rainer, 1989; van de Velde, 1995; Roy, 2010) or *dispositional nouns* (Alexiadou and Martin, 2012; Martin, 2013).[5] Before examining the properties of PC nouns, let me briefly characterize them by comparing them to state nominals.

To begin with, qualities do not have temporal duration and, consequently, they do not accept temporal modification (229), even if it is conceptually possible that possession of those qualities is not perpetual. On the contrary, states, which are temporally anchored (Dowty, 1979; Verkuyl, 1972; Rothmayr, 2009; a.o.; see also Maienborn, 2007) accept PP modifiers denoting temporal extension and frequency adjectives (230) (Roy, 2010; Fábregas and Marín, 2012; Arche and Marín, 2015; Fábregas, 2016, §II).

(229) a. ?? una {libertad / sabiduría / belleza} de varias   horas
            a   freedom   wisdom   beauty   of several hours

   b. ?? la   constante {libertad / sabiduría / belleza} de Cristina
            the constant   freedom   wisdom   beauty   of Cristina

(230) a. un(a) {soledad   / oscuridad / aburrimiento} de varias   horas
            a   loneliness darkness   boredom   of several hours

   b. la/el constante {soledad   / oscuridad / aburrimiento} de Cristina
         the   constant   loneliness darkness   boredom   of Cristina

---

[5]Admittedly, the term *abstract* is elusive and it is not clear whether the difference between concrete and abstract nouns is grammatically relevant. Bello (1847, §103) characterized the entities denoted by abstract nouns as "the qualities that are attributed to objects but are separated or independent from them" (my translation, MSM), and the subsequent grammars adopted some version of this idea of independent quality (for a short overview and discussion, see Bosque, 1999, §1.5). I use the term here as merely descriptive and I will not have much to say about abstract nouns in general, but I succinctly discuss some difference between concrete and abstract mass nouns in section 4.3.3.

Moreover, the bearer of the quality does not need to be present (231a) (see also (235) below) (Roy, 2010). By contrast, state nominals require that the holder is overtly expressed (231b).[6]

(231) a. La popularité (*constante) est une qualité qui lui   French
            the popularity   constant   is a   quality that DAT.3SG
            fait défaut
            does default
            'Popularity is a quality he lacks.'

       b. La popularité constante *(de ses chansons) m'impressionne.
            the popularity constant   of his songs   DAT.1SG.impresses
            'I'm impressed by the constant popularity of his songs.'

                                                          (examples from Roy, 2010)

Finally, nouns denoting qualities (232a), as opposed to nouns that denote states (232b) can appear in the genitive of quality construction (van de Velde, 1995; Roy, 2010).

(232) a. une personne d'une grande {patience / puissance /   French
            a   person of a great   patience force
            clarté / beauté}
            clarity   beauty

       b. * une personne d'une grande {peur / fatigue / colère / émotion}
            a   person of a great   fear   fatigue rage   emotion
                                            (examples from van de Velde, 1995)

To sum up, PC nouns denote properties or qualities, which are different from states in their temporal duration, the presence of a holder, and their ability to appear in some constructions, such as the genitive of quality. In this section, I focus on PC nouns, and abstract away from state-denoting nominalizations

---

[6]Borer (2013) takes this as evidence that quality nominals are R-nominals and state nominals have argument structure (see section 4.4.3) (cf. Roy, 2010). A syntactic implementation of our ideas here could go along those lines.

(see Fábregas and Marín, 2012; Fábregas et al., 2012; Moltmann, 2012, 2015; cf. Landman, 2000, §8.2). I also leave aside nominalizations of adjectives that denote occurrences of events, such as *estupidez* 'stupidity' or *crueldad* 'cruelty' (see Beauseroy, 2009; Arche and Marín, 2015; for the role and aspectual value of the suffixes, see Alexiadou and Martin, 2012; Martin, 2013; Fábregas, 2016, §IV). The properties of PC nouns are discussed next, in section 4.3.2.1. I present my proposal in section 4.3.2.2, where I adopt an approach in which PC nouns denote properties of portions of substances, in the line of Francez and Koontz-Garboden (2015).

4.3.2.1 Properties of property concept nouns

Nouns that denote property concepts have a series of characteristics that set them apart as a group of nouns. In this section, I review those properties regarding their reference, their relational status, their gradability and discuss how some previous analyses of these nouns (Nicolas, 2004, 2010; Moltmann, 2009) have accounted for them.

First, PC nouns behave morphosyntactically as mass nouns (e.g., Nicolas, 2004, 2010). For instance, they do not inflect for number (233)[7] and are compatible with the quantifiers *poco* 'little', or *demasiado* 'too much' (234).[8]

(233) a. #arroces; #cervezas   b. #libertades; #felicidades
              rices   beers   freedoms   hapinesses

(234) a. poco arroz; demasiada cerveza
              little rice   too.much   beer

---

[7]Mass nouns can be coerced into a count interpretation. For example, *dos cervezas* 'two beers' can refer to two servings of beer or to two types of beer. Abstract mass nouns, although with more restrictions, can also be used as count (e.g., *se tomó demasiadas libertades* 'she took too many liberties', *¡felicidades!* (lit. 'hapinesses') 'congratulations!'), and display a wide range of readings (see Beauseroy and Knittel, 2007; Beauseroy, 2009; Acquaviva, 2004; Grimm, 2014).

[8]Note that these Spanish quantifiers do not have separate forms for count and mass nouns (*pocas cervezas* 'few beers', *poca cerveza* 'little beer').

b. poca libertad; demasiada felicidad
   little freedom too.much happiness

PC nouns and mass nouns both have cumulative reference. A predicate *P* has cumulative reference if, and only if, whenever it holds of two things, it also holds of their collection (Krifka, 1989).[9] For instance, the result of combining the beer from two glasses is referred to as *beer*. Similarly (although certainly not as easy to visualize), Sophia's happiness and Maksim's happiness put together can be referred to as *happiness*.

Second, PC nouns denote abstract properties and often refer to instantiations of those properties in an individual. Hence, they usually appear with a prepositional complement that refers to that individual. The examples in (235) show absolute uses of PC nouns, where they are understood as abstract qualities (see also (231)), and (236) illustrate uses of PC with the individual the property is manifested in present. Note that the PPs can be substituted by a possessive pronoun (236c–d).

(235) a. La libertad es lo más importante.
         the freedom is the more important
         'Freedom is the most important thing.'

      b. Disertaron   sobre la belleza toda la noche.
         discussed.3PL about the beauty all the night
         'They discussed beauty all night long.'

(236) a. la libertad de la prensa
         the freedom of the press
         'the freedom of the press'

      b. la belleza de las cataratas Victoria
         the beauty of the falls Victoria
         'The beauty of the Victoria Falls'

---

[9]Formally,

(i) **Cumulative reference**
    $\forall x \forall y [P(x) \wedge P(y) \rightarrow P(x \sqcup y)]$ (Krifka, 1989, 78)

    c. su libertad
       its freedom

    d. su   belleza
       their beauty

Most approaches to PC nouns assume that the holder of the property is part of the meaning of the noun. In other words, that the noun is relational (Nicolas, 2004, 2010; Moltmann, 2004, 2009; Bochnak, 2013a). The appropriateness of an analysis of PC nouns in these terms (as expressing a two-place relation between a property and a bearer) lies in the argumental character of the the constituent expressing the possessor of the quality. This is problematic for a couple of reasons.

To begin with, if the holder of the property is an argument of the noun, it would be expected to be obligatorily realized. Testing this is complicated by the fact that the distinction between arguments and modifiers in the nominal domain is not as clear as in the verbal domain (see, e.g., Partee and Borschev, 2003; Adger, 2013, §4), and even the PP complements of kin nouns or body-part nouns can be omitted in certain contexts (237).

(237) a. Defendimos al   hermano ?(de Juan).
            defend.1PL DOM.the brother   of Juan
            'We defended (the) brother (of Juan).'

      b. It had the same contours as a hand.   (Adger, 2013)

The PP complements of PC nouns in Spanish are optional (238), and more easily omitted than those of kin nouns (cf. (237a)), tilting the balance in favor of a non-relational analysis of PC nouns. It could be argued that the relational nature is a semantic specification, and, even if the possessors can be omitted, there is an entailment that they exist. For instance, a person cannot be a sister without being the sister of someone (Barker, 1995). The question would then be whether something can be freedom or generosity without being instantiated in someone (without being someone's freedom or someone's generosity). My intuition is that it can. Even if it is difficult to talk about freedom or generosity without referring

to concrete examples, the sentences in (235) and (238) show that PC nouns do allow for abstract uses that do not require the presence of a holder.[10]

(238) a. Defendimos   la   libertad (de la   prensa).
defended.1PL the freedom of the press

'We defended (the) freedom (of the press).

b. Le   inquieta la generosidad (de Nuria).
DAT.3SG unsettles the generosity   of Nuria

'(Nuria's) generosity unsettles him.'

In addition, if the holder were an argument, PC nouns would not be able to receive an existential interpretation when the bearer is not present. However, this is not borne out. The examples in (239a–b), show the abstract mass noun *democracy* can have an existential interpretation (cf. the universal reading in (239c)) (Carlson, 1977).

(239) a. The Greeks practiced democracy.   EXISTENTIAL

b. There is now democracy in India.   EXISTENTIAL

c. Democracy is {a form of government / nearing extinction}. UNIVERSAL

(examples from Carlson, 1977)

Finally, the third property of PC nouns is a clear correlation between measurement of intensity in the adjectival domain and measurement of quantity in nominals. The sentences in (240a–b) with an adjective and a degree modifier are equivalent to those in (240c–d) with the corresponding PC noun and a quantifier or an AC.

(240) a. Lucía tiene mucha paciencia.
Lucía has   a.lot.of patience

---

[10]Moltmann (2004) takes nouns like *wisdom* to denote kinds of tropes, and phrases such as *the property of being wise* to denote properties. The question here is not whether *wisdom* can denote a kind, but rather whether it can have an existential interpretation that does not involve a bearer.

   b. La   prensa tiene completa libertad.
      the press   has   complete freedom

   c. Lucía es muy paciente.
      Lucía is very patient

   d. La   prensa es completamente libre.
      the press   is completely   free

This is further illustrated by exclamatives (Tovena, 2001; Brucart and Rigau, 2002). In particular, and illustrated in Catalan, a quantity exclamative with *quant* 'how much' and one with *quin* 'what' have the same interpretation with PC nouns. Thus, both exclamatives in (241a–b) have the same reading. The quality weighed by *quin* in (241b) is the amount of patience. This is not the case with concrete mass nouns such as *gent* 'people' (241c–d). Example (241c) refers to the amount of people, whilst (241d) weighs the properties of such people (for similar data in Italian, see Tovena, 2001).

(241) a. ¡Quanta   paciència!   c. ¡Quanta   gent!   Catalan
         how.much patience   how.much people

         'What a patience!'   'How many people!'

      b. ¡Quina paciència!   d. ¡Quina gent!
         what   patience   what   people

         'What a patience!'   'What (strange) people!'

                                       (examples from Brucart and Rigau, 2002)

The equivalence between quantity and quality in PC nouns is also manifested in the distribution of size adjectives (242). Size adjectives are compatible with PC nouns and have an intensifying reading (242a) (see, e.g., Morzycki, 2009; Constantinescu, 2011, 2013). For instance, *una felicidad enorme* 'a huge happiness' corresponds with a high intensity of happiness. By contrast, size adjectives do

not occur with concrete mass nouns (242b)[11] and have their literal readings with
count nouns (242c).

(242)   a.   una gran {belleza / libertad}; una {sabiduría / felicidad} enorme
             a   big   beauty   freedom   a   wisdom   happiness huge
             'a great {beauty / freedom}'; 'a huge {wisdom / happiness}'

        b.   *gran agua; #arroz enorme
              big   water   rice   huge

        c.   una gran casa; un parque enorme
             a   big   house a   park   huge
             'a big house'; 'a huge park'

In conclusion, PC nouns are characterized by their mass denotation, their relation
to the holder of the property, and the relation between the gradability of the noun
and that of their adjectival counterpart. The semantics I propose for Spanish PC
nouns in the next section resemble Nicolas's (2004; 2010) analysis in taking PC
nouns to have mass denotations and having degrees introduced by a measure
function external to the noun. The difference lies in the relation between the
property and the holder, which I take to be possession. In this sense, and also
in PC nouns not denoting tropes, it is different from the analysis in Moltmann
(2004, 2009). As for the dimension of ordering shared by the PC noun and the
corresponding adjective, which is stipulated in Nicolas (2004, 2010), I assume
that it is part of the conceptual information of the root and is inherited by its
different lexicalizations.

---

[11]Van de Velde (1995) proposes that a subset of abstract mass nouns such as *courage* denote intensive
quantities that can undergo and increase or contraction without a corresponding extension in space
or time. That is not the case for concrete mass nouns such as *water*. This may shed some light on the
collapse of intensity and amount in abstract but not in concrete mass nouns and why modification
by size adjectives, as well as ACs, results in intensification for the former but not the latter. The
difference between concrete and abstract mass nouns is out of the scope of this dissertation (for a
proposal, see Tovena, 2001).

4.3.2.2   Spanish property concept denote substances

I propose that Spanish PC nouns denote substances, building on Francez and Koontz-Garboden's (2015) proposal for PC terms in Ulwa (see also Levinson, 1978). In this section, I present the analysis and explain the two first properties of PC nouns, namely their mass status and their relation to the possessor of the property. Gradability is addressed in the next section.

The model in Francez and Koontz-Garboden (2015) draws on the mereological approach to mass terms put forward in Link (1983). A substance is understood as an abstract mass entity, the sort of thing *freedom* or *generosity* denote. The basic observation is that, just like concrete mass nouns such as *wine* have a domain that is mereologically ordered, substances are also predicates over domains structured in the same way. As mentioned above, both concrete and abstract mass terms have cumulative reference. Two portions of wine combined are wine; likewise, two portions of freedom together are freedom.

Hence, the main idea is that substances are predicates over a domain that is partially ordered. The basic assumptions are as follows. Let $\mathcal{A}$ be a non-empty set of portions of a substance. Substances are subsets of $\mathcal{A}$ that form a join semi-lattice with the join operation $\sqcup$ (commutative, idempotent, and associative). $\sqcup$ induces an ordering relation $\preceq$ on $\mathcal{A}$, that can be thought of as a 'part-of' relation (Francez and Koontz-Garboden, 2015).

A substance-denoting PC term denotes the set of all portions of the substance. Formally, this is represented as the characteristic function of the set. For instance, *libertad* denotes a property of portions of the substance, as in (243), where p is a variable over portions.

(243) $[\![libertad]\!] = \lambda p.\textbf{freedom}(p)$

A substance cannot be directly predicated of an individual. Instead, the way to predicate the property denoted by a PC noun of an individual is by a possession

relation (Francez and Koontz-Garboden, 2015). Roughly, an individual has the property denoted by the PC noun if it possesses a portion of the substance. The definition of substance possession is in (244), where π is the possessive relation.

(244) **Substance possession**

For any individual a and substance P, a has P iff $\exists p[P(p) \land \pi(a, p)]$

(Francez and Koontz-Garboden, 2015, 546)

As a consequence, possessive morphology is required to relate PC nouns to an individual (for crosslinguistic evidence, see Francez and Koontz-Garboden, 2015). In Spanish, this can be done by a PP headed by *de* or a possessive pronoun (236). Since the holder of the property is not a semantic argument of the PC noun (see section 4.3.2.1), the possessive relation (π) is introduced by a possessive head. I follow Storto (2003, 2005) for the analysis of possessive constructions in Romance. In his proposal for Italian, the head of the possessive PP brings in the possessive relation (245).[12] The head of the possessive PP selects the possessor DP as its complement. Therefore, the DP *de la prensa* 'of the press' denotes the property of individuals (portions of a substance in this case) that stand in a possessive relation to the press (246b).

(245) $[\![di]\!] = \lambda u_e.[\lambda v_e. u$ and v stand in the CONTROL relation$]$

(Storto, 2005, 74)

(246) a. $[\![de]\!] = \lambda x \lambda p.\pi(x, p)$

b. $[\![de\ la\ prensa]\!] = \lambda p.\pi(\textbf{the-press}, p)$

---

[12]For Storto (2003), the head of the possessive PP is lexically ambiguous between the relation CONTROL, a constant, and a variable, both of the relational type $\langle e, \langle e, t\rangle\rangle$. In control interpretations, the possessor has some sort of control of the possessum or of his bearing a relation to the possessum (not restricted to ownership); free interpretations are non-control interpretations and arise from leaving the possessive relation unspecified (see Storto, 2003 for details). The CONTROL relation is the only relevant for our purposes here. Since, in the case of PC nouns, the relation is possession, I represent it as π (246a).

This PP then adjoins to the PC noun (the possessum) and modifies the property it denotes via predicate modification. The resulting NP denotes the property of being a portion of a substance and standing in a possessive relation to the possessor (247). The NP then combines with the determiner.

(247) ⟦libertad de la prensa⟧ = $\lambda p[\textbf{freedom}(p) \wedge \pi(\textbf{the-press}, p)]$

This captures the fact that the possessor behaves like a restrictive modifier of the possessum (see Larson and Cho, 2003; Storto, 2003) and that the definiteness is introduced in Romance by the determiner and it is not a property of the genitive construction itself, as in English Saxon genitive DPs (Storto, 2003; cf. Partee, 1983/1997; Barker, 1995).

Hence, a phrase consisting of a PC noun and a PP complement such as *la libertad de la prensa* 'the freedom of the press' (236a), denotes the unique portion that is a portion of freedom and that the press possesses (248f). The individual in the PP complement of the PC noun (*the press*) is analyzed as a possessor, and the relation is mediated by the preposition *de*, which introduces the possessive relation (248b). The PP then composes with the PC noun via predicate modification (248e). The whole derivation is in (248).

(248)
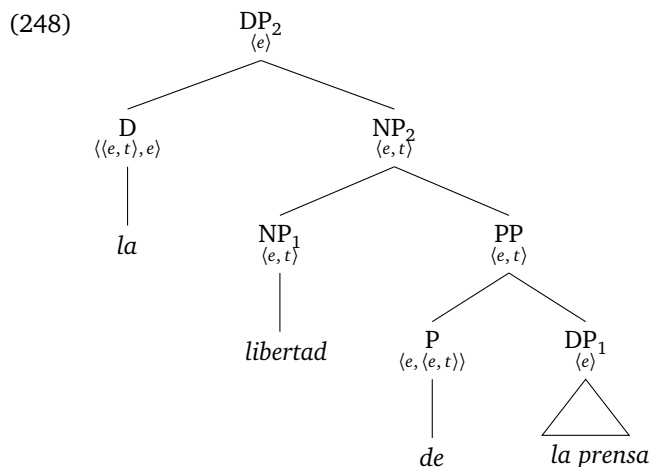
a. $[\![\text{DP}_1]\!] = \iota x.\textbf{press}(x)$

b. $[\![\text{P}]\!] = \lambda x \lambda y.\pi(x, y)$

c. $[\![\text{PP}]\!] = \lambda y.\pi(\iota z.\textbf{press}(z), y)$ (FA)

d. $[\![\text{NP}_1]\!] = \lambda p.\textbf{freedom}(p)$

e. $[\![\text{NP}_2]\!] = \lambda y[\textbf{freedom}(y) \wedge \pi(\iota z.\textbf{press}(z), y)]$ (PM)

f. $[\![\text{DP}]\!] = \iota y.[\textbf{freedom}(y) \wedge \pi(\iota z.\textbf{press}(z), y)]$ (FA)

In short, PC nouns have been analyzed as denoting portions of substances, thus accounting for their mass denotation. Since the bearer of the property is not an argument of the noun, PCs are related to an individual via a possessive relation introduced externally, by a possessive head. We turn now to the source of gradability of PC nouns.

4.3.2.3 Source of gradability and the collapse between amount and intensity

The last crucial property of PC nouns to be implemented is their gradability. In this section I follow (Francez and Koontz-Garboden, 2015) in deriving gradability from the partially ordered domain of substance-denoting terms and argue against PC nouns lexicalizing scales.

As mentioned above, the domain of a substance-denoting term is partially ordered (Francez and Koontz-Garboden, 2015). Gradability can thus be modeled as an ordering of portions of substance. This ordering is regulated by two postulates (249) (Francez and Koontz-Garboden, 2015). The first postulate (249a) states that any two portions of a substance are comparable in size. In particular, two distinct portions can be of the same size, or else one is bigger than the other. According to the second postulate (249b), the mereological part-of relations is preserved by the preorder $\leq$. Consequently, a portion that is part of another portion is smaller than the portion it is part of.

(249) a. Any substance $P \subset \mathcal{A}$ is ordered by a total preorder $\leq$, intuitively thought of as 'smaller or equal to'.

b. The preorder $\leq$ preserves the mereological part-of relation $\preceq$, so that given a substance P, and two portions $p, q \in P : p \preceq q \rightarrow p \leq q$.

(Francez and Koontz-Garboden, 2015)

Recall from section 4.3.2.1 that measurement of amount correlates with measurement of intensity, or degree, of the property in PC nouns. One option to account for this would be to assume that PC nouns lexicalize scales, just like their corresponding adjectives. That is, that their domain forms a total order instead of a partial one (e.g., Bochnak, 2013a). However, this would be problematic.

First, in many languages, including Spanish (233–234), PC nouns pattern with mass nouns. Mass nouns traditionally denote substances and their domain forms a mereology ordered by a part-whole relation, which is reflexive and transitive (a pre-order). This means that a portion of a substance can be part of or overlap with another, and accounts for the cumulative reference of PC nouns. There is no part-whole relation or overlapping in scales, unless intervals instead of degrees are considered (cf. Schwarzschild and Wilkinson, 2002). Therefore, excluding the possibility of overlapping would draw the semantics of PC nouns and mass nouns apart.

Second, scales are total orders and, as such, are antisymmetric. A relation is antisymmetric if there is no pair of distinct elements of X each of which is related by the relation R to the other. This means that whenever two degrees d_1 and d_2 stand in the same position in the ordering ($d_1 \leq d_2$ and $d_2 \leq d_1$) they are necessarily the same degree. This does not seem to be the case for PC nouns. The concrete manifestation of a property in an individual is unique (Moltmann, 2009). For instance, the particular entity that is the Taj Mahal's beauty is not identical to the Stata Center's even if they are as beautiful as one another (250). That is, two individuals can have the same degree or amount of the property (a portion of the same size) and the two amounts do not need to be identical.

(250) The Taj Mahal has as much beauty as the Stata Center, though their beauties
        are very different.   (Francez and Koontz-Garboden, 2015)

Therefore, there are reasons to prefer a mereology over a scale for the denotation
of PC nouns (see Francez and Koontz-Garboden, 2015; cf. also Moltmann, 2009).
What is then the relation between a PC noun and its corresponding adjective? First
of all, I assume that Spanish gradable adjectives (*libre* 'free', *bello* 'beautiful') and
their corresponding nouns (*libertad* 'freedom', *belleza* 'beauty') are derived from a
common root, but not from one another. A first piece of evidence for this is the fact
that it is not always the case that the noun is derived from the adjective. There
are cases of gradable adjectives derived from the PC noun (*corajudo* 'courageous'
from *coraje* 'courage'; *silencioso* 'silent, quiet' from *silencio* 'silence'; *hambriento*
'hungry' from *hambre* 'hunger'), and also cases of suppletion (*viejo* 'old', *edad*
'age'). In addition, some Spanish PC nouns do not have correspondent adjectives
(*fe* 'faith', *amor* 'love', *prestancia* 'elegance'), but their behavior is parallel to that
of those that have one.

In order to account for the relation between the PC noun and the corresponding
adjective, I suggest that property concepts can be gradable or non-gradable, and,
if gradable, bounded or unbounded. This information is conceptual. As such, it
is part of the root and passes on to its different lexicalizations. For instance, the
property concept that is the base for *free* and *freedom* is gradable and bounded.
Since it is gradable, then either the individuals that possess the property, or the
portions of the substance form an ordered set; since it is bounded, there is a
maximal degree or amount of the property an individual can have. By contrast,
the concept for *wisdom* is unbounded and the derived noun and adjective do not
have maximums. Finally, the concept for *father* and *fatherhood* is not gradable,
so individuals either have the property or do not, and are thus not ordered.[13]

By encoding the boundedness of the concept in the root, the type difference
between nouns and adjectives is preserved. Nouns denote properties and their

---

[13]A full development and formalization of these ideas would take us very far from the purpose of this
chapter, so it is left for future work.

domain forms a join semi-lattice, whereas adjectives are relations between degrees and individuals and their domain forms a scale (Krifka, 1989; cf. Wellwood, 2014), and there is a mapping between the two. That is, a certain amount of a property corresponds to a certain degree of the same property, but only adjectives include degree arguments. The mapping is evidenced by the correspondences between the degree modifiers of nouns and adjectives in (240) (see, e.g., Doetjes, 1997, §6). The distinction between quantities and degrees seems thus to be a matter of linguistic representation, so that the same dimension can be construed as either a quantity or a degree (Doetjes, 1997; see also Bresnan, 1973; Bosque and Masullo, 1998).

In sum, Spanish PC nouns have been argued to denote substances. In particular, they are predicates over portions of a substance. This accounts for their cumulative reference. In order to be related to an individual, a possessive relation is introduced by a specific head. Gradability of PC nouns has been derived from a partial order in their domain. Although there is a mapping between the size of a portion of a substance and a degree on the scale of the property used by the corresponding adjective, PC nouns do not lexicalize degrees. However, I assume that property concepts can be bounded or unbounded and, although these endpoints do not constitute standards to calculate the cutoff point for PC nouns, they are present and will be argued to be targeted by ACs in the next section. Before that, I discuss how degrees are introduced in the semantics of PC nouns.

4.3.3 Adjectives of completeness are maximality modifiers

ACs modify certain PC nouns, namely those related to adjectives using a maximum standard, and show the same entailments as their adverbial counterparts. In this section I provide the final semantics for ACs when modifying PC nouns. In order to do so, degrees are introduced in the semantics of those nouns via a functional head. ACs are then analyzed as maximality modifiers using the scale provided by the noun's root. I then shortly discuss some consequences of the analysis.

4.3.3.1   Introducing degrees in the semantics of property concept nouns

According to the semantics for PC nominals provided in the last section (section 4.3.2), they denote properties of portions of substances. Their domain is partially ordered, but they do not include degrees in their semantics (cf. Cresswell, 1977). Nouns do not combine directly with degree morphology. Rather, some functional projection is needed to enable nouns to be counted or measured. Evidence for this comes, for instance, from the obligatory presence of *much* (or *many*) in nominal (251) but not in adjectival comparatives (252) in English (Bresnan, 1973; Wellwood, 2014).

(251)   a. Elena has as *(many) books as Isabel.

   b. The local press has as *(much) freedom as the national press.

(252)   a. Elena is as (*much) tall as Isabel.

   b. The local press is as (*much) free as the national press.

I thus assume that degrees are introduced for nouns via a null head (Schwarzschild, 2006; Kayne, 2007; Solt, 2015a; see also Abney, 1987; Zamparelli, 1996; Svenonius, 2008). In particular, I adopt Solt's (2015a) MEAS (cf. Schwarzschild's (2006) Mon, Rett's (2008) QUANTITY). In this approach, quantifier adjectives such as *much* are predicates of degrees. When applied to an individual, MEAS produces a degree representing its number or amount. In other words, MEAS introduces a measure function that links individuals to degrees on the scale of some dimension, and thereby enables the semantic composition of quantity expressions with nouns.

(253) $[\![\text{MEAS}]\!]^{g_c} = \lambda x \lambda d. \mu_S(x) \geq d$ (Solt, 2015a, 236)

MEAS composes with the noun via a rule of Degree Argument Introduction, which is a variant of Kratzer's (1996) Event identification that identifies the individual argument and demotes it to second position in the lambda prefix (254) (Solt, 2015a).

(254) **Degree Argument Introduction (DAI)**

If α is a branching node, $\{\beta, \gamma\}$ are the set of α's daughters,

and $[\![\beta]\!] = \lambda x.P(x)$, $[\![\gamma]\!] = \lambda x \lambda d.Q(d)(x)$,

then $[\![\alpha]\!] = \lambda d \lambda x.[P(x) \wedge Q(x)(d)]$

(Solt, 2015a, 237)

MEAS encodes an underspecified measure function (μ_S). S is a variable over measurement scales, whose value is contextually determined. However, the choice of the scale is not completely unrestricted; rather, there is a requirement that it be monotonic on the part-whole structure of the object (Schwarzschild's (2002; 2006) *monotonicity constrain*).[14]

For PC nouns, size of the portion is monotonic (more freedom implies a bigger portion of freedom). Quantifier adjectives such as *poco* 'a little' or *demasiado* 'too much' (234a) measure thus the size of the portion of the substance denoted by the PC noun. Looking ahead, since size correlates with intensity in PC nouns and size is monotonic for these nouns, the intensity scale shared by the noun and the corresponding adjective is adequate for μ_S to use it as the dimension of measurement. This is the dimension ACs use.

4.3.3.2   Adjectives of completeness are maximizers

Once the degree argument is introduced, the expression MEAS *+ PC noun* denotes a gradable property. The degree can be saturated by degree expressions such as quantifier adjectives (*demasiado* 'too much', *poco* 'little'). I propose that ACs

---

[14]A dimension is monotonic if any proper subpart of the entity has a lesser degree of the dimension than the whole entity. More formally, a measurement scale S is monotonic if, for any x, y such that x is a proper part of y, the measure of x relative to the dimension used by S is strictly less than the measure of y relative to the same dimension (i).

(i) **Monotonicity**
   A dimension of measurement of a scale S is **monotonic** iff $\forall x, y \in D_e$,
   $x \prec y \Longrightarrow \mu_S(x) < \mu_S(y)$

can saturate this degree as well. ACs have the semantics in (255), which is equivalent to that of adverbs of completeness (209a). That is, they take a relation between degrees and individuals and return a property with the value of the degree argument set to the maximum of the scale used by the gradable predicate, if there is one.

(255) $[\![AC]\!] = \lambda G_{\langle d, \langle e, t \rangle \rangle} \lambda x. \exists d [d = \mathbf{max}(S_G) \wedge G(d)(x)]$

In the case of PC nouns, the scale S_G is provided by the value of the measure function μ_S introduced by the MEAS head. This measure function links individuals to degrees of the scale and thereby enables the semantic composition of quantity expressions with nouns. As mentioned above, the choice of the dimension of measurement S used by μ is contextually determined, but must be monotonic. In this case, S is set to size of the portion, and therefore, intensity (section 4.3.2.1). More water means more size of the portion of water (or more volume). Likewise, more freedom or more happiness means a bigger portion of freedom or happiness. As opposed to regular mass nouns, substances denoted by PC nouns may be bounded, that is, there is a maximal amount of the substance an individual can have. Put differently, the maximum the **max** function in the semantics of ACs returns for those PC nouns, such as *freedom*, that are bounded (256). For unbounded PC nouns, such as *sabiduría* 'wisdom', no maximum is available and the function **max** is undefined. This results in unacceptability of ACs (see 226).

(256) $[\![completa\ libertad]\!] = \lambda p [\mathbf{freedom}(p) \wedge \mu_S(p) \geq \mathbf{max}(S_{freedom})]$

The derivation for *la completa libertad de la prensa* 'the complete freedom of the press' is as in (257). The PC noun *libertad* conjoins with the property of being in a possessive relation with an individual (*la prensa*) (257c). The null head MEAS then combines via DAI (254) with the PC noun and introduces the degree argument (257e). The AC *completa* saturates that degree argument and fixes its value to the maximum in the scale (257g). The result is a property of individuals

(substances in this case) that have the maximum amount of freedom and that are possessed by the press. After the definite article is introduced, the result is the unique portion of freedom that the press possesses and that measures the maximum amount of freedom possible (257h).

(257)

```
                              DP₂
                              ⟨e⟩

               D                      MEASP
          ⟨⟨e,t⟩,e⟩                   ⟨e,t⟩

               |                 DegP              MEAS'
               la          ⟨⟨d,⟨e,t⟩,⟨e,t⟩⟩⟩      ⟨d,⟨e,t⟩⟩

                                 |          MEAS              NP₂
                              completa     ⟨e,⟨d,t⟩⟩          ⟨e,t⟩

                                                      NP₁              PP
                                                     ⟨e,t⟩            ⟨e,t⟩

                                                       |         P          DP₁
                                                    libertad   ⟨e,⟨e,t⟩⟩    ⟨e⟩

                                                                |         la prensa
                                                                de
```
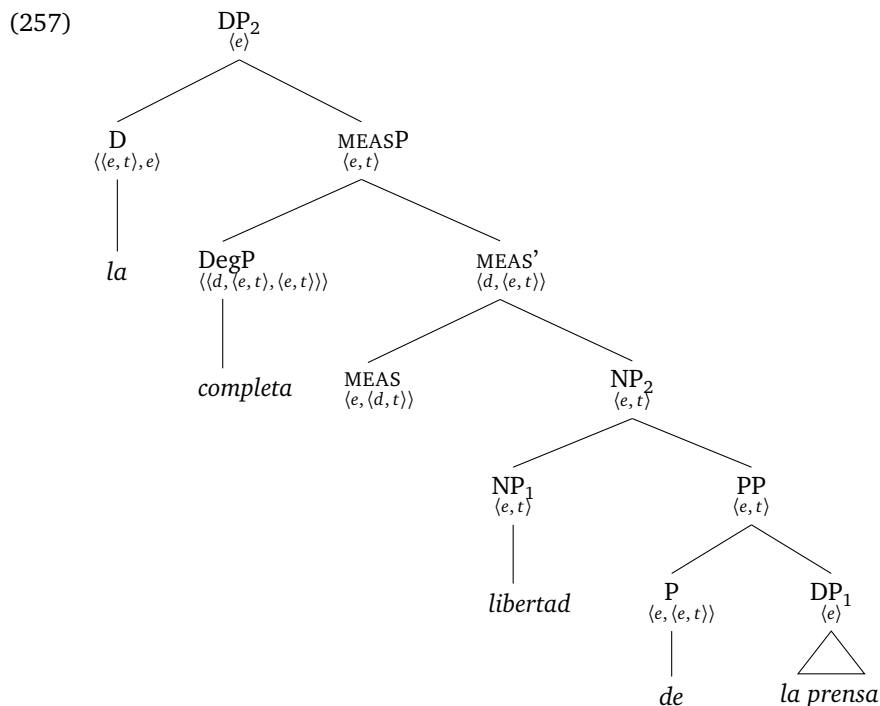

a. $[\![\text{PP}]\!] = \lambda y.\pi(\iota z.\textbf{press}(z), y)$ (FA)

b. $[\![\text{NP}_1]\!] = \lambda p.\textbf{freedom}(p)$

c. $[\![\text{NP}_2]\!] = \lambda p[\textbf{freedom}(p) \wedge \pi(\iota z.\textbf{press}(z), p)]$ (PM)

d. $[\![\text{MEAS}]\!] = \lambda x \lambda d.\mu_S(x) \geq d$

e. $[\![\text{MEAS}']\!] = \lambda d \lambda p[\textbf{freedom}(p) \wedge \mu(p) \geq d \wedge \pi(\iota z.\textbf{press}(z), p)]$ (DAI)

f. $[\![\text{DegP}]\!] = \lambda G_{\langle d, \langle e,t\rangle\rangle} \lambda x. \exists d[d = \textbf{max}(S_G) \wedge G(d)(x)]$

g. $[\![\text{MEASP}]\!] = \lambda p[\textbf{freedom}(p) \wedge \mu(p) \geq \textbf{max}(S_{freedom}) \wedge \pi(\iota z.\textbf{press}(z), p)]$ (FA)

h. $\llbracket \text{DP}_2 \rrbracket = \iota p \iota z [\mathbf{freedom}(p) \wedge \mu(p) \geq \mathbf{max}(S_{freedom}) \wedge \pi(\mathbf{press}(z), p)]$ (FA)

In the analysis put forward here, ACs compose with the noun through MEAS and provide a value for the measure of the size of the portion of the substance. These modifiers do so regardless of the part structure and other physical properties of the possessor of the property. In section 4.3.1, it was shown that the nouns share the scale structure with their corresponding adjective, and maximality modifiers are compatible with them only if the adjective lexicalizes a scale closed on the upper end. Since the possessor has a certain portion of the property, one of a precise size, a reasonable alternative would be that the maximal amount of the property the individual has provides a maximum for ACs. This is, however, not the case.[15] The amount of tallness (the height) of a building is a delimited amount (the interval between 0 and its maximal degree of height, say 170 meters), but that is not a valid maximum for *completo* (258a). The same happens with *impureza* 'impurity' in (258b).

(258) a. * la   completa altura   del   edificio
              the complete tallness of.the building
       b. * la   total impureza de la   muestra
              the total impurity of the sample

In addition to this, most of the examples in this section have involved nouns related to gradable adjectives, but that is not a requirement for the acceptability of ACs. For instance, the nouns in (259a) are underived and can appear with ACs with the same reading (that of having a maximal amount of the property). By contrast, those in (259b) are not acceptable with ACs. This supports the view that the structure of the scale is part of the information of the root, and not of the adjective itself.[16]

---

[15]Moltmann (2009, 61) also observes that tropes appear to belong to the mass domain regardless of the part structure and unity of their bearer.

[16]The domain of concrete mass nouns forms a mereology, but it is never bounded (neither does it collapse intensity with amount). This is the reason why ACs are not acceptable with them (i).

(259) a. completa paz,   total silencio, absoluta fe
           complete peace total silence   absolute faith

       b. *completo miedo, ??total daño, *absoluto tiempo
            complete fear   total harm   absolute time

To sum up, ACs have been given an analysis as maximality modifiers of PC
nouns. In particular, PC nouns are turned into gradable properties by means
of a functional head MEAS. ACs then saturate the degree argument and set its
value to the maximum in the scale associated with the noun. This accounts for
ACs sensibility to the scale structure of the adjective related to the noun. In the
following section, I discuss some consequences of the analysis.

4.3.3.3 Consequences

In the analysis put forward here, ACs are degree modifiers and not regular
adjectives when modifying PC nouns. As a consequence, they are not expected to
be subject to the difference in interpretation between prenominal and postnominal
position for adjectives in Romance languages (see, e.g., Demonte, 2008; Cinque,
2010). This is borne out. In (260), both versions, with the adjective to the left or
to the right of the noun, receive the same reading. However, with nouns other
than PC nouns (261), prenominal position corresponds with a non-restrictive
interpretation whereby the committee is said to include a wide variety of members,
to be comprehensive, while postnominal position asserts that all the members of
the committee were present.

(260) a. La prensa tiene {completa libertad / libertad completa}.
           the press   has   complete freedom   freedom complete
           'The press has complete freedom.'

(i) *completa agua, *total arroz, *absoluta cerveza
      complete water   total rice   absolute beer

b. Comprobamos la {total aridez / aridez total} del   terreno.
   checked.1PL   the total aridity   aridity total of.the land

   'We checked the total aridity of the land.'

(261) a. Conocimos al   completo comité   de expertos.
          met.1PL   DOM.the complete committee of experts

          'We met the complete committee of experts.'

       b. Conocimos al   comité   de expertos completo.
          met.1PL   DOM.the committee of experts   complete

          'We met the whole committee of experts.'

Another prediction of analyzing ACs as degree modifiers is that they should not be able to appear in predicative position, because the degree modifier needs to be adjacent to the degree argument. Yet, ACs do occur predicatively with PC nouns (262). However, there are reasons to think that this is not a degree reading of ACs. First, note that PC nouns using open scales are also acceptable with predicative uses of ACs (263a), but not with attributive ones (263b), which pattern with the distribution of adverbs of completeness (263c). Second, the predicative AC can be substituted by its negative counterpart *incompleto* 'incomplete', which is never a degree modifier, in both cases (264).

(262) La libertad de la prensa es {completa / ?total}
       the freedom of the press is complete   total

(263) a. Su {bondad   / sabiduría} es {completa / ?total}.
          her goodness   wisdom   is complete   total

       b. ?? la {completa / total} {bondad   / sabiduría} de Lucía
             the complete   total goodness   wisdom   of Lucía

       c. ?? Lucía es {completamente / totalmente} {buena / sabia}.
             Lucía is completely   totally   good   wise

(264) a. La libertad de la prensa es incompleta.
          the freedom of the press is incomplete

       b. La {bondad   / sabiduría} de Lucía es incompleta.
          the goodness   wisdom   of Lucía is incomplete

These facts indicate that ACs here are receiving a reading that can be paraphrased as 'from all points of view' or 'in every respect' (see, e.g., Fábregas, 2015). For instance, saying that someone's wisdom is complete (263a) does not mean that she has a maximum intensity, or degree, of wisdom, but rather that the person is wise in every respect (cf. Sassoon, 2013b).

The null head used to introduce degrees in the semantics of the nouns (which I called MEAS following Solt (2015a)) is usually brought in to account for quantifier adjectives such as *mucho* 'a lot of' and *poco* 'little'. ACs have been argued to have a quantificational nature, but they are different from quantifier adjectives in various ways. For instance, both ACs and quantifier adjectives are felicitous as an answer to quantity questions with *cuánto* 'how much' (265a), but only ACs can answer manner questions with *cómo* 'how' (265b).

(265) a. A: ¿Cuánta   libertad tiene la prensa?
                how much freedom has   the press

            'How much freedom does the press have?'

       B: mucha / poca / demasiada / completa / total
           a lot   little   too much   complete   total

    b. A: ¿Cómo es la   libertad de la   prensa?
             how   is the freedom of the press

        'How is the freedom of the press?'

       B: #mucha / #poca / #demasiada / completa / total
            a lot   little   too much   complete   total

Despite their similarities, such as the fact that they must be adjacent to the noun and that they track the same dimensions (as illustrated by the fact that both can be answers to quantity questions), quantifier adjectives and ACs are syntactically and semantically different,[17] and this has consequences for, for example, the formation

---

[17]For instance, in Solt's (2015a), quantifier adjectives are predicates of sets of degrees, and have to undergo Quantifier Raising in order to be interpreted. For discussion, see, e.g., Barwise and Cooper 1981; Partee 1989; Schwarzschild 2006; Solt 2015a and references therein.

of partitive structures (see e.g., Schwarzschild, 2006). A full comparison between quantifier adjectives and ACs is left for the future.

To sum up, the analysis of ACs as maximizers when they modify PC nouns correctly predicts the lack of correlation between position and restrictiveness for ACs, as well as their restriction to attributive position. It also sets them apart from quantifier adjectives, which quantify over the same degree.

4.3.4   Conclusion

This section has examined ACs in combination with PC nouns. It has been argued that the modifiers are sensitive to the scale structure of the adjective related to the noun, and, for this reason, they should receive a degree analysis as maximizers.

Adverbs of completeness combine only with upper- or totally-closed scale adjectives and show a series of properties that are replicated in the modification of PC nouns by ACs. This was shown in section 4.3.1 and is the main empirical contribution of this section.

In order to capture the scale-structure properties shared by related nouns and adjectives, an analysis of PC nouns as denoting substances has been put forth. Basically, PC nouns denote properties of portions of substances that are ordered by the part-whole relation. Substances can be bounded if the property has a maximum. The relations between the PC noun and the bearer of the property was argued to be one of possession. This analysis connects PC nouns with mass nouns and accounts for their shared distribution.

ACs are maximality modifiers. Their composition with the PC noun is mediated by a null head that introduces the degree argument and links it to the individual argument. ACs set the degree of the property to its maximum.

This is the first case of degree modification in the nominal domain we analyze in this chapter. In this case, the degree was provided by the property scale shared

by gradable adjectives and their related nouns. This dimension of measurement is conflated with amount, establishing a parallelism between degree and quantity. In the next sections I show that there are two more cases where the nominal provides a degree argument and ACs are maximality modifiers.

4.4   Eventive nominalizations

ACs modify deverbal nominalizations. In addition to adjectival modifiers, adverbs of completeness are VP modifiers and, like in the case of PC nouns (section 4.3), a correlation between the behavior of the adverbs and the adjectives can be established. The phrases in (266) show the nominal paraphrases of the sentences in (267). In the acceptable cases, the modifier is indicating that the event has reached its endpoint.

(266) a. la   total destrucción de la   ciudad
           the total destruction of the city

       b. ?? la   completa traducción de poemas
            the   complete translation of poems

           'the complete translation of poems'

       c. el   completo oscurecimiento del   cielo
           the complete darkening   of.the sky

       d. ?? el   total encarecimiento   de los alimentos
            the   total become.more.expensive.NMLZ of the food

           'the total rising of food prices.'

(267) a. El   incendio destruyó   completamente la   ciudad.
           the fire   destroyed completely   the city

       b. ?? Elena tradujo   totalmente poemas.
            Elena translated totally   poems

           'Elena totally translated poems.'

       c. El   cielo se oscureció completamente.
           the sky   SE darkened completely

           'The sky darkened completely.'

    d. ?? Los alimentos se encarecieron   totalmente.
        the food   SE became.more.expensive totally

      'The food prices rose totally.'

Recall from section 4.2 that adverbs of completeness are maximality modifiers of adjectives. In the verbal domain, they are sensitive to aspect. In particular, they combine with expressions denoting telic events, and their contribution is to assert that the event has developed to its end. The question addressed in this section is whether their adjectival counterparts, ACs, are aspectual modifiers as well when combined with event-denoting nouns and, ultimately, whether they are maximizers. In order to do so, this section examines the syntax and semantics of eventive nominalizations of incremental theme verbs and degree achievements. It argues for a scalar account of both of them. This contributes to the investigation of aspectual inheritance in nominalizations and the parallelism between modifiers of adjectives and event descriptions.

This section is organized as follows. Section 4.4.1 introduces the distribution of adverbs of completeness with the different aspectual classes, as well as the two case studies: incremental theme verbs and degree achievements. Section 4.4.2 shows that ACs are maximality modifiers with eventive nominalizations of these verbs. The analysis of the nominalizations is provided in section 4.4.3, where I combine a Distributive Morphology approach to argument-structure nominals for the syntax and a scalar approach for the semantics. ACs are argued to be maximizers in section 4.4.4. Section 4.4.5 concludes.

4.4.1 Maximality modifiers of events

Adverbs of completeness such as *completamente* 'completely' and *totalmente* 'totally' modify verbs (268).[18] They assert that the event is realized to its culmination.

---

[18]In this case, they are sometimes referred to as *adverbs of completion* (see Parsons, 1990; Moltmann, 1997; Caudal and Nicolas, 2005; Piñón, 2005a; Lenepveu, 2013).

In this section I show that their distribution and its relation to lexical aspect parallels the modification they perform on gradable adjectives discussed in section 4.2. Two types of verbs showing variable telicity center the discussion: incremental theme verbs and degree achievements.

(268) El incendio destruyó totalmente la ciudad
      the fire   destroyed totally   the city
      'The fire totally destroyed the city.'

In (268), the presence of the adverb implies that the event of destroying the city was realized to the end, that is, to its maximal degree. Intuitively, this is the same role adverbs of completeness play when they modify adjectives (see section 4.2). If this is the case, and the analysis of adverbs of completeness as maximizers can be extended to cover their modification of VPs, two predictions would follow. First, they would be restricted to events that develop in time (that is, that are durative) and are bounded (that is, that are telic). Second, they would show the properties of maximizers presented in section 4.2.1. Both are borne out.

Firstly, adverbs of completeness only occur with accomplishments (269a) and are not acceptable with states (269b), activities (269c) or achievements (269d). Therefore, they require that the event be extended in time (that be durative) and that it have and endpoint (that be telic) (see also Piñón, 2005a; Caudal and Nicolas, 2005; Lenepveu, 2013).

(269) a. Jenny dibujó completamente un círculo.
          Jenny drew completely   a circle
          'Jenny completely drew a circle.'   ACCOMPLISHMENT

       b. ?? Jenny sabe   francés totalmente.
             Jenny knows French totally
             'Jenny totally knows French.'   STATE

       c. ?? Jenny corrió completamente.
             Jenny ran   completely
             'Jenny completely ran.'   ACTIVITY

    d. ?? Jenny advirtió totalmente el   cuadro.
          Jenny noticed totally   the painting
          'Jenny totally noticed the painting.'   ACHIEVEMENT

Secondly, the properties of adverbs of completeness when modifying verbs parallel those of maximality modifiers of adjectives (section 4.2.1). First, they entail that the event has come to its endpoint (270) (cf. (213)). In (270a), the city is said to be completely destroyed, so it is a contradiction to assert that some buildings did not collapse. The same applies to (270b).

(270) a. # El incendio destruyó   totalmente la ciudad; quedaron
           the fire   destroyed.3SG totally   the city   remained.3PL
           algunos edificios en pie.
           some   buildings in foot
        'The fire totally destroyed the city; some buildings still remain.'

      b. # El cielo se oscureció   completamente; quedó   un claro
           the sky   SE darkened.3SG completely   remained.3SG a   break
           de luz.
           of light
        'The sky darkened completely; there was a break in the clouds.'

Second, as a total construct, *maximizer + VP* is compatible with *casi* 'almost', which asserts that the event is close to reaching its end (271) (cf. (215)). And third, they accept exceptive phrases (272) (cf. (217)).

(271) a. El incendio destruyó   casi   totalmente la ciudad.
           the fire   destroyed.3SG almost totally   the city
        'The fire almost totally destroyed the city.'

      b. El cielo se oscureció   casi   completamente.
           the sky   SE darkened.3SG almost completely
        'The sky almost completely darkened.'

(272) a. El incendio destruyó   totalmente la ciudad, excepto dos
         the fire   destoyed.3SG totally   the city   except two
         edificios.
         buildings
         'The fire totally destroyed the city, except for two buildings.'

     b. El cielo se oscureció   completamente, salvo por un claro de
         the sky SE darkened.3SG completely   except for a   break of
         luz.
         light
         'The sky completely darkened, except for a break.'

If the realization of an event is mapped onto a scale, where the termination point of the event (if there is one) corresponds to its maximum, accomplishments can be represented as using totally-closed scales. This is the approach I adopt for eventive nominalizations, as will be detailed below. Under this view, adverbs of completeness in the verbal domain can be analyzed as maximality modifiers (see Piñón, 2005a; Kennedy and Levin, 2008; cf. Cinque, 1999, §4.26; Alexiadou, 1997, §5.2.4; Moltmann, 1997). I argue that this analysis is appropriate for ACs modifying eventive nominalizations as well.

4.4.1.1 Two case studies: Incremental theme verbs and degree achievements

Adverbs of completeness have been shown to be sensitive to the aspect of the event. In particular, they only combine with telic events (for the different aspectual classes, see Bach, 1986; Vendler, 1957, 1967; Verkuyl, 1972; Dowty, 1979; a.o.). Telicity is not, however, a property of verbs, but it emerges from the interaction of properties of the verb and those of a participant in the event, which provides an explicit bound (Verkuyl, 1972; Mourelatos, 1978; Dowty, 1979; Krifka, 1989, 1992; Dowty, 1991; Jackendoff, 1991, 1996; Tenny, 1994; a.o.). In this section I present the two case studies that are the base for the study of maximality in eventive nominalizations: incremental theme verbs and degree

achievements. These two classes of verbs show variable telicity depending on the properties of some participant in the event (see, e.g., Krifka, 1989, 1992; Hay et al., 1999; Piñón, 2005a, 2008; Kennedy and Levin, 2008; Kennedy, 2012b; Winter, 2006; Rappaport Hovav, 2008) and are compatible with adverbs of completeness. This makes them pertinent to investigate the interaction between aspect and maximizers.

In the case of incremental theme verbs, their variable telicity is tied to the referential properties of their theme argument (273). If the extent scale supplied by the internal argument is bounded, the event is telic (273a), as shown by the unacceptability of *for*-adverbials (e.g., Vendler, 1957; Dowty, 1979; Rothstein, 2004); if it is unbounded, the event is atelic (273b), and *in*-adverbials are not acceptable. Adverbs of completeness only occur with the telic version (274).

(273) a. El incendio destruyó   la ciudad {en / ??durante} una hora.
           the fire   destroyed.3SG the city   in   for   a   hour
           'The fire destroyed the city {in / ??for} an hour.'   TELIC

       b. El incendio destruyó   ciudades {??en / durante} una hora.
           the fire   destroyed.3SG cities   in   for   a   hour
           'The fire destroyed cities {??in / for} an hour.'   ATELIC

(274) El incendio destruyó   totalmente {la ciudad / ??ciudades}.
       the fire   destroyed.3SG totally   the city   cities
       'The fire totally destroyed {the city / ??cities}.'

Change of state verbs such as degree achievements lexically specify a scale. The event describes an increase or decrease in the values of the property by the internal argument, such as an increase in closeness or width (275). The boundedness of this scale depends on the scale associated with the source adjective. In the case of *cerrar* 'close', the corresponding adjective (*cerrado* 'closed') uses a closed scale and the verb has a telic interpretation (275a). By contrast, *ancho* 'wide' lexicalizes an open scale and its derived verb (*ensanchar* 'widen') is atelic by

default (275b).[19] Adverbs of completeness only combine with the telic event descriptions (276).

(275) a. La grieta se cerró {en / ??durante} dos días.
           the crack SE closed in   for   two days

           'The crack closed {in / ??for} two days.'   TELIC

       b. La grieta se ensanchó {??en / durante} dos días.
           the crack SE widened   in   for   two days

           'The crack widened {??in / for} two days.'   ATELIC

(276) La grieta se {cerró   / ??ensanchó} completamente.
        the crack SE closed   widened   completely

        'The crack {closed / widened} completely.'

To sum up, adverbs of completeness only occur with durative telic events (i.e., accomplishments) and show the properties of maximality modifiers. In the case of verbs showing variable telicity, they are only acceptable with the telic versions. Their role is to assert that the event has been developed to its endpoint.[20]

---

[19]Degree achievements alternate between a causative and an inchoative version. The *se* in the examples marks the inchoative version and has no aspectual effects. See the discussion around the examples in (292) below.

[20]Directed motion verbs also show variable telicity, but, since ACs modifying nominalizations of motion verbs (*completo descenso* 'complete descent', *total aterrizaje* 'total landing') are out of the scope of this dissertation, I only make a few observations here. These verbs are measured out via a mapping between the event and the path (i) (Dowty, 1991; Tenny, 1992; Jackendoff, 1996; Krifka, 1998; Zwarts, 2005; Beavers, 2008). Adverbs of completeness only appear with the telic ones (ii).

 (i) a. El avión cruzó   la isla   {en / ??durante} dos horas.
          the plane crossed the island in   for   two hours

          'The plane crossed the island {in / ??for} two hours.'   TELIC

       b. El avión ascendió {?en / durante} cinco minutos
          the plane ascended   in   for   five minutes

          'The plane ascended {?in / for} five minutes.'   ATELIC

 (ii) El avión {cruzó   completamente la isla   / ??ascendió completamente}.
       the plane crossed completely   the island   ascended completely

       'The plane completely {crossed the island / ascended}.'

Event descriptions display certain characteristics that are similar to those found in the domain of degree semantics. Based on this fact, several scalar accounts of aspectual composition have been put forth (Krifka, 1998; Hay et al., 1999; Piñón, 2005a, 2008; Caudal and Nicolas, 2005; Beavers, 2008; Kennedy and Levin, 2008; Kennedy, 2012b; a.o.). For instance, proportional modifiers such as *completely* or *half* are both degree and event modifiers (Piñón, 2005a, 2008; Caudal and Nicolas, 2005; Bochnak, 2013b). In scalar accounts of aspect, progress of an event corresponds with movement along a scale that measures the change in a property of an event participant. Thus, boundedness of a scale corresponds with a telic (bounded) event. In order to account for the parallelisms between the behavior of adverbs of completeness in the adjectival and the verbal domain, and ACs in that of eventive nominalizations, I adopt a scalar approach to variable telicity. The basic idea is that the event descriptions above share in their meaning a function that measures the degree to which an object changes relative to some scalar dimension over the course of the event.

In the next section, I introduce the different classes of deverbal nominals. Then, the data regarding ACs' modification of eventive nominalizations are presented. I show that they behave as maximizers and thus a degree analysis of ACs can be imported in this case as well.

However, the correlation between telicity and acceptability of adverbs of completeness does not extend to manner of motion verbs (Rappaport Hovav and Levin, 2010), for which the path is not conflated in the verb (Talmy, 1985, 2000) and directional PPs contribute to the aspectual properties of the event description (iii) (Jackendoff, 1991; Piñón, 1993; Zwarts, 2005; Winter, 2006; a.o.).

(iii) a. Norberto corrió (*completamente) hasta su casa   {en/??durante} cinco minutos.
           Norberto ran   completely   to   his house   in   for   five   minutes

       b. Norberto condujo (*totalmente) de   Madrid a Valencia {en/??durante} tres   horas.
           Norberto drove   totally   from Madrid to Valencia in   for   three hours

4.4.2 Adjectives of completeness with deverbal nominalizations

Deverbal nominals do not form a homogeneous class (Grimshaw, 1990; for an overview, see, e.g., Alexiadou et al., 2007, part IV). Grimshaw (1990) divides them into three semantic classes, according to whether they obligatorily take arguments and denote eventualities: complex event (CE) nominals, result nominals, and simple event (SE) nominals. The classification is obscured, however, by the fact that many deverbal nominals can be two- or three-way ambiguous. For instance, a noun such as *construcción* 'building' can refer to the event of building something (277a), or to an entity, the result of that building (277b). A simple event nominal like *class* can denote an event, but does not obligatorily take arguments (277c).

(277) a. La construcción ??(del   puente) llevó mucho tiempo.
          the building   of.the bridge   took a.lot   time
          'The building ??(of the bridge) took a long time.'   CE NOMINAL

       b. La construcción (*del   puente) es de piedra.
          the building   of.the bridge   is of stone
          'The building (*of the bridge) is made of stone.'   RESULT NOMINAL

       c. La clase (de matemáticas) (a los alumnos de tercero) llevó mucho
          the class   of maths   to the students of third   took a.lot
          tiempo.
          time
          'The (math) class (to the third-year students) took a long time.'

                                                                   SE NOMINAL

Only CE nominals obligatorily take internal arguments (277a). For this reason, the difference has been recast in terms of argument structure (AS) nominals (Grimshaw's CE nominals) and referential (R) nominals (result and SE nominals)

(e.g., Borer, 2003).[21] Grimshaw (1990) shows that a set of properties distin-
guishes AS nominals from R nominals (cf. Borer, 2003; Newmeyer, 2009; Grimm
and McNally, 2013, and references therein). For instance, only AS nominals
accept aspectual modifiers such as *in-* or *for*-adverbials (278a); R nominals are
incompatible with them (278b). Table 4.1 offers a summary of the properties of
AS nominals and R nominals respectively.[22]

(278) a. La construcción del   puente en dos horas tuvo lugar en abril.
           the building   of.the bridge in two hours had place in April
           'The building of the bridge in two hours took place in April.'   AS
           NOMINAL

       b. La construcción (*en dos horas) es de piedra.
           the building   in two hours is of stone
           'The building (*in two hours) is made of stone.'   R NOMINAL

ACs occur with both AS nominals and R nominals. In the former case, ACs and
the corresponding adverbs (section 4.4.1) behave alike in their distribution and
meaning. For instance, in (279), the event of translating the book of poems has
reached its terminal point. By contrast, when ACs appear with result nominals,
they do not measure the degree of development of the event. Instead, they
indicate that the object has all the parts it must have (280).

---

[21] The optionality of arguments in result and SE nominals poses a theoretical problem, since it is been
assumed that arguments are an indication for the presence of argument structure and, if no verbal
layers are present, it is not clear what licenses them. A common explanation is to assume that
they are semantic participants related to the conceptual or encyclopedic meaning associated with
the root (for discussion and different implementations, see, e.g., Grimshaw, 1990; Picallo, 1991;
Pustejovsky, 1995; Levin, 1999; Alexiadou, 2001b; Borer, 2013).

[22] A note on terminology is necessary here. I use *deverbal nominals* (Grimshaw, 1990) to refer to the
three types of event/verbal related nominals: 1) *argument-structure (AS) nominals* (Borer, 2003) or
eventive nominalizations (derived event-denoting nominals, Grimshaw's *complex event nominals*);
2) *result nominalizations* (Grimshaw, 1990) (derived object-denoting nominals); 3) *simple event
nominals* (Grimshaw, 1990) (underived event denoting nominals); *Referential (R) nominals* (Borer,
2003) refers to the two latter classes, that is, to nouns that do not possess argument structure.

	AS NOMINALS	R NOMINALS
Have obligatory arguments	+	–
Denote eventualities	+	–
Allow agent-oriented modifiers (*deliberate*)	+	–
Subjects are arguments	+	–
By-phrases are arguments (in Spanish select *por*)	+	–
Allow implicit argument control	+	–
Take aspectual modifiers (*in-* or *for*-adverbials)	+	–
Frequent, *constant* are possible in the plural	–	+
May pluralize	–	+
Take indefinite determiners	–	+

TABLE 4.1: Argument structure vs. Result nominals

(279) a. La completa traducción del   poemario   tuvo lugar en abril.
           the complete translation of.the book.of.poems had place in April

           'The complete translation of the book of poems took place in April.'

(280) La completa traducción está encima de la   mesa.
       the complete translation is   on.top of the table

       'The complete translation is on the table.'

ACs show aspectual sensitivity with eventive nominalizations of incremental theme verbs and degree achievements.[23] In particular, they only combine with nominalizations denoting telic events (281a, 282a) (cf. (274, 276)). By contrast, the events in (281b) and (282b) are atelic, and the modifier is not acceptable.[24]

(281) a. La completa destrucción de la   ciudad se produjo en abril.
           the complete destruction of the city   happened in April

           'The complete destruction of the city took place in April.'   TELIC

       b. ?? La completa destrucción de ciudades se produjo en abril.
              the complete destruction of cities   happened in April

              'The complete destruction of cities took place in April.'   ATELIC

---

[23]I mostly set R nominals aside from the discussion until section 4.4.4.1.

[24]Some speakers accept examples like (281b) under a distributive reading (completely each of the cities) (see also fn. 49).

(282) a. El   completo oscurecimiento del   cielo se produjo en abril.
         the complete darken.NMLZ   of.the sky   happened in April

         'The complete darkening of the sky took place in April.'   TELIC

     b. ?? El   completo ensanchamiento de la   ciudad se produjo en abril.
          the complete widen.NMLZ   of the city   happened in April

         'The complete widening of the city took place in April.'   ATELIC

ACs modifying AS nominals also display the properties of maximality modifiers (see sections 4.2.1 and 4.4.1). First, they entail that the end of the scale tracking the development of the event has been reached. The examples in (283) show thus a contradiction, just like their counterparts in (270).

(283) a. # La   completa destrucción de la   ciudad tuvo lugar en abril;
           the complete destruction of the city   had place in April
           quedaron   algunos edificios en pie.
           remained.3PL some   buildings in foot

           'The complete destruction of the city took place in April; some build-
           ings still remain.'

     b. # El   completo oscurecimiento del   cielo tuvo lugar en abril;
           the complete darken.NMLZ   of.the sky   had place in April
           quedó   un claro de luz.
           remain.3SG a   break of light

           'The complete darkening of the sky took place in April; there remained
           a break in the clouds.'

Second, the modified nominal is compatible with *casi* 'almost', as a consequence of its behavior as a total construct (284) (cf. (271)). And third, they accept exceptive phrases (285) (cf. (272)).

(284) a. La   casi   completa destrucción de la   ciudad tuvo lugar en abril.
           the almost complete destruction of the city   had place in April

           'The almost complete destruction of the city took place in April.'

       b. El   casi   total oscurecimiento del   cielo tuvo lugar en abril.
          the almost total darken.NMLZ   of.the sky had place in April
          'The almost total darkening of the sky took place in April.'

(285) a. La completa destrucción de la   ciudad, excepto dos edificios, tuvo
          the complete destruction of the city   except two buildings had
          lugar en abril.
          place in April
          'The complete destruction of the city, except for two buildings took
          place in April.'

       b. El   total oscurecimiento del   cielo, salvo un pequeño claro, tuvo
          the total darken.NMLZ   of.the sky   except a small   break had
          lugar en abril.
          place in April
          'The total darkening of the sky, except for a small break, took place in
          April.'

To sum up, deverbal nominals can be divided into three groups depending on whether they have argument structure and on whether they denote eventualities. AS nominals have argument structure and denote events. When ACs combine with them, they are restricted to those denoting telic events and show the properties of maximality modifiers. In the following section, I examine the internal structure of eventive nominalizations of incremental theme verbs and degree achievements and argue for an scalar analysis of them.

4.4.3   The syntax and semantics of eventive nominalizations

When a derived nominal denotes an event, the lexical aspect of the verb is preserved under nominalization (Gross and Kiefer, 1995; Haas et al., 2008), unless the nominalizing morphology contributes an aspectual effect. Many incremental

theme verbs are nominalized in Spanish by the suffix *-ción* (286).[25] Degree
achievements are mainly nominalized by *-miento* (287), which takes a verbal
base, as shown by the fact the nominalization includes the affixes that are part
of the verbal structure (288), including the theme vowel (see Oltra-Massuet,
1999; Oltra-Massuet and Arregi, 2005).[26,27] Lexical aspect is preserved in *-ción*
and *-miento* nominalizations in Spanish (281–282) (Meinschäfer, 2005; Fábregas
et al., 2012), which are the ones I focus on in this chapter.

(286) a. construir; destruir; traducir; revisar; transformar
            build   destroy   translate revise   transform

       b. construcción; destrucción; traducción; revisión; transformación
            building   destruction translation revision transformation

(287) a. enfriar; calentar; ensanchar; oscurecer
            cool   heat   widen   darken

       b. enfriamiento; calentamiento; ensanchamiento; oscurecimiento
            'cooling'   'warming'   'widening'   'darkening'

(288) a. anch-o, ens-anch-a-r,   ens-anch-a-miento
            root-M   EN-root-TH-INF EN-root-TH-NMLZ

            'wide', 'widen', 'widening'

       b. oscur-o, oscur-ec-e-r,   oscur-ec-i-miento
            root-M   root-VBZ-TH-INF root-VBZ-TH-NMLZ

            'dark', 'darken', 'darkening'

---

[25] Another way of nominalizing incremental theme verbs is by using the past participle such as in *pelado*,
from *pelar* 'peel' or *recogida*, from *recoger* 'collect' (see Fábregas, 2010). These nominalizations in
-do/-da preserve the aspect of the verb in combination with its theme argument, so the analysis
presented here for *-ción* nominalizations may be extended to them.

[26] Many degree achievement verbs in Spanish are parasynthetic, that is, they are derived by simulta-
neously adding a preffix and a suffix (*en-fri-ar* 'cool'; *a-bland-ar* 'soften'; *em-pequeñ-ecer* 'make or
become smaller'). The choice of prefix has no aspectual or otherwise semantic effect, and there
seems to be no correlation between any of the affixes and a resulting causative or inchoative reading.
That is not the case when the base is nominal (*en-carcel-ar* 'incarcerate') (see Gumiel Molina et al.,
1999; Serrano Dolader, 1999; Acedo Matellán and Mateu, 2009, and references therein).

[27] For other properties of *-ción* and *-miento* and the rivalry between them, see Santiago Lacuesta and
Bustos Gisbert (1999, §69.2.27); Fábregas (2010).

This section deals with eventive nominalizations of incremental theme verbs and degree achievements. Based on the fact that they present verbal features, in section 4.4.3.1 I argue for a syntactic approach to their internal structure (Van Hout and Roeper, 1998; Borer, 2003; Alexiadou, 2001b; a.o.). In sections 4.4.3.2 and 4.4.3.3, given that they denote events and their aspectual properties are carried over from their verbal source, I adopt a scalar approach to aspectual composition in order to account for the parallelisms between the domains of event and degree semantics, specifically with respect to their modifiers.

4.4.3.1 The syntax of eventive nominalizations of incremental theme verbs and degree achievements

There have been two main types of approaches to the difference between AS nominals and R nominals in the literature, based on whether word formation is located in the lexicon, or in the syntactic component. Lexicalist approaches (Chomsky, 1970; Halle, 1973; Aronoff, 1976; Lieber, 1980; a.o.) rely on a formal enrichment of the lexicon and of lexical operations, and take the ambiguity between AS and R nominals to be stored in lexical entries. By contrast, for syntactic approaches, word formation is syntactically determined (Lees, 1960; Lebeaux, 1986; Baker, 1988; a.o.), and the contrasts between those two types of nominals is accounted for in terms of a systematic structural difference. I base my analysis of AS and R nominals on the latter approach here, but see Hoekstra (1986); Williams (1981); Grimshaw (1990); a.o. for various lexicalist implementations.

The contrast between AS nominals and R nominals is thus taken to be structural. In particular, the argument supporting properties of AS nominals result from the presence of verbal syntactic structure (Hazout, 1991; Van Hout and Roeper, 1998; Fu et al., 2001; Alexiadou, 2001b; Borer, 2003, 2005a), so that different layers are responsible for the introduction of different components of AS nominals (see, e.g., Borer, 2005a; Ramchand, 2008). Some of these approaches assume that the basis for the formation of (at least some) nouns and verbs is an element unspecified for

category (Chomsky, 1970; Picallo, 1991; Alexiadou, 2001b; Borer, 2003). Recent formulations of this approach within the Distributed Morphology framework (Halle and Marantz, 1993; Marantz, 1997; Harley and Noyer, 1998; Alexiadou, 2001b) propose that syntax is the only generative component responsible for the formation of both words and phrases; in other words, the internal structure of words is created by the same mechanisms of construction as the internal structure of sentences.

Arguments in favor of the presence of verbal layers in the structure of AS nominals are based on properties standardly associated with VPs that AS nominals display as well. One such property is adverbial modification. In some languages, such as Hebrew or Greek, adverbs can modify AS nominals (289a), but not result nominals (289b) (see Hazout, 1991; Alexiadou, 2001b; Borer, 2013; a.o.; cf. Siloni, 1997). Assignment of accusative case in Arabic and Hebrew, and *do so* anaphora in English provide further evidence (see Hazout, 1991; Valois, 1991; Fu et al., 2001; Borer, 2013, and references therein).

(289) a. harisat   ha.cava et ha.kfar   be-axzariyut   Hebrew
           destruction the.army ACC the.village cruelly
           'the army's destroying the village cruelly'

       b. * ha.harisa   be-axzariyut
            the.destruction cruelly

                                                      (examples from Hazout, 1995)

The distinction between AS nominals and R nominals is thus accounted for on the basis of the height of attachment of the nominal categorizer n, and the number of functional projections below that head, which can vary across nominalization types and languages (Alexiadou, 2001b, 2009; Alexiadou et al., 2011; a.o.). In the case of R nominals, n merges directly with the category-neutral root (see section 4.4.4.1). In AS nominals, which are the ones under discussion here, n embeds a number of functional categories that introduce arguments. I mainly follow here Alexiadou's framework, with some adjustments (but see, e.g., Harley and Noyer (1998); Borer (2003) for different implementations).

Spanish eventive nominalizations of incremental theme verbs in *-ción* and of degree achievements in *-miento* exhibit a number of verbal features that can be attributed to verbal structure. In this section I discuss the verbal and nominal properties of those nominalizations and provide a proposal for their internal structure that will be used as the basis for the order of semantic composition.

The first verbal projection is the verbalizing head v, which introduces the event argument.[28] This head is responsible for the eventive interpretation, which is manifested, for instance, in the combination of the nominalizations with *take place* or *happen* (281a, 282a).[29] I thus place verbal affixes in v. The internal argument has been argued to be introduced by a functional projection (Marantz, 2005; Borer, 2005a, 2013; a.o.), in a parallel way as the external argument is severed from the verb (Kratzer, 1996). Following Hale and Keyser (1993, 1998); Marantz (2005); Alexiadou and Schäfer (2010), I take the internal argument to be in the specifier of vP.[30]

AspectP is only realized by verbal constructions introducing aspect shift (understood as in de Swart, 1998), which is independent of the inner aspect of the event description. Only nominalizations that introduce an aspect shift that overwrites the Aktionsart of the original verbal predicate present an Aspect projection in their internal structure (Alexiadou et al., 2010, 2011). As mentioned above, the nominalizers *-ción* and *-miento* do not have an aspectual contribution. Their nominalizations preserve the inner aspect of the source VP (see (298, 315)).

Further evidence against the presence of an Aspect projection in Spanish *-ción* and *-miento* nominalizations is provided by the fact that they do not allow adverbial modification, including aspectual adverbs such as *constantly* or *daily* (290a–b).

---

[28]I assume here that the root merges with the categorizer (v or n) and the latter projects (for discussion, see Harley (2005); Embick (2010); De Belder and van Craenenbroeck (2015)).

[29]For discussion on the presence of v in Spanish nominalizations, see López (2015).

[30]It is an ongoing debate within DM whether this projection is vP. Lin (2001); Borer (2005a, 2013); Alexiadou (2014); Lohndal (2014) argue that this functional projection is not vP, but a specialized FP. It has also been proposed that the internal argument is selected by the root itself (see Marantz, 1997; Harley and Noyer, 1998; Alexiadou, 2001b; Harley, 2014).

(290) a. * La   destrucción de documentos {diariamente / constantemente}
         the destruction   of documents   daily   constantly
         nos   preocupa.
         ACC.1PL worry.3SG

         Intended: 'We are worried about the {daily / constant} destruction
         of documents.'

      b. * El   oscurecimiento del   cielo {diariamente / constantemente}
           the darken.NMLZ   of.the sky   daily   constantly
           nos   preocupa.
           ACC.1PL worry.3SG

           Intended: 'We are worried about the {daily / constant} darkening of
           the sky.'

As for the presence of VoiceP in nominalizations, it has been argued that nominal-
ization is akin to passivization (see Chomsky, 1970; Grimshaw, 1990; Giorgi and
Longobardi, 1991; Picallo, 1991; Borer, 2013; cf. Alexiadou, 2001b). Romance
eventive nominalizations of transitive verbs have been claimed to be passive (see
Cinque, 1980 for Italian; Picallo, 1991 for Catalan; Picallo, 1999; a.o. for Span-
ish; cf. Varela, 2012; see Alexiadou et al., 2009 for English *-ation* and German
-ung nominals) and thus a passive Voice head that licenses the optional external
argument must be present in the structure.

A different type of argument for the presence or absence of Voice comes from
manner adverbs (*carefully*, *quickly*), which have been argued to be licensed by
this head (Alexiadou, 1997; Cinque, 1999). They are not acceptable with *-ción*
and *-miento* nominalizations (291).

(291) a. * La   destrucción de documentos {cuidadosamente / mal} nos
           the destruction   of documents   carefully   badly ACC.1PL
           preocupa.
           worry.3SG

           Intended: 'We are worried about the {careful / bad} destruction of
           documents.'

b. * El oscurecimiento del   cielo {repentinamente / deprisa} nos
      the darken.NMLZ   of.the sky   suddenly   quickly ACC.1PL
      preocupa.
      worry.3SG

      Intended: 'We are worried about the {sudden / quick} darkening of
      the sky.'

Given the contradictory evidence, and since nothing in my analysis of ACs hinges on the presence of VoiceP in the structure of these nominals, I assume that it is a different projection what licenses manner adverbs and I therefore include a passive Voice head, which is used to encode the causative/inchoative alternation of nominalizations of degree achievements.

Spanish change of state verbs, including degree achievements, may alternate between a causative (292a) and an inchoative version, marked by *se* (292b). Nominalizations of these verbs in the absence of a *por*-phrase are ambiguous between the two interpretations (293). I explain the alternation in terms of the presence/absence of Voice, following Alexiadou et al. (2006), and assume that v is causative, or at least can license causative PPs (for details and discussion, see Harley and Noyer, 2000; Alexiadou et al., 2006; see also Ramchand, 2008) and that the theme is generated in the specifier of a functional projection FP.[31]

(292) a. Los ingenieros ensancharon el   cauce del   río.
           the engineers widened   the bed   of.the river
           'The engineers widened the riverbed.'

       b. El cauce del   río   se ensanchó (por sí   solo).
           the bed   of.the river SE widened   by self only
           'The riverbed widened (by itself).'

---

[31]The behavior with respect to telicity of the change of state verbs analyzed here is not affected by whether the verb is causative or inchoative. I adopt a non-derivational approach to the causative/anticausative alternation because it will keep the representation simpler, but it could be implemented with other approaches as well. For other approaches (non-derivational and otherwise), see, e.g., Dowty (1979); Parsons (1990); Piñón (2001); Reinhart (2003); Koontz-Garboden (2009).

(293) a. el   ensanchamiento del   cauce del   río   (por los ingenieros)
             the widen.NMLZ   of.the bed   of.the river by the engineers

             'the widening of the riverbed (by the engineers)'

       b. el   ensanchamiento del   cauce del   río   (por sí   solo)
             the widen.NMLZ   of.the bed   of.the river by self only

             'the widening of the riverbed (by itself)'

Once the verbal complex is complete, the nominal head n (realized by the affixes *-ción* or *-miento* in the cases under discussion) nominalizes the array of verbal projections as its complement (Van Hout and Roeper, 1998; Alexiadou, 2001b; Borer, 2003) and introduces nominal internal structure (Marantz, 2001; a.o.; cf., e.g., Alexiadou, 2001b).

Nominalizations of incremental theme verbs and degree achievements show nominal properties, such as gender (*-ción* nominals have feminine gender, *-miento* ones have masculine gender) and adjectival modification (294). In addition, theme arguments are assigned genitive case (295).

(294) a. La   {cuidados-a / constante} destrucción   de documentos ha
             the.F careful-F   constant.F destruction.F of documents has
             terminado.
             ended

             'The {careful / constant} destruction of documents has ended.'

       b. El   {repentin-o / constante} oscurecimiento del   cielo ha
             the.M sudden-M   constant.M darken.NMLZ.M of.the sky   has
             terminado.
             ended

             'The {sudden / constant} darkening of the sky has ended.'

(295) a. La destrucción *(de) documentos ha terminado.
             the destruction   of documents has ended

       b. El oscurecimiento *(d)el   cielo ha terminado.
             the darken.NMLZ   of the sky   has ended

Gender declension is associated with Classifier, which is in charge of giving the stuff-denoting N a kind or type reading (Picallo, 2006).[32] Class is obligatory once nP is projected, given that it holds nominal properties. Following Alexiadou et al.'s (2010) implementation of Borer's and Picallo's ideas for ClassP, I assume that telic nominalizations behave like count nouns in having a [+count] Class, which allows the projection of Number.[33] Atelic nominals are unbounded, like mass nouns, and thus Class has a [−count] feature, which blocks the projection of Number. This captures the parallelism between the mass/count distinction in the nominal domain and the opposition between atelic and telic events in the verbal domain (Mourelatos, 1978; Bach, 1986; Krifka, 1989; Jackendoff, 1991; a.o.).[34]

To sum up, AS nominals preserve several verbal features in combination with some nominal properties. In this section, it has been argued that the structure for nominalizations of incremental theme verbs (296) includes a vP, which verbalizes the root and introduces the internal argument, and a passive VoiceP, which introduces the external argument. The nominalizing head n, realized as *-ción*, projects on top of them. As for nominalizations of degree achievements (297), the structure under n consists of an aP, which adjectivizes the root, a vP, which derives the verb from the adjective and it is realized as *-eci-*, and no Voice in the inchoative version (a passive Voice head would be present in the causative one). Above nP, ClassP and, if count/telic, NumberP are projected.

---

[32]Class can also be understood as in Borer (2005b), as a syntactic functor that divides mass and makes it countable. In any case, the form of the noun in Class is always nonplural.

[33]*Contra* Grimshaw (1990), who argues eventive nominalizations are always mass; see Alexiadou et al. (2010); Roodenburg (2010); Sleeman and Brito (2010); Varela (2012); a.o.

[34]ClassP accommodates the inner aspect of the event description by means of the [±count] feature. In order to do so, Class needs some way to *see* the aspectual information of the VP. Recall that the nominalizations of incremental theme verbs and degree achievements analyzed here have been argued not to project Aspect (for discussion, see Alexiadou, 2011).

(296)

```
                    DP
                  /    \
                 D     NumP
                      /    \
                   Num     ClassP
                          /     \
                      Class      nP
                                /    \
                               n     VoiceP
                               |     /      \
                            -ción  Voice_PASS  vP
                                           /     \
                                          DP     v'
                                          △     /   \
                                      la ciudad v   √DESTR–
```

(297)

```
                    DP
                  /    \
                 D     NumP
                      /    \
                   Num     ClassP
                          /     \
                      Class      nP
                                /    \
                               n     vP
                               |    /    \
                           -miento DP     v'
                                   △     /   \
                               el cielo  v     aP
                                         |    /   \
                                       -eci-  a   √OSCUR–
```
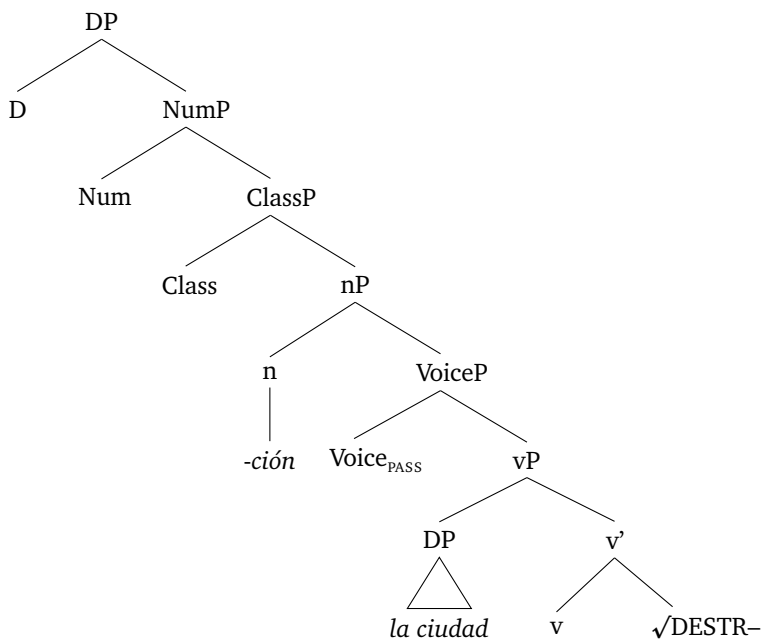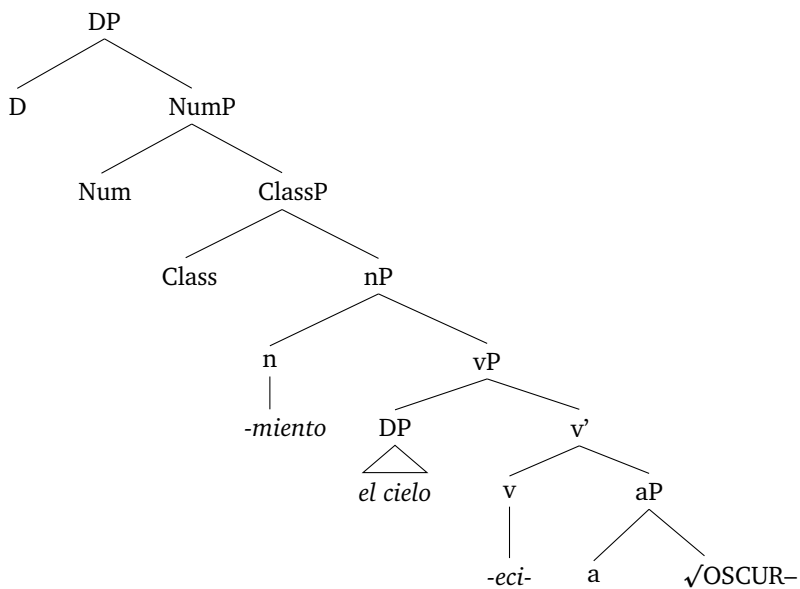
This section has been devoted to show that eventive nominalizations of incremental theme verbs and degree achievements preserve several verbal properties along with nominal characteristics. This has structural correspondences. In particular, both nominals have been argued to have a VP (including at least a vP) in their structure in combination with nominal layers. Next sections put forward a scalar account of eventive nominalizations of incremental theme verbs and degree achievements and give their final syntax and semantics.

4.4.3.2   The semantics of nominalizations of incremental theme verbs

The syntactic structure for nominalizations of incremental theme verbs in *-ción* and of degree achievements in *-miento* put forward in the previous section will serve as the base for the semantic analysis. In particular, I assume that semantic composition follows the same order as syntactic composition. In this section, I provide an analysis for nominalizations of incremental theme verbs. The following one (section 4.4.3.3) is devoted to nominalizations of degree achievements.

Incremental theme verbs describe events in which the internal argument of the verb undergoes an incremental change over the course of the event (Verkuyl, 1972; Krifka, 1989, 1992; Tenny, 1994; Dowty, 1991; a.o.). The referential properties of the incremental theme argument determine the telicity of the event described by the incremental theme verb (Verkuyl, 1972; Dowty, 1979; Krifka, 1989, 1992; Filip, 1999; a.o.) or its nominalization. If the internal argument is cumulative (298b), the event is atelic. If it has quantized reference (298a), the event is telic (see also (273)).[35]

---

[35]To be sure, a predicate has cumulative reference if whenever it holds of two things, it also holds of their collection. By contrast, a predicate is quantized if whenever it holds of something, it does not hold of any of its proper parts (Krifka, 1989). For instance, *cities* has cumulative reference, so the collection of two sets of cities can be also referred to as *cities*; by contrast, *city* is quantized, so a proper part of a city is not a city.

(298) a. La destrucción de la   ciudad {en / ??durante} dos horas tuvo lugar
           the destruction of the city   in   for   two hours had place
           en abril.
           in April

           'The destruction of the city {in / ??for} two hours took place in April.'

                                                                                    TELIC

       b. La   destrucción de ciudades {??en / durante} dos horas tuvo lugar
           the destruction of cities   in   for   two hours had place
           en abril.
           in April

           'The destruction of cities {??in / for} two hours took place in April.'

                                                                                    ATELIC

The relation between event structure of the verb and the part structure of an
incremental theme argument can be thought of as an homomorphism whereby
each subevent of the main event is mapped to a subpart of the object, and vice
versa (Krifka, 1989). This ensures the correspondence between the part structure
of the incremental theme argument and the development of the event. Telicity
is captured based on the boundedness of the object. If it is bounded, the event
will be bounded (telic) as well; if it unbounded, the event will be atelic (cf., e.g,
Rothstein, 2004; Arsenijević, 2006).

Scalar approach to nominalizations of incremental theme verbs

From a scalar perspective, the part structure of the referent of the theme argument
constitutes a scale that is homomorphic to the progress of the event. Objects with
quantized reference can be mapped onto bounded scales, whereas objects with
cumulative reference are mapped onto unbounded ones. The scale boundary
corresponds with a telos for the event (Caudal and Nicolas, 2005; Piñón, 2005a;
Kennedy, 2012b; Bochnak, 2013b).

Two possibilities are available for the source of the scale in incremental theme
verbs and their nominalizations. It can either be part of the verb (Caudal and

Nicolas, 2005; Piñón, 2005a, 2008) or be provided by the theme argument (Rappaport Hovav, 2008; Kennedy, 2012b; Bochnak, 2013b). I adopt the latter, and discuss the former at the end of this section. In particular, I assume that an incremental theme verb denotes a property of events and does not lexically encode a scale. Instead, the measure of change is associated with the incremental theme argument. The idea is that the incremental theme is associated with a function that measures the extent to which the mereological structure of the object changes over the course of an event.

For nominalizations of incremental theme verbs, I suggest that the function that measures out the change that the theme undergoes during the progress of the event is brought in by an incremental partitive head, as proposed by Kennedy (2012b) for incremental theme verbs. PART_{inc} is a partitive head that introduces a measure function in order to measure or count a nominal, and has undergone a conversion to measuring change as a consequence of being part of an incremental theme. It has the semantics in (299).[36] This includes a parameterized, closed-scale function **partof**$_\Delta$ that returns the degree d to which a portion of the constitutive parts y of an individual x is affected by an event e.

(299) $\llbracket \text{PART}_{inc} \rrbracket = \lambda x \lambda d \lambda y \lambda e.\textbf{partof}_\Delta(x)(y)(e) = d$ (Kennedy, 2012b, 119)

In the case of individual-denoting incremental themes, such as in *la ciudad* 'the city', PART_{inc} tracks the parts of the city that have been affected by the event, represented as a degree argument. The degree argument can be saturated by an explicit degree term, such as *120 km²* (300) or degree modifiers such as *completely*, or, in the absence thereof, it is set to an appropriate standard of comparison.

---

[36]Note that **partof**$_\Delta$ already includes the theme relation in its semantics, since it relates (a part of) the object and the event. This could be decomposed into a theme function and a (nonincremental) measure function (**quantity**), as in Bochnak (2013b) (this measure function corresponds to the one introduced by MEAS in Solt (2015a), see section 4.3.3) (see Kennedy, 2012b, 119).

(i) $\llbracket \mu \rrbracket = \lambda x \lambda d \lambda e.\exists y[y \leq x \wedge \textbf{theme}(e)(y) \wedge \textbf{quantity}(y) = d]$ (Bochnak, 2013b, 112)

Since the scale used by the **partof**$_\Delta$ function is totally closed (it measures the degree to which a portion is part of an individual, and, as a consequence has two endpoints), there are two options (see Kennedy, 2007): a maximum-standard interpretation where the degree is set to 1 (301a), and a minimum-standard one, when it is set to greater than 0 (301b). I represent this default mechanism as a null POS$_v$ morpheme (302), which is a verbal version of the adjectival POS (Kennedy and McNally, 2005; Kennedy and Levin, 2008) (see also (320a)). The **stnd** function in the denotation of POS$_v$ sets the degree to the contextually most relevant standard (the maximum or the minimum of the scale).

(300) $[\![\textit{120 km}^2 \text{ PART}_{inc} \textit{ the city}]\!] = \lambda y \lambda e . \mathbf{partof}_\Delta(\mathbf{the\text{-}city})(y)(e) = 120 \text{ km}^2$

(301) a. $[\![\text{POS}_v \text{ PART}_{inc} \textit{ the city}]\!] = \lambda y \lambda e . \mathbf{partof}_\Delta(\mathbf{the\text{-}city})(y)(e) = 1$

     b. $[\![\text{POS}_v \text{ PART}_{inc} \textit{ the city}]\!] = \lambda y \lambda e . \mathbf{partof}_\Delta(\mathbf{the\text{-}city})(y)(e) > 0$

(302) $[\![\text{POS}_v]\!] = \lambda g_{\langle d, \langle e, \langle v, t \rangle \rangle \rangle} \lambda x \lambda e . \exists d [d \succ \mathbf{stnd}(g) \wedge g(d)(x)(e)]$

This predicts that incremental theme verbs and their nominalizations with quantized direct objects can have atelic interpretations, which seems problematic in the face of the data in (298a). However, the minimum-standard interpretation, although weaker (as it is entailed by the maximum-standard one) and therefore less preferred, appears to be possible in the appropriate context. For instance, in (303), the nominalization receives an atelic interpretation, denoting the process of destruction or of translation, that can interrupted (cf. Snyder, 1998).[37]

---

[37]The atelic reading is also available for the verbs (i).

    (i) a. I ate Mr Unagi for a few minutes, then decided to switch to tofu.   (Kennedy, 2012b)

        b. John wiped the table / polished the glass for five minutes.   (Rothstein, 2004)

(303) a. Si la   destrucción de la   ciudad continúa, no   quedará   nada
         if the destruction of the city   continues NEG remain.FUT nothing
         en pie.
         in foot

         'If the destruction of the city continues, nothing will remain.'

     b. La traducción del   poemario   durante media hora la
        the translation of.the book.of.poems for   half hour ACC.3SG
        convenció de que era una gran obra.
        convinced of that was a   great work

        'The translation of the book of poems for half an hour convinced her of
        the quality of the work.'

As for mass nouns or plurals, I assume that it is also the function introduced
by PART$_{inc}$ what measures out quantities of matter. Since both mass nouns and
plurals have cumulative reference, the mapping of parts of the stuff denoted by
them onto a scale has no endpoint. Thus, the scale used by the PART$_{inc}$ function
has no upper bound (it is an open scale). When the mass noun appears bare, the
sole possibility is that the degree argument is set to the minimum of the scale by
the POS morpheme (304) ('*' is the pluralizing operator, as in Link (1983)).[38]

---

[38]This assumes that neither mass nouns nor count nouns incorporate measure functions in their
meaning, but rather that they are introduced externally (which is in line with our analysis of
PC nouns in section 4.3), but it is not the only option (Cresswell, 1977; Krifka, 1989; see also
Schwarzschild, 2006). For count nouns, Kennedy (2012b) argues that the measure of change
function comes from the semantics of the nominal itself. In particular, **NU** is a parameterized
measure function that measures things according to *natural units* based on the intension of the
noun (for dumplings, for instance, individual dumplings) (i) (see Krifka, 1989). Evidence for this is
the fact that count nouns, as opposed to mass nouns, can combine directly with numerals, without
a measure phrase (*two cows* vs. *two heads of cattle*).

(i) $[\![dumpling(s)_{inc}]\!] = \lambda d \lambda x \lambda e.\mathbf{dumplings}(x) \wedge \mathbf{NU}_{\triangle}(\mathbf{dumplings})(x)(e) = d$ (Kennedy,
     2012b, 117)

For our purposes here, PART$_{inc}$ is enough. But for extending the analysis of maximizers to cases
like the ones in (ii), where the degree argument of the noun is saturated by a numeral it would
be necessary to make a distinction between structured parts and unstructured parts (or natural
units) for the function that measures them out. Note that, in this case, the adverbs can only have a
distributive reading, by which Zoltan eat completely or partially *each* of the dumplings.

(304) $[\![\text{POS}_v\ \text{PART}_{inc}\ \textit{cities}]\!] = \lambda y \lambda e.\textbf{partof}_\Delta(\textbf{*city})(y)(e) > 0$

Incremental DPs then combine with the verb. Assuming that incremental theme verbs denote simple properties of events, the composition with the incremental theme can be executed using Kratzer's (1996) rule of Event Identification. Since both the VP and its nominalization are eventive (281), I assume that the nominalizer has no semantic effect (for its syntax, see section 4.4.3.1 above). The semantics for the nominalization of an incremental theme verb such as *destrucción* 'destruction' with a quantized theme and a cumulative one is as in (305a) and (305b) respectively. Finally, the individual argument is existentially closed by means of the determiner (306).[39]

(305) a. $[\![\textit{destrucción de la ciudad}]\!] = \lambda e.\exists y \exists d[\textbf{destroy}(e)\ \wedge$
        $\wedge\ \textbf{partof}_\Delta(\textbf{the-city})(y)(e) \succeq d\ \wedge\ d \succeq \textbf{stnd}([\![\text{PART}_{inc}\ \text{la ciudad}]\!])$

     b. $[\![\textit{destrucción de ciudades}]\!] = \lambda e.\exists y \exists d[\textbf{destroy}(e)\ \wedge$
        $\wedge\ \textbf{partof}_\Delta(\textbf{*city})(y)(e) \succeq d \wedge d \succeq \textbf{stnd}([\![\text{PART}_{inc}\ \text{ciudades}]\!]) =$
        $= \lambda e.\exists y[\textbf{destroy}(e)\ \wedge\ \textbf{partof}_\Delta(\textbf{*city})(y)(e) > 0]$

(306) $[\![\textit{la destrucción de la ciudad}]\!] = \iota e.\exists y \exists d[\textbf{destroy}(e)\ \wedge$
     $\wedge\ \textbf{partof}_\Delta(\textbf{the-city})(y)(e) \succeq d\ \wedge\ d \succeq \textbf{stnd}([\![\text{PART}_{inc}\ \text{la ciudad}]\!])$

To sum up, a scalar analysis of eventive nominalizations of incremental theme verbs has been proposed. In particular, an incremental partitive head is responsible for measuring the parts of the referent of the incremental theme that are affected through the course of the event. If the theme is quantized, its part-structure is

---

(ii) Zoltan (se) comió {completamente / parcialmente} diez empanadillas
      Zoltan SE ate   completely   partially   ten dumplings
      'Zoltan {completely / partially} ate ten dumplings.'

[39]The semantics of the definite article is generalized to extend to properties of events (type $\langle\langle v, t\rangle, v\rangle$).

(i) $[\![\textit{the}]\!] = \lambda P \in D_e \cup D_v.\iota\sigma[P(\sigma)]$

mapped onto a bounded scale, and this corresponds with a telic interpretation. By contrast, if the theme is cumulative, it does not provide a boundary for the scale, and consequently, for the event, and the interpretation is atelic. Before putting the syntax and the semantics together, I review the arguments for having the degree argument associated with the theme argument, instead of the verb.

The degree argument is provided by the incremental theme argument

As mentioned above, not all authors agree in that the scale is provided by the referent of the internal argument of the verb in VPs with incremental theme verbs. Some assume instead that the degree argument is part of the denotation of the verbal predicate, either directly lexicalized by it (Caudal and Nicolas, 2005; Piñón, 2008) or via a type shift (Piñón, 2005a). An example of the former is in (307), where the incremental theme verb *eat* includes a degree argument in its semantics, as well as a BECOME predicate that maps degrees onto parts of the event described, and a **quantity** predicate that maps degrees to parts of the theme argument (see Caudal and Nicolas, 2005). The type-shift approach can be implemented by a null degree morpheme DEG-V with the content of a degree function δ, a function from events, objects and two-place relations between events and objects to degrees. In other words, it measures the extent to which an object x is affected in an event e with respect to a relation S and adds a degree argument to the verb (308) (see Piñón, 2005a).

(307) $[\![\textit{John ate an apple}]\!] = \exists x \exists y \exists e \exists d [\textbf{eat}(d, e) \wedge \text{BECOME}(\textbf{eat}) \wedge$
$\wedge \textbf{quantity}(d, y) \wedge \textbf{agent}(e, x) \wedge \textbf{theme}(e, y) \wedge \textbf{john}(x) \wedge \textbf{an-apple}(y)]$

(Caudal and Nicolas, 2005, 291)

(308) a. $[\![\textit{eat}]\!] = \lambda y \lambda x \lambda e.\textbf{eat}(e, x, y)$

b. $[\![\text{DEG-V } \textit{eat}]\!] = \lambda d \lambda y \lambda x \lambda e.\delta(e, y, \lambda y' \lambda e'[\textbf{eat}(e', x, y')]) = d$

(Piñón, 2005a, 163)

However, there is evidence against having a degree argument in the verb or at the VP level, at least in English (Rappaport Hovav, 2008; Kennedy, 2012b). Rather, the scalar meaning is provided by the referent of the incremental theme argument itself. A first argument for this is that verbs that lexicalize scales as part of their meaning, such as degree achievements, are very restrictive with the kind of resultatives they can appear with. In particular, they can only appear with result predicates that use the same scale (309a). By contrast, incremental theme verbs occur with a variety of resultative secondary predicates (309b). Since Romance languages lack resultative constructions like the ones in (309) (Green, 1973; Talmy, 1985, 2000; a.o.), this test cannot be replicated in Spanish. However, as Rappaport Hovav (2008) mentions, the very fact that there are languages in which the association of a scale with a predicate is much more restricted is an argument in itself for not assuming that all verbs are associated with a scale.

(309)   a.   We froze the ice-cream {solid / ??blue / ??sweet}.

       b.   We steamed the clothes {dry / clean / stiff}. (Rappaport Hovav, 2008)

Second, the relation between incremental theme verbs and verbal degree constructions is different from that of degree achievements with the same degree constructions. As shown by Gawron (2007), VPs headed by incremental theme verbs do not accept the full range of degree morphology that is allowed for when there is a degree argument at the VP level, as it is the case with degree achievements (310).[40] The examples with *acortar* 'shorten' in (310) compare the degree to which the article gets shortened, but those with *traducir* 'translate' are not an acceptable way to compare the degree to which it gets translated to some other degree. Instead, that kind of meaning is conveyed by directly combining the degree construction with the incremental theme argument (311).

---

[40]The verbs that do not allow object deletion, such as *destruir* 'destroy' (see (313b)) are slightly better, although not completely acceptable, in some of these constructions.

(310) a. Elena {acortó / ??tradujo} el artículo más que Juan.
           Elena shorten   translated the article   more than Juan

           'Elena {shortened/translated} the article more than Juan did.'

       b. Elena {acortó / ??tradujo} demasiado el artículo.
          Elena shorten   translated too.much the paper

          'Elena {shortened/translated} the article too much.'

       c. Elena {acortó / ??tradujo} tanto   el artículo que Juan casi
          Elena shorten   translated so.much the article   that Juan almost
          no hizo nada.
          NEG did nothing

          'Elena {shortened/translated} the article so much that Juan barely did
          anything.'

(311) a. Elena tradujo   más del   poemario   que Juan.
          Elena translated more of.the book.of.poems than Juan

          'Elena translated more of the book of poems than Juan did.'

       b. Elena tradujo   {mucho / demasiado} del   poemario.
          Elena translated a.lot   too.much of.the book.of.poems

          'Elena translated {a lot / too much} of the book of poems.'

       c. Elena tradujo   tanto   del   poemario   que Juan casi   no
          Elena translated so.much of.the book.of.poems that Juan almost NEG
          hizo nada.
          did nothing

          'Elena translated so much of the book of poems that Juan barely did
          anything.'

Third, Rappaport Hovav (2008) argues that verbs with lexicalized scales require
that their direct objects (the DP whose referent undergoes the change) be realized
syntactically (312a, 313a). Verbs that do not lexicalize scales are expected to
have intransitive uses (312b). However, only some but not all incremental theme
verbs can appear without their objects (313b). In Rappaport Hovav and Levin
(2010), the possibility of omitting their objects is instead associated with manner
roots (as opposed to result ones) (see also Beavers and Koontz-Garboden, 2012).
Given that this is not that clear a test for the presence or absence of a scale being

lexicalized in a verb, and incremental theme verbs pass the rest of tests, I conclude that the degree argument is provided by the part structure of the referent of the incremental theme verb, as described above.

(312) a. All last night we cooled *(the room with the air-conditioner).

     b. All last night, Cinderella scrubbed. (examples from Rappaport Hovav, 2008)

(313) a. {Enfriamos / secamos} *(la habitación) con el   aire acondicionado
       cooled.1PL   dried.1PL   the room   with the air   conditioned
      durante toda la   noche.
      during   all   the night

     b. {Comimos / leímos   / ?tradujimos   / ??construimos /
       ate.1PL   read.PST.1PL   translated.1PL   built.1PL
      ?destruimos   / ??transformamos} durante toda la   noche.
      destroyed.1PL   transformed.1PL during   all   the night

In short, in incremental theme verbs and their nominalizations, the scale that tracks the amount of the direct object that is affected during the course of the event is provided not by the verb but by the incremental theme. Next section provides the final syntax and semantics for nominalizations of incremental theme verbs.

Putting the syntax and the semantics together

As discussed above, nominalizations of incremental theme verbs may denote events and their aspectual properties depend on the referential properties of their themes. The semantic tree in (314) for *la destrucción de la ciudad (por el ejército)* 'the destruction of the city (by the army)' parallels the configuration in (296). The v head turns the root into a property of events (314a). I remain agnostic about the semantic type of roots (see, e.g., Acquaviva, 2009; Borer, 2013) and start the derivation at the level of vP. The incremental theme (314f), which is technically a DegreeP because of its semantic incrementality, represented by the

partitive head PART$_{inc}$ (314c) (which includes the theme role in its semantics), is selected by v and combines with the verb (v') via Event Identification (314g). Existencial closure over the individual argument gives the final semantics for vP (314h). A passive Voice head (314i) introduces the external argument, which is optional, by Event Identification. Up to this point, the structure is verbal. The categorizer head n, realized as *-ción*, attaches on top of it and nominalizes the whole structure. This has no semantic effect (the string still denotes a property of events (314m)) but has syntactic consequences, such as the assignment of case or the licensing of adjectives. A number of nominal layers project. Only DP is represented in the tree in (314), which transforms the property of events into a unique event (314n).

As mentioned above (see discussion around (301)), the degree argument provided by the partitive head PART$_{inc}$ needs to be saturated, by either overt or covert degree morphology. In (314), a default null morpheme, POS$_v$ (314e) (cf. (302)), sets the degree to the standard of the scale. According to this analysis, in the case of themes with quantized reference, two options are available, either the maximum or the minimum of the scale. In the former case, *the destruction of the city* is telic (314n-i); that is, it is true of events in which the whole city has been destroyed. In the latter, which is weaker and thus less preferred, the event denoted is atelic (314n-ii): it is true if the destroying event has affected some part of the city.

(314)
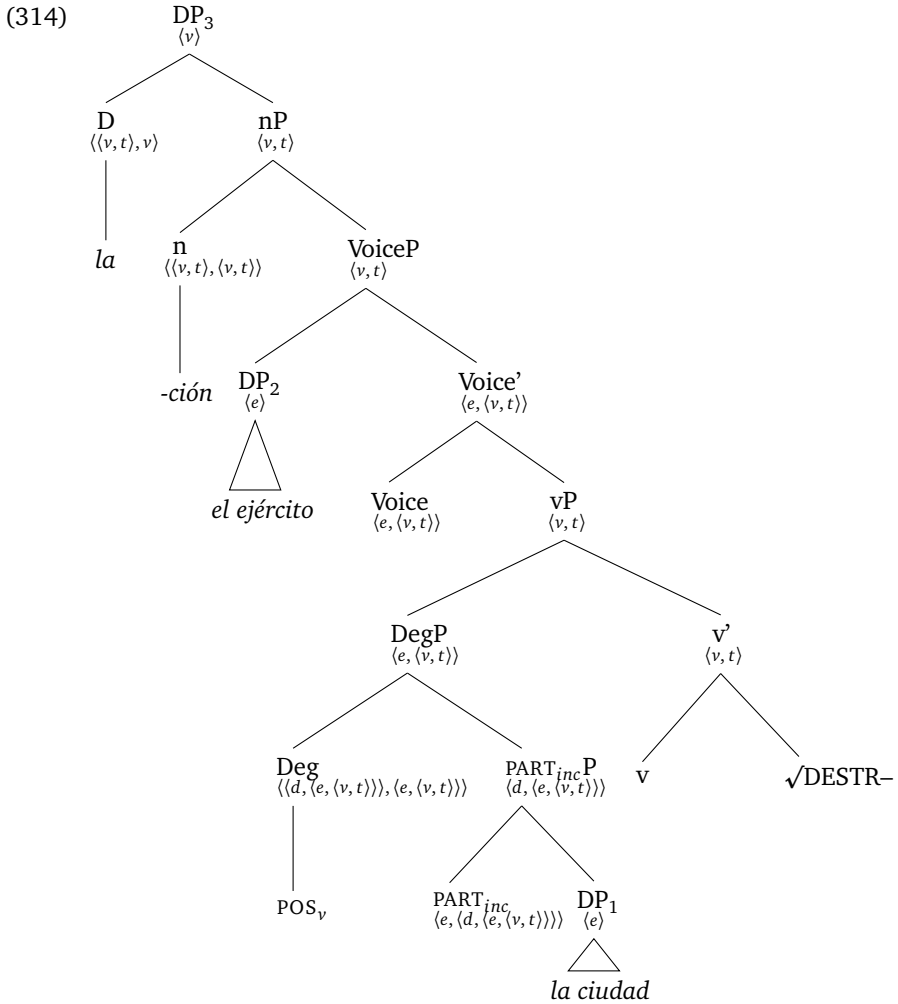
a. $\llbracket \text{v'} \rrbracket = \lambda e.\textbf{destroy}(e)$

b. $\llbracket \text{DP}_1 \rrbracket = \iota x.\textbf{city}(x)$

c. $\llbracket \text{PART}_{inc} \rrbracket = \lambda x \lambda d \lambda y \lambda e.\textbf{partof}_\Delta(x)(y)(e) = d$

d. $\llbracket \text{PART}_{inc}\text{P} \rrbracket = \lambda d \lambda y \lambda e.\textbf{partof}_\Delta(\iota x.\textbf{city}(x))(y)(e) = d$ (FA)

e. $\llbracket \text{Deg} \rrbracket = \lambda g_{\langle d,\langle e,\langle v,t\rangle\rangle\rangle} \lambda x \lambda e.\exists d[d \succ \textbf{stnd}(g) \wedge g(d)(x)(e)]$

f. $\llbracket \text{DegP} \rrbracket = \lambda y \lambda e.\exists d[d \succeq \mathbf{stnd}(\llbracket \text{PART}_{inc} \text{ la ciudad}\rrbracket) \wedge$
   $\wedge \ \mathbf{partof}_\Delta(\iota x.\mathbf{city}(x))(y)(e) \succeq d]$ (FA)

g. $\llbracket \text{vP} \rrbracket = \lambda y \lambda e.\exists d[\mathbf{destroy}(e) \wedge d \succeq \mathbf{stnd}(\llbracket \text{PART}_{inc} \text{ la ciudad}\rrbracket) \wedge$
   $\wedge \ \mathbf{partof}_\Delta(\iota x.\mathbf{city}(x))(y)(e) \succeq d]$ (EI)

h. $\llbracket \text{vP} \rrbracket = \lambda e.\exists d \exists y[\mathbf{destroy}(e) \wedge d \succeq \mathbf{stnd}(\llbracket \text{PART}_{inc} \text{ la ciudad}\rrbracket) \wedge$
   $\wedge \ \mathbf{partof}_\Delta(\iota x.\mathbf{city}(x))(y)(e) \succeq d]$ (∃)

i. $\llbracket \text{Voice} \rrbracket = \lambda z \lambda e.\mathbf{agent}(z)(e)$

j. $\llbracket \text{Voice'} \rrbracket = \lambda z \lambda e.\exists d \exists y[\mathbf{destroy}(e) \wedge d \succeq \mathbf{stnd}(\llbracket \text{PART}_{inc} \text{ la ciudad}\rrbracket) \wedge$
   $\wedge \ \mathbf{partof}_\Delta(\iota x.\mathbf{city}(x))(y)(e) \succeq d \ \wedge \ \mathbf{agent}(z)(e)]$ (EI)

k. $\llbracket \text{DP}_2 \rrbracket = \iota x.\mathbf{army}(x)$

l. $\llbracket \text{VoiceP} \rrbracket = \lambda e.\exists d \exists y[\mathbf{destroy}(e) \wedge d \succeq \mathbf{stnd}(\llbracket \text{PART}_{inc} \text{ la ciudad}\rrbracket) \wedge$
   $\wedge \ \mathbf{partof}_\Delta(\iota x.\mathbf{city}(x))(y)(e) \succeq d \ \wedge \ \mathbf{agent}(\iota x'.\mathbf{army}(x'))(e)]$ (FA)

m. $\llbracket \text{nP} \rrbracket = \lambda e.\exists d \exists y[\mathbf{destroy}(e) \wedge d \succeq \mathbf{stnd}(\llbracket \text{PART}_{inc} \text{ la ciudad}\rrbracket) \wedge$
   $\wedge \ \mathbf{partof}_\Delta(\iota x.\mathbf{city}(x))(y)(e) \succeq d \ \wedge \ \mathbf{agent}(\iota x'.\mathbf{army}(x'))(e)]$ (FA)

n. $\llbracket \text{DP}_3 \rrbracket =$ (FA)

   i. $= \iota e \exists y[\mathbf{destroy}(e) \wedge \mathbf{partof}_\Delta(\iota x.\mathbf{city}(x))(y)(e) = 1 \ \wedge$
      $\wedge \ \mathbf{agent}(\iota x'.\mathbf{army}(x'))(e)]$

   ii. $= \iota e \exists y[\mathbf{destroy}(e) \wedge \mathbf{partof}_\Delta(\iota x.\mathbf{city}(x))(y)(e) > 0 \ \wedge$
      $\wedge \ \mathbf{agent}(\iota x'.\mathbf{army}(x'))(e)]$

In the next section, I propose a scalar analysis of nominalizations of degree achievements, which lexicalize their own scales.

4.4.3.3 The semantics of nominalizations of degree achievements

Degree achievements[41] and their nominalizations show variable telicity. However, in contrast to incremental theme verbs (section 4.4.3.2), their telicity does not

---

[41]The term *degree achievement* is due to Dowty (1979), who argues that they pattern with achievements. However, they are closer to accomplishments and activities, as becomes clear in this section.

depend on the properties of the internal argument, but on the verb itself (Dowty, 1979; Hay et al., 1999; Winter, 2006; Kearns, 2007; Kennedy and Levin, 2008). Specifically, if the source adjective uses an upper-closed scale, such as *oscuro* 'dark', the derived verb and its nominalization have default telic interpretations (315a). If it uses an open scale, such as *caro* 'expensive' they can only be atelic (315b) (see also (275)).

(315) a. El   oscurecimiento del   cielo {en / ?durante} dos minutos tuvo
           the darken.NMLZ   of.the sky   in   for   two minutes had
           lugar en abril.
           place in April

           'The sky's darkening {in / ?for} two minutes took place in April.' TELIC

       b. El   encarecimiento   de los alimentos {??en / durante}
           the become.more.expensive.NMLZ of the food   in   for
           dos meses   tuvo lugar en verano.
           two months had place in summer

           'The food prices rising {??in / for} two years took place in the summer.'
                                                                              ATELIC

The contrast between the two groups of verbs can be observed in the fact that only degree achievements derived from total adjectives entail the positive form of the adjective (316), while the verbs derived from relative adjectives do not (317). That is, in the former type of degree achievements, the affected objects reach an endstate of, for instance, being dark, but that is not the case for the latter verbs.[42,43]

---

[42]Degree achievements derived from lower-closed scale adjectives (*dirty*, *bent*, *moist*) are claimed to be atelic by default and to pattern with verbs derived from relative adjectives (see Winter, 2006; cf. Kearns, 2007, fn. 19).

[43]Contextual factors can override the atelicity of degree achievements derived from relative adjectives. For instance, contextual cues, such as knowledge about the conventional length for pants, can provide a bounded interpretation (i) (Hay et al., 1999). Note that the positive form of the adjective is not entailed.

(316) a. El cielo se ha oscurecido (?pero no   está oscuro).
the sky   SE has darkened   but NEG is   dark

'The sky darkened (?but it's not dark).'

b. La grieta se ha cerrado (??pero no   está cerrada).
the crack SE has closed   but   NEG is   closed

'The crack closed (??but it's not closed).'

(317) a. Los alimentos se han   encarecido   (pero no   son
the food.PL   SE have.3PL become.more.expensive but NEG are
caros).
expensive

'Food prices rose (but they are not expensive).'

b. La grieta se ha ensanchado (pero no   es ancha).
the crack SE has widened   but NEG is wide

'The crack widened (but it's not wide).'

Scalar approach to nominalizations of degree achievements

Variable telicity of degree achievements thus depends on the adjectival part of their meaning (Dowty, 1979; Abusch, 1986; Hay et al., 1999; Kearns, 2007; Winter, 2006; Kennedy and Levin, 2008). A scalar approach to these verbs assumes that the scale used by the adjective is part of the semantics of the verb and measures out the change in the property undergone by the object over the course of the event. I adopt here Kennedy and Levin's (2008) approach to degree achievement verbs to their nominalizations.

(i) El sastre me   alargó   los pantalones en una hora. ⊭ Ahora los pantalones son
the tailor DAT.1SG lengthened the pants   in a   hour   now the pants   are
largos.
long

'The tailor lengthened my pants in an hour.' ⊭ 'The pants are long now.'

Following Kennedy and Levin (2008), the adjectival part of degree achievements is not treated as identical to the meaning of the adjective.[44] Rather, the adjectival core of a degree achievement is a *derived* measure function (a *difference function*) that measures not the final degree of the property the object reaches at the end of the event, but the degree to which an object has changed along a scale during the course of the event.[45]

More formally, degree achievements lexicalize measure of change functions. This functions take an individual x and an event e and return a degree that represents the amount that x changes in the property measured by $\mathbf{m}$ as a result of participation in e (Kennedy and Levin, 2008). A measure of change function $\mathbf{m}_\Delta$ is defined as in (318), where $\mathbf{m}_d^\uparrow$ is a difference function that returns the difference between the x's value on the relevant property at the end of the event $\mathbf{m}(x)(\mathbf{fin}(e))$ and the minimum of the scale $\mathbf{m}(x)(\mathbf{init}(e))$, the degree of the property x has at the beginning of the event.

(318) **Measure of change**

For any measure function $\mathbf{m}$, $\mathbf{m}_\Delta = \lambda x \lambda e.\mathbf{m}^\uparrow_{\mathbf{m}(x)(\mathbf{init}(e))}(x)(\mathbf{fin}(e))$

(Kennedy and Levin, 2008, 173)

The verb *oscurecer* 'darken' has the denotation in (319a). The verbalization of the adjective thus consists on a change in its domain. In particular, a function from

---

[44] Some previous analyses treat the adjectival part of degree achievements as identical to the meaning of the adjective (either in positive or in comparative form). This leaves some data unaccounted for. For the first option, if a degree achievement roughly means 'to become G', examples like the ones in (317), where the positive form is not entailed at the end of the event would be unexpected. The second option would take degree achievements to be true if there has been some change in the degree of the property at the end of the event (meaning something along the lines of 'become G-er') (e.g., Hay et al., 1999; see also Kearns, 2007). For this view, examples (316), with default telic interpretations, are not predicted. Abusch (1986) combines the two options in an ambiguity analysis. See Kennedy and Levin (2008) for discussion.

[45] Evidence for this comes from the fact that, when degree achievements occur with measure phrases, these do not denote an absolute value, but a relative one. In (i), 3 centimeters is not the final width of the crack, but the difference between its width at the beginning and at the end of the event.

   (i) The crack widened 3 centimeters.

individuals and situations to degrees (319b) becomes a function from individuals and events to degrees (Kennedy and Levin, 2008).[46]

(319) a. $[\![oscurecer]\!] = \lambda d \lambda x \lambda e.\mathbf{dark}_{\triangle}(x)(e) \succeq d$

b. $[\![oscuro]\!] = \lambda d \lambda x \lambda s.\mathbf{dark}(x)(s) \succeq d$

Hence, degree achievements encode measure of change functions and, like gradable adjectives, include a degree argument that must be saturated in order to derive a property of events. This can be done by overt degree morphology (i). In the absence thereof, a null positive morpheme POS$_v$ is needed to derive the correct semantics (320) (see also Piñón, 2005a). According to this analysis, *oscurecer* is true of an object and an event just in case the degree to which the object changes in darkness meets the standard of comparison for $\mathbf{dark}_{\triangle}$ in the context (see Kennedy, 2012b, 110).[47]

(320) a. $[\![\textsc{pos}_v]\!] = \lambda g_{\langle d,\langle e,\langle v,t\rangle\rangle\rangle} \lambda x \lambda e.\exists d[d \succ \mathbf{stnd}(g) \wedge g(d)(x)(e)]$

b. $[\![\textsc{pos}_v\ oscurecer]\!] = \lambda x \lambda e.\exists d[d \succ \mathbf{stnd}([\![oscurecer]\!]) \wedge \mathbf{dark}_{\triangle}(x)(e) \succeq d]$

As with incremental theme verbs (314), POS$_v$ sets the value of the degree argument that represents the amount of change the object has undergone during the event to the standard in the scale. Since all events have an initial point, all measure of change functions use lower-closed scales. If the source adjective is relative (lexicalizes an open scale), such as in the case of *ensanchar* 'widen', the scale employed by the corresponding measure of change function has only a minimum. That minimum is the standard used and, as a consequence, the interpretation

---

[46]Kennedy and Levin (2008) take gradable adjectives to directly lexicalize measure functions (type $\langle d,e\rangle$), but following Kennedy (2012b), I use the implementation in (319b) (whereby adjectives are of type $\langle d,\langle e,t\rangle\rangle$) because it keeps the syntax parallel to that proposed for incremental theme verbs in section 4.4.3.2.

[47]Another option would be that the degree argument is saturated before verbalization, but that would not account for those cases where the positive form of the adjective is not entailed at the end of the event (for instance, *the crack widened* does not entail that the crack is wide), see discussion in fn. 44.

is atelic. In the case of *oscurecimiento* 'darkening' or *endurecimiento* 'hardening', the base adjective uses an upper-closed scale, and thus the eventive scale has both a maximum and a minimum. Both are possibilities, although the telic one is preferred. Examples in (321) show that the atelic interpretation is possible for the nominalizations in some contexts.

(321) a. El oscurecimiento del   cielo durante media hora (hasta que volvió
           the darken.NMLZ   of.the sky   for   half   hour until that returned
           a clarear)   nos   sorprendió.
           to clear.up.INF ACC.1PL surprised

           'The darkening of the sky for half an hour (until it started to clear up
           again) surprised us.'

       b. El endurecimiento de la   resina durante una hora no fue
           the harden.NMLZ   of the resin   for   a   hour NEG was
           suficiente.
           enough

           'The hardening of the resin for an hour was not enough.'

Once the degree argument is saturated by POS$_v$, the internal argument combines with the verb. Since these nominalizations of degree achievements are eventive (282), I assume that the nominalizer has no semantic effect (but see section 4.4.3.1 for its syntax). Thus, the semantics for the nominalization of a degree achievement such as *oscurecimiento* 'darkening' is as in (322). Since the source adjective uses a scale with a maximum, the nominalization has a default telic interpretation (with the degree argument set to 1).

(322) $\llbracket oscurecimiento\ del\ cielo \rrbracket = \lambda e.\exists d[d \succ \mathbf{stnd}(\llbracket oscurecimiento \rrbracket) \wedge$
       $\wedge\ \mathbf{dark}_\triangle(\mathbf{the\text{-}sky})(e) \succeq d] = \lambda e[\mathbf{dark}_\triangle(\mathbf{the\text{-}sky})(e) = 1]$

To sum up, a scalar analysis of eventive nominalizations of degree achievements has been put forward. Specifically, degree achievements encode measure of change functions that return the amount of change the object undergoes with respect to the gradable property introduced by the source adjective over the course

of the event. These measure functions pass on to the nominalizations. Telicity is derived from the type of the scale used by the adjective. Nominalizations of degree achievements derived from total adjectives have default telic interpretations, whereas those derived from relative adjective have atelic readings. In the next section, I combine the syntax and the semantics of nominalizations of degree achievements.

Putting the syntax and the semantics together

The semantic derivation of nominalizations of degree achievements (323) follows the structure in (297). The root is first turned into a relation between degrees, and individuals and situations by an adjectival categorizer (323a). Then the head v verbalizes the structure and adds the event argument. In particular, it transforms the adjectival measure function into a measure of change function. Degree morphology such as a silent POS_v morpheme (323c) is required to ensure that the result is a property of events (323d). The internal argument (323e) is introduced as the specifier of vP. At the level of vP (323f), the structure denotes the event of the sky becoming dark. The causative version (see (293)) would include a Voice head that introduces the external argument. The nominalizer -*miento*, head of nP, nominalizes the whole structure and has no semantic effect (323g). In other words, the nP still denotes a property of events. A number of nominal layers project. At the DP level (323h), the property of events is closed.

As discussed above, POS_v saturates that degree in the absence of degree morphology, by setting its value to the standard in the scale. If the source adjective is relative (uses an open scale), the scale employed by the measure of change function has only a minimum. That minimum is the standard used and, consequently, the interpretation is atelic. In the case of *oscurecimiento* 'darkening', the base adjective uses an upper-closed scale, and thus the eventive scale has both a maximum and a minimum (323h). Both are possibilities, although the telic one (one in which the sky becomes maximally dark) (323h-i) is preferred (see (321)).

(323)

DP$_2$
$\langle v \rangle$

D
$\langle \langle v,t \rangle, v \rangle$

nP
$\langle v,t \rangle$

el

n
$\langle \langle v,t \rangle, \langle v,t \rangle \rangle$

vP
$\langle v,t \rangle$

-miento

DP$_1$
$\langle e \rangle$

v'
$\langle e, \langle v,t \rangle \rangle$

el cielo

DegP
$\langle \langle d, \langle e, \langle v,t \rangle \rangle \rangle, \langle e, \langle v,t \rangle \rangle \rangle$

v'
$\langle d, \langle e, \langle v,t \rangle \rangle \rangle$

POS$_v$

v
$\langle \langle d, \langle e, \langle s,t \rangle \rangle \rangle, \langle d, \langle e, \langle v,t \rangle \rangle \rangle \rangle$

aP
$\langle d, \langle e, \langle s,t \rangle \rangle \rangle$

-eci-

a
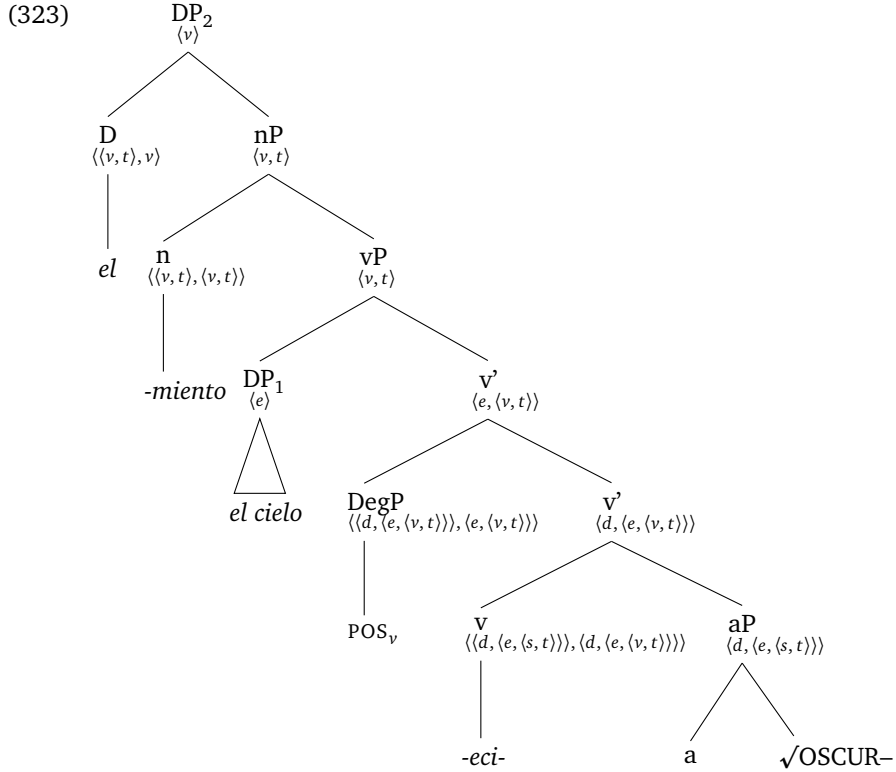
√OSCUR–

a. $\llbracket \text{aP} \rrbracket = \lambda d \lambda x \lambda s.\mathbf{dark}(x)(s) \succeq d$

b. $\llbracket \text{v'} \rrbracket = \lambda d \lambda x \lambda e.\mathbf{dark}_\Delta(x)(e) \succeq d$ (FA)

c. $\llbracket \text{DegP} \rrbracket = \lambda g_{\langle d, \langle e, \langle v,t \rangle \rangle \rangle} \lambda x \lambda e.\exists d[d \succ \mathbf{stnd}(g) \wedge g(d)(x)(e)]$

d. $\llbracket \text{v'} \rrbracket = \lambda x \lambda e.\exists d[d \succ \mathbf{stnd}(\llbracket oscurec\text{-} \rrbracket) \wedge \mathbf{dark}_\Delta(x)(e) \succeq d]$ (FA)

e. $\llbracket \text{DP}_1 \rrbracket = \iota x.\mathbf{sky}(x)$

f. $\llbracket \text{vP} \rrbracket = \lambda e.\exists d[d \succ \mathbf{stnd}(\llbracket oscurec\text{-} \rrbracket) \wedge \mathbf{dark}_\Delta(\iota y.\mathbf{sky}(y))(e) \succeq d]$ (FA)

g. $\llbracket \text{vP} \rrbracket = \lambda e.\exists d[d \succ \mathbf{stnd}(\llbracket oscurec\text{-} \rrbracket) \wedge \mathbf{dark}_\Delta(\iota y.\mathbf{sky}(y))(e) \succeq d]$ (FA)

h. $\llbracket \text{DP}_2 \rrbracket = \iota e.\exists d[d \succ \mathbf{stnd}(\llbracket oscurec\text{-} \rrbracket) \wedge \mathbf{dark}_\Delta(\iota y.\mathbf{sky}(y))(e) \succeq d] =$

   i. $= \iota e[\mathbf{dark}_\Delta(\iota y.\mathbf{sky}(y))(e) = 1]$ (FA)

   ii. $= \iota e[\mathbf{dark}_\Delta(\iota y.\mathbf{sky}(y))(e) > 0]$ (FA)

4.4.3.4   Summary

Eventive nominalizations of incremental theme verbs and degree achievements have eventive properties and preserve aspect. In order to account for their verbal properties, a Distributive Morphology approach has been adopted. Specifically, these nominalizations have been argued to include a VP consisting of vP and, in some cases, VoiceP, but crucially no AspectP. Their nominal properties are introduced by the nominalizer head n, which attaches on top of the verbal structure.

As for their semantics, a scalar analysis has been provided. According to it, the development of the event is mapped onto a scale, and boundedness of the scale corresponds with telicity. In the case of nominalizations of incremental theme verbs, telicity depends on the referential properties of the theme argument. They have been argued to include an incremental partitive head that introduced the degree that measures the parts of the theme that are affected during the course of the event, following Kennedy's (2012b) proposal for incremental theme verbs.

Nominalizations of degree achievements also include a degree. In this case, it comes from the adjectival core of the source verbs and measures the change in a property the object experiences over the event. In particular, nominalizations of degree achievements have been argued to include in their semantics a measure of change function derived from the measure function of the original adjective, in line with the analysis of degree achievement verbs in (Kennedy and Levin, 2008).

Now that they syntax and semantics of eventive nominalizations of incremental theme verbs and degree achievements are set, we move on to the analysis of ACs when modifying them.

4.4.4   ACs are maximality modifiers

In this section, I put forward an analysis of ACs as maximality modifiers of eventive nominalizations of incremental theme verbs and degree achievements.

In particular, I argue that they are degree morphology able to saturate the degree argument associated with those nominals.

ACs are maximality modifiers. Eventive nominalizations of incremental theme verbs and degree achievements have a degree that track the development of the event. I argue that ACs are degree morphology that can saturate that degree. For incremental theme verbs, *completo* 'complete' sets the degree of affectedness of the object during the course of the event to its maximal value (324). If the incremental theme is quantized (e.g. *the city*), the scale associated with it is bounded, so there is a maximal value and ACs are acceptable (281a). Instead, if it has cumulative reference (e.g., *cities*), the scale is unbounded and no maximum is defined, thus the function **max** in the lexical semantics of ACs does not return any value, making ACs incompatible (281b). The derivation for *la completa destrucción de la ciudad* 'the complete destruction of the city' is provided in (325).

(324) $[\![AC]\!] = \lambda g_{\langle d, \langle e, \langle v, t \rangle \rangle \rangle} \lambda x \lambda e. \exists d[d = \mathbf{max}(S_g) \wedge g(d)(x)(e)]$

(325) $[\![la\ completa\ destrucción\ de\ la\ ciudad]\!] = \iota e \exists y [\mathbf{destroy}(e) \wedge$
$\quad \wedge\ \mathbf{partof}_{\triangle}(\mathbf{the\text{-}city})(y)(e) = 1]$

Note that the semantics for *la completa destrucción de la ciudad* in (325) is exactly the same as one of the possible semantics for the same DP without the modifier (314n). The lexical semantics of the null morpheme POS$_v$ and ACs differ in that the former sets the value of d to the standard of the scale (314e), which can be a maximum or a minimum, and the latter, to its maximum (324). The difference is then that, in the absence of degree morphology, the event description can be ambiguous between a telic and an atelic interpretation, whereas the presence of an AC forces, and emphasizes, the telic one (see also section 4.2).

If ACs set the degree of the incremental partitive to its maximum value, the atelic or process reading that is possible when no overt degree morphology is present should be excluded. This is borne out, as the unacceptability of the examples in (326) shows (cf. (303)).

(326) a. * Si la   total destrucción de la   ciudad continúa, no   quedará
             if the total destruction of the city   continues NEG remain.FUT
             nada   en pie.
             nothing in foot

             'If the total destruction of the city continues, nothing will remain.'

       b. * La completa traducción del   poemario   durante media hora
            the complete translation of.the book.of.poems for   half   hour
            la   convenció de que era una gran obra.
            ACC convinced of that was a   great work

            'The complete translation of the book of poems for half an hour
            convinced her of the quality of the work.'

For degree achievements, ACs set the degree of change in the property scale used
by the verb to its maximum value. The semantics for *completo* remain the same as
above (324). The difference is the source of the scale. In this case, the scale that
serves as input for the **max** function is not provided by the extent scale associated
with the mereological structure of the theme argument, but by the property scale
associated with the adjectival base of the degree achievement (327).

(327) $[\![el\ completo\ oscurecimiento\ del\ cielo]\!] = \iota e.\exists d[d = \mathbf{max}(S_{darken})\ \wedge$
       $\wedge\ \mathbf{dark}_{\triangle}(\mathbf{the\text{-}sky})(e) \succeq d] = \iota e[\mathbf{dark}_{\triangle}(\mathbf{the\text{-}sky})(e) = 1]$

Again, the presence of the AC forces the telic interpretation. Thus, examples in
(328) with *for*-adverbials are not acceptable (cf. (321)).[48]

(328) a. ?? El   completo oscurecimiento del   cielo durante media hora (hasta
             the complete darken.NMLZ   of.the sky   for   half   hour until
             que volvió   a clarear)   nos   sorprendió.
             that returned to clear.up.INF ACC.1PL surprised

             'The complete darkening of the sky for half an hour (until it started
             to clear up again) surprised us.'

---

[48]Example (328a) is acceptable with the reading in which the sky is completely dark for half an hour,
which is not the one intended here. In that case, the adverbial is modifying the external frame
interval rather than the event time (see Dowty, 1979; Krifka, 1998; van Geenhoven, 2004; Arche,
2014; a.o.).

  b. ?? El   total endurecimiento de la   resina durante una hora no   fue
       the total harden.NMLZ   of the resin for   a   hour NEG was
       suficiente.
       enough

     'The total hardening of the resin for an hour was not enough.'

The analysis can be extended to other modifiers affecting the extent to which an
event is realized. For instance, *parcial(mente)* 'partially' asserts that the event has
not been completed (329a). In particular, it sets the degree of development of
the event to a value lower than its maximum (329b). As a proportional modifier,
it requires that the scale is totally closed. Thus, atelic events (those without a
maximum) are incompatible with this modifier (cf. Piñón, 2005a).[49]

(329) a. la   parcial destrucción de la   ciudad
           the partial destruction of the city
       b. $[\![partial(ly)]\!] = \lambda g_{\langle d,\langle e,\langle v,t\rangle\rangle\rangle} \lambda x \lambda e. \exists d[d < \mathbf{max}(S_g) \wedge g(d)(x)(e)]$

Degree uses of ACs are predicted to be restricted to attributive position (see also
section 4.3.3.3). However, ACs are at times found in predicative position with
eventive nominalizations (330). These uses of ACs are suspicious as degree uses.
First, there is a wide range of acceptability from example to example, as shown in
(330). Second, when *completo* 'complete' expresses the result state of a process, it

---

[49]Some speakers find acceptable examples like (i), where the proportional modifier appears with
an atelic event. However, the only reading available is distributive, that is, (i) is only true if each
city has been partially destroyed, but not in a situation where three out of five cities have been
destroyed and two remain undamaged. For this reading, an AC modifying the theme is preferred
(ii) (see also fn. 38).

  (i) la   destrucción parcial de ciudades
       the destruction partial of cities

       'the partial destruction of cities'

  (ii) la   destrucción de ciudades enteras
       the destruction of cities   entire

       'the destruction of whole cities'

only appears with the copula *estar* in Spanish, but it never does in the cases below (331).[50] So ACs in (330) appear to be operating on something different from the degree of development of the event. In particular, they seem to be modifying the resulting state, as the possibility of having a relational adjective such as *urbana* 'urban' or *planetario* 'planetary', which favors the result reading (Bosque and Picallo, 1996), shows (330a, 330d).

(330) a. La   destrucción urbana (en Siria) fue   {completa / total /
           the destruction urban   in Siria was$_{ser}$ complete   total
           ?absoluta}.
            absolute

           'The urban destruction (in Siria) was {complete / total / absolute}.'

       b. La   traducción del   poemario   fue   ??{completa / total /
           the translation of.the book.of.poems was$_{ser}$ complete   total
           absoluta}.
           absolute

           'The translation of the book of poems was {complete / total / absolute}.'

       c. El   oscurecimiento del   cielo fue   {?completo / total /
           the darken.NMLZ   of.the sky   was$_{ser}$ complete   total
           ??absoluto}.
            absolute

           'The darkening of the sky was {complete / total / absolute}.'

       d. El   enfriamiento planetario fue   {?completo / ?total /
           the cold.NMLZ   planetary was$_{ser}$ complete   total
           ??absoluto}.
            absolute

           'The planetary cooling was {complete / total / absolute}.'

(331) a. * La   destrucción urbana (en Siria) estuvo completa.
             the destruction urban   in Siria was$_{estar}$ complete

       b. ?? El   oscurecimiento del   cielo estuvo completo.
             the darken.NMLZ   of.the sky   was$_{estar}$ complete

---

[50]*Completo* 'complete' is a perfective or cut-short adjective. These adjectives (such as *limpio* 'clean', *lleno* 'full', *desnudo* 'naked') are morphologically related to verbal participles that have an internal argument, express the result state of a process and only occur with *estar* (see, e.g., Bosque, 1990; Arche, 2006).

Finally, note that the semantics for adverbs and adjectives of completeness are identical. Throughout the examples of this section, ACs have been shown to be modifying the event denoted by the noun (in particular, its degree of development or completion). However, it is usually an adverb's role to modify events. Here, following Alexiadou (2001b, 2009); Fu et al. (2001); Borer (2013), I argue that the semantics of at least these modifiers should be kept separated from their adverbial or adjectival morphology.

The behavior of adjectives and adverbs with respect to the *doing so* anaphor in English points in this direction (Borer, 2013). In the examples in (332), *doing so* refers back to the filing or concealment events plus the adjective modifying these events (*competent* and *deliberate*). However, overt modification of *doing so* with an adjective rather than an adverb would lead to ungrammaticality (333). The same applies to the examples with ACs (334). To the extent that the adjectives appear to license the ellipsis of a covert adverb modifying *doing so*, it suggests that the adjectives themselves have been raised from a predicate internal position, and their occurrence as adjectives is due to that (Borer, 2013, §3.7.4).

(332) a. Mary's competent filing of the forms yesterday and John's doing so today (=John's doing so competently).

   b. Mary's deliberate concealment of the evidence in the bedroom and John's doing so in the warehouse (=John's doing so deliberately).

(333) a. * Mary's competent filing of the evidence yesterday and John's incompetent doing so today.

   b. * Mary's deliberate concealment of the evidence in the bedroom and John's unintentional doing so in the warehouse.

(examples from Borer, 2013)

(334) a. Mary's complete destruction of the documents in the office and John's doing so in the warehouse (=John's doing so completely).

   b. * Mary's complete destruction of the documents in the office and John's partial doing so in the warehouse.

Since the nominalizations of incremental theme verbs and degree achievements have verbal layers, which, in the analysis put forward here, include degrees, the modifiers are able to access the event description. Alexiadou (2001b) (see also 2009) argues that the possibility of adverbial modification is linked to Aspect. In lack thereof, the modifier surfaces with adjectival morphology, as part of the nominal structure (see section 4.4.3.1). Therefore, the difference between *completo* 'complete' and *completamente* 'completely' when modifying AS nominals is syntactic rather than semantic. In other words, adverbs of completeness are excluded not because of their semantic interpretation, but because the syntactic environment require to license them is not present.

In conclusion, ACs modifying AS nominals are aspectual modifiers. In a scalar account of aspect as the one adopted in this section, they are maximality modifiers that set the degree of development of the event to its maximum. Let's examine now a couple of consequences of the analysis.

4.4.4.1   Consequences of the analysis

This section deals with ACs modifying non-AS nominals, namely result nominals and simple event nominals. Since these nominals lack argument structure, and therefore lack aspect and do no provide any degree argument for ACs to saturate, these modifiers are expected to display their non-degree readings.

Result nominals
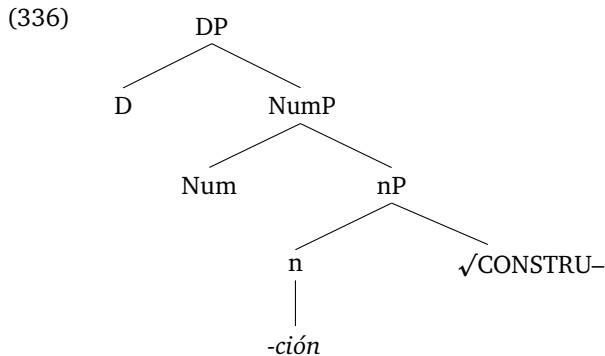
Result nominals are derived nouns that denote the output of an action, that is, an entity in the world. As such, the objects they denote can be on the table, be sent or be destroyed (335). Recall from section 4.4.3 that many nominals are ambiguous between an event and a result interpretation (Grimshaw, 1990). Result nominals can be teased apart by several properties (table 4.1), such as the

optionality of their arguments or their incompatibility with aspectual modifiers
(335).

(335) a. La traducción (del   poemario)   (*en dos días) está encima de
          the translation of.the book.of.poems   in two days is   on.top of
          la   mesa.
          the table

          'The translation (of the book of poems) (*in two days) is on the table.'

       b. La construcción de piedra (*en dos días) fue destruida.
          the build.NMLZ   of stone   in two days was destroyed

          'The stone building (*in two days) was destroyed.'

These properties have been taken as evidence for the absence of verbal layers
in the structure of result nominals that would bring about the process or event
readings and would license some arguments and modifiers (Alexiadou, 2001b;
Borer, 2003; a.o.). Argument structure is not present in the case of result nominals
because the nominalization is formed before the projection of verbal structure.
In particular, the n head combines directly with the root and nominalizes it
(336) (cf. Alexiadou, 2001b; Borer, 2003). Semantically, result nominals such as
construcción 'building' denote properties of individuals.

(336)
```
                    DP
                  /    \
                 D     NumP
                      /     \
                   Num       nP
                            /    \
                           n   √CONSTRU–
                           |
                         -ción
```

As expected from their lack of aspect, ACs combine with result nominals with a
non-aspectual or degree reading. They assert that the object referred to by the

noun has all its parts. As such, it is subject to the correlation between position
and restrictiveness in Romance (see also discussion around (261)). Prenominal
adjectives (non restrictive, NR) refer only to the relevant or desirable parts of the
object. The translation in (337a) is said to be comprehensive, that is, to include
all the information the reader may want, such as explanatory notes. By contrast,
postnominal adjectives (restrictive, R) refer to the presence of all the physical
parts of the object. Example (337b) may be paraphrase as 'the whole translation
is on the table'. Note that, in this reading, *total* 'total' and *absoluto* 'absolute' are
degraded (337), indicating that they may be only degree modifiers.

(337) a. La {completa / ??total / *absoluta} traducción está encima de la
           the complete   total   absolute translation is   on.top of the
           mesa.
           table

           'The {complete / total / absolute} translation is on the table.'   NR

       b. La traducción {completa / ?total / *absoluta} está encima de la
           the translation complete   total   absolute is   on.top of the
           mesa.
           table

           'The {complete / total / absolute} translation is on the table.'   R

The occurrence of both readings of ACs is uncommon, but still possible, as example
(338), from the web, shows. In the example, the Arabic translation is said to have
all its parts (as opposed to the Albanian one), by the postnominal *completo*, and
to be comprehensive, by the prenominal *completo*, at the same time.

(338) [Kašić] logró   traducir y   publicar el *Ritual Romano* en idioma
         Kašić achieved.3SG translate and publish the Roman Ritual   in language
       nacional vivo (aparte de una traducción parcial albanesa y   una
       national alive besides of a   translation partial Albanian and a
       completa traducción árabe completa).[51]
       complete translation Arabic complete

       '[Kašić] managed to translate and publish the *Roman Ritual* in the alive

national language (besides a partial Albanian translation and a compre-
hensive complete Arabic translation).'

In short, result nominals are deverbal nouns but they neither denote event nor
have argument structure. Consequently, they do not provide any degree for ACs
to target and these modifiers thus receive a non-degree reading.

Simple event nominals

The second class of non-AS nominals are simple event nominals. SE nominals
are underived nouns that denote events. As such, they occur with *durar* 'last' or
tener lugar 'take place' (339). However, they pattern with result nominals for the
rest of the properties listed in table 4.1. For instance, they do not take arguments
obligatorily. As can be observed in (339), any phrase expressing a participant
in the event is optional (cf. fn. 21). Also unlike AS nominals, SE nominals are
incompatible with aspectual modifiers (340) (see, e.g., Grimshaw, 1990; Borer,
2003).

(339) a. La clase de matemáticas (a los alumnos de tercero) duró   mucho
            the class of maths   to the students of third   lasted a.lot
            tiempo.
            time
            'The math class to the third-year students lasted a lot of time.'

       b. El   accidente (de Isabel) tuvo lugar en abril.
          the accident   of Isabel had place in April
          'Isabel's accident took place in April.'

(340) a. * La clase durante dos horas nos   sorprendió.
              the class for   two hours ACC.1PL surprised
              'The class for two hours surprised us.'

---

[51]http://www.studiacroatica.org/revistas/144/144.htm

b. * El accidente en dos minutos nos sorprendió.
   the party in two minutes ACC.1PL surprised
   'The accident in two minutes surprised us.'

These examples constitute evidence for SE nominals denoting events, but not having argument structure. The common view in the literature is that they are not structurally derived from verbs and, as a consequence, their eventivity cannot be inherited from verbal projections. Rather, it is lexical or inherent to the root (see Grimshaw, 1990; Borer, 2003; Roy and Soare, 2013; for Spanish, cf. Resnik, 2011). As a consequence of this lack of argument structure, and thus, aspect, the reading of ACs is expected not to be a degree or aspectual one. This is borne out. In (341), *completo* 'complete' is modifying the parts of the class (in particular, its temporal parts) rather than the parts of the (developing of the) event. In postnominal position (341b), *completo* is referring to the class as including all its parts (either content blocks or temporal blocks of the class). In prenominal position (341a), the modifier describes the class as including the parts a (good) class should contain. In this case, *total* 'total' and *absoluto* 'absolute' are also out (see also (337)).

(341) a. La {completa / *total / *absoluta} clase sobre *Poeta en Nueva York*
           the complete total absolute class on poet in New York
           nos sorprendió.
           ACC.1PL surprised

           'The {complete / total / absolute} class on *Poet in New York* surprised
           us.' NON-RESTRICTIVE

       b. La clase {completa / *total / *absoluta} sobre *Poeta en Nueva York*
           the class complete total absolute on poet in New York
           nos sorprendió.
           ACC.1PL surprised

           'The {complete / total / absolute} class on *Poet in New York* surprised
           us.' RESTRICTIVE

For ACs to have an aspectual reading, an event argument is not enough. Rather, the degree interpretation seems to be only possible if the nominal has aspect. Semantically, and at least for durative verbs with variable telicity, we have represented this by means of a degree argument provided by a measure function that returns the degree of development of the event. In the case of SE nouns, no such degree is available.

There are, however, adverbial adjectives whose modification affects not the degree argument related to the development of the event but the event itself. This is the case, for instance, of frequency adjectives (see, e.g., Stump, 1981; Schäfer, 2007; Gehrke and McNally, 2015). This is shown by the fact that frequency adjectives are compatible both with event nominalizations (342a) and with SE nominals (342b–c), which denote an event, but have no aspect.

(342) a. La periódica destrucción de documentos era un problema.
           the periodic destruction of documents was a   problem

       b. Las frecuentes fiestas en casa   de Isabel tenían un claro objetivo.
          the frequent   parties in house of Isabel had   a   clear objective

          'The frequent parties at Isabel's place had a clear goal.'

       c. Las clases {semanales / periódicas} sobre Cortázar nos   gustaron.
          the classes weekly   periodic   on   Cortázar DAT.1PL liked.3PL

          'We liked the {weekly / periodic} classes about Cortázar.'

To sum up, SE nominals are underived nouns that involve events. Since no argument structure is present, there is no degree available for ACs to saturate, and the modifiers can only combine with these nouns in their non-degree versions, similarly to their modification of result nominals.

4.4.5 Conclusion

This section has dealt with ACs in their combination with eventive nominalizations. It has been shown that these modifiers are sensitive to the aspect of the nominalization. Specifically, they are maximality modifiers and their semantics replicates that of maximality modifiers in the domain of PC nouns (section 4.3).

ACs are restricted to accomplishments (telic and durative events) and their behavior parallels the one they have when modifying PC nouns. A unified analysis was given by adopting a scalar approach to aspectual composition, which establishes a mapping between the development of the event and a scale. Two types of nominalizations showing variable telicity were considered, nominalizations of incremental theme verbs and degree achievements. They were argued to include several verbal layers in their structure (vP, and VoiceP if the verb was transitive). Semantic composition followed the structure given by the syntax. The nominalizations were given event semantics, with the nominalizer having no semantic effect. In order to account for the incrementality and the variable telicity of the event descriptions, both structures included a Degree phrase.

ACs are maximality modifiers. They saturate the degree argument that represents the amount of change undergone by a participant over the course of the event and is responsible for the variable telicity of the nominals under discussion. Specifically, they set the value to its maximum, which corresponds with the endpoint of the event.

Finally, both adverbs and adjectives of completeness were given the same semantics and differ only in the syntactic contexts where they are licensed. This is therefore the second case of degree modification in the nominal domain we analyze in this chapter. Next section looks at evaluative nouns.

4.5   Evaluative nouns

In the previous sections, ACs have been shown to behave as maximality modifiers when modifying PC nouns and eventive nominalizations. There is a third use of ACs, in which they behave as intensifiers. It is mainly restricted to prenominal position and only occurs with a small subset of nouns that, before providing a formal definition, can be referred to as *evaluative* (343).[52]

(343)   a. Juan es un completo genio.
           Juan is a   complete genius

        b. Juan es un total idiota.
           Juan is a   total idiot

        c. La clase era un absoluto desastre.
           the class was a   absolute mess

           'The class was an absolute mess.'

In this case as well, the modifiers seem to be asserting that the individuals have the property of being a genius, an idiot, and a mess, respectively, to a maximum degree. The question here is whether ACs are actually degree modifiers or the intensifying reading derives from some other type of modification. In other words, are evaluative nouns upper-bounded gradable predicates? Or is the degree reading a consequence of something else?

This section is structured in the following way. Section 4.5.1 discusses the properties of ACs as maximizers when modifying evaluative nouns. Section 4.5.2 is devoted to defining evaluative nouns with respect to their gradability and expressivity, with attention to their subjectivity. In particular, evaluative nouns are argued to denote properties that hold of its bearer to an extreme degree and

---

[52]Some of these nouns, such as *idiota* 'idiot', *inútil* 'inept', or *friki* 'nerd', are also adjectives. The relation between the noun and the adjective is beyond the scope of this dissertation (for different analyses in a number of languages, see, e.g., Bosque, 1999; Giannakidou and Merchant, 1999; Borer and Roy, 2010; McNally and de Swart, 2015; and references therein). Nevertheless, the closeness of evaluative nouns to adjectives will play a role in the analysis put forward here.

involve an attitude from the speaker towards that individual. In section 4.5.3, ACs
are analyzed as maximality modifiers and some previous analyses are reviewed.

4.5.1   Adjectives of completeness and evaluative nouns

Spanish ACs combine with evaluative nouns with an intensifying reading. In this
case, they are preferred in prenominal position, although *total* 'total' and *absoluto*
'absolute' may occur to the right of the noun (344).

(344)   a.   Juan es un {completo / ?total / absoluto} idiota.
             Juan is   a   complete   total   absolute idiot

       b.   Juan es un idiota {?completo / total / absoluto}.
             Juan is   a   idiot   complete   total   absolute

       c.   La clase es un {completo / ?total / absoluto} desastre.
             the class is a   complete   total   absolute mess

       d.   La clase es un desastre {??completo / total / absoluto}.
             the class is a   mess   complete   total   absolute

Several properties are associated with maximality modifiers (see section 4.2.1).
In this section, I apply the tests for maximality to ACs modifying evaluative nouns.
Since judgments regarding these data were unsteady and, sometimes, even
contradictory, they were gathered through a small questionnaire (see appendix A
for details).

First, maximality modifiers entail that the end of the scale associated with the
property denoted by the predicate has been reached (cf. (213)). As a consequence,
the referent cannot have more of the property, idiocy or disastrousness in this
case, than it already has. This is shown in (345a), where there is a contradiction
in asserting that Juan could be more of an idiot than a complete idiot. The same
applies to (345b). Yet, (346a), where Juan's idiocy is compared to his brother's is
more acceptable, although not perfect (see also (346b)).

(345) a. # Juan es un completo idiota, pero podría   serlo más.
        Juan is a   complete idiot   but   could.3SG be CL more

        'Juan is a complete idiot, but he could be more of an idiot.'

    b. # La clase es un absoluto desastre, pero podría   serlo más.
        the class is a absolute mess   but   could.3SG be CL more

        'The class is an absolute mess, but it could be more of a mess.'

(346) a. ? Juan es un completo idiota, pero su hermano lo es más.
        Juan is a   complete idiot   but   his brother   CL is more

        'Juan is a complete idiot, but his brother is more of an idiot.'

    b. ? La clase es un absoluto desastre, pero la   de Paz lo es más.
        the class is a absolute mess   but   the of Paz CL is more

        'The class is an absolute mess, but Paz's is more of a mess.'

Second, maximality modifiers are compatible with *casi* 'almost' (cf. (215)). However, ACs in their use with evaluative nouns are ruled out with this modifier (347). And third, expressions modified by maximality modifiers accept exceptive phrases (cf. (217)). Exceptives are acceptable in the case of evaluative nouns modified by ACs, although they are slightly degraded (348).

(347) a. ?? Juan es un casi   completo idiota.
        Juan is a   almost complete idiot

        'Juan is an almost complete idiot.'

    b. ?? La clase es un casi   absoluto desastre.
        the class is a almost absolute mess

        'The class is an almost absolute mess.

(348) a. ? Juan es un completo idiota, menos en su trabajo.
        Juan is a   complete idiot   except in his work

        'Juan is a complete idiot, except at work.'

    b. ? La clase es un absoluto desastre, excepto el   día del   examen.
        the class is a absolute mess   except   the day of the exam

        'The class is an absolute mess, except for the day of the exam.'

The data in this section show that ACs modifying evaluative nouns do not completely behave as maximality modifiers (see also Constantinescu, 2011, §4.5.2). The puzzle is whether the maximizer analysis can be maintained and explain the data in (346–348), or ACs in this case should be analyzed as something else. In order to give an answer to this, the semantics of evaluative nouns is discussed in depth in the next section.

4.5.2   Evaluative nouns

Evaluativity is certainly an elusive concept. It has to do with expressing some kind of value judgment. As such, it is subjective and involves some emotional state of the speaker. This section provides diagnostics for evaluative nouns and discusses some proposals in the literature to define the class with respect to their gradability, expressivity, and subjectivity. I argue that an approach based on evaluative nouns denoting extreme degrees of a property and including an expressive component is the best suited to cover all the data.[53]

Evaluative nouns appear in the first position in qualitative nominal constructions such as the so-called *N of an N* construction (349). The nouns in (350) are not acceptable in that position (unless the construction is interpreted as possessive, as in *the grandmother of the neighbor*), even if there are some stereotypical, evaluative properties associated with them. For instance, *la política de la vecina*

---

[53]A note on terminology is in order here. Bierwisch (1989) uses the term *evaluative* to name a subclass of adjectives (*beautiful*, *stupid*) that are different from dimensional adjectives (*tall*, *narrow*). Relatedly, the term has also been used for degree constructions that license inferences to the positive form (Neeleman et al., 2004; Rett, 2008). It is employed as well to refer to adjectives and adverbs that express some sort of evaluative judgment, such as *good* or *luckily* (e.g., Eckardt, 1998; Scott, 2002; Geuder, 2000; van Rooij, 2008; Cinque, 2010; Liu, 2011). On the other hand, the nouns under discussion, which I refer to as *evaluative nouns*, have been described as *degree nouns* (Bolinger, 1972) or *scalar nouns* (Matushansky, 2002), *quality nouns* (Milner, 1978; Ruwet, 1982), and *evaluative epithet nouns* (Corver, 2008).

'that politician of a neighbor' cannot be used to convey that the neighbor is smooth-tongued or untrustworthy.[54]

(349) a. la   {idiota / burra   / granuja / friki / genio} de la   vecina
           the idiot   donkey   crook   nerd   genius of the neighbor

           'that {idiot / silly / crook / nerd / genius} of a neighbor'

       b. un(a) {desgracia   / desastre / pesadilla   / maravilla / delicia} de
           a   misfortune   mess   nightmare   wonder   delight of
           vecina
           neighbor

           'a(n) {tragedy / mess / nightmare / jewel / delight} of a neighbor'

(350) a. la   {#política   / #abuela   / ??italiana / ??fumadora } de la
           the   politician   grandmother   Italian   smoker   of the
           vecina
           neighbor

       b. ?? un(a) {montaña / inspiración / aficionada / entusiasta} de vecina
              a   mountain   inspiration amateur   enthusiast of neighbor

---

[54]It is possible to make those nouns acceptable by adding an affective suffix or using an expressive variant (ia), or by adding an evaluative modifier (ib) (Suñer Gratacós, 1990, 1999; Villalba, 2008). For the *N of an N* construction, see Bolinger (1972); Hulk and Tellier (2000); Doetjes and Rooryck (2003); den Dikken (2006); Villalba (2008); Villalba and Bartra-Kaufmann (2010), and references therein.

(i) a. la   {politicastra   / matasanos / abuelaza}   de la   vecina
         the   politician.PEJ   quack   grandmother.AUG of the neighbor

         'that {bad politician / quack / good grandmother} of a neighbor'

     b. la   {genial política   / abuela   de pacotilla} de la   vecina
         the   great politician   grandmother trashy   of the neighbor

         'that {great politician / trashy grandmother} of a neighbor'

In Spanish, evaluative nouns also appear in attributive constructions with the indefinite article (351).[55],[56] Note that, in this case, the predicate does not always agree in gender with the subject (351b) (Suñer Gratacós, 1990; Bosque, 1996). Nouns expressing professions, nationalities, religions (or, more generally, a specific role in society) appear bare in Spanish (352a) (see, e.g., Matushansky and Spector, 2005; Munn and Schmitt, 2005; Déprez, 2005; de Swart et al., 2007, and references therein).[57] Compare the neutral *doctor* (352a) to its evaluative counterpart (352b).

(351) a. La vecina   es (una) {idiota / inútil}.
           the neighbor is a   idiot   inept
           'The neighbor is an {idiot / inept}.'

       b. La vecina   es *(un(a)) {pesadilla   / delicia   / desastre /
           the neighbor.F is   a   nightmare.F   delight.F   mess.M
           genio}
           genius.M
           'The neighbor is a {nightmare / delight / mess / genius}'

(352) a. La vecina   es (*una) médica.
           the neighbor is a   doctor

       b. La vecina   es *(una) matasanos.
           the neighbor is a   quack

Evaluative nouns can also be used in verbless exclamatives such as the ones in (353) (Vinet, 1991; Hernanz and Suñer Gratacós, 1999; Hernanz, 2001; Munaro, 2006), where the predicative complement precedes the subject and the missing verb is interpreted as a silent copula. They are also found as independent exclamatives (354) (Milner, 1978; Suñer Gratacós, 1990, 1999; Hernanz, 2001).

---

[55]The predicates in (351a) may be adjectives and, as such, they may appear bare in predicative position. That is the reason why the indefinite is not marked as ungrammatical.

[56]This construction is traditionally called *un enfático* 'emphatic un' in Spanish grammars. See Fernández Lagunilla (1983); Portolés (1993, 1994); Bosque (1996, §3.2); Fernández Leborans (1999); di Tullio and Suñer Gratacós (2008); a.o.

[57]Example (352a) with the indefinite article is acceptable under an identificational reading, which is not relevant here (see, e.g., Higgins, 1979; Roy, 2004).

(353)   a.   ¡Un {genio   / desastre}, este chico!
             a   genius   mess   this boy

        'This boy is such a {genius / mess}!'   (Hernanz, 2001)

        b.   * ¡Un {fumador / italiano / padre}, este chico!
             a   smoker   Italian   father   this boy

             Intended: 'This boy is such a(n) {smoker / Italian / father}!'

(354)   a.   ¡{Genio / Desastre / Idiota}!
             genius   mess   idiot

        '{Genius / Mess / Idiot}!'

        b.   * ¡{Fumador / Italiano / Padre}!
               smoker   Italian   father

             '{Smoker / Italian / Father}!'

These tests isolate the class of evaluative nouns (for more diagnostics, see Milner, 1978; Ruwet, 1982; Suñer Gratacós, 1990, 1999; a.o.). Part of the literature considers that evaluative nouns contain some sort of affective feature that allows them to appear in the constructions above (Milner, 1978; Suñer Gratacós, 1990; Hulk and Tellier, 2000; Hernanz, 2001; cf. Ruwet, 1982; Fernández Lagunilla, 1983; den Dikken, 2006, for whom any noun can acquire this feature). Others have argued that the relevant characteristic is a degree argument (Bolinger, 1972; Matushansky, 2002; Espinal, 2013; for discussion, see Constantinescu, 2011). What seems clear is that these nouns are especial inasmuch as they do not only assign a property to an individual, but also express a value judgment. The following section discusses previous proposals and the best way to capture each component of the meaning of evaluative nouns.

4.5.2.1   Evaluative nouns denote extreme degrees

As just mentioned, some authors take the properties and distribution of evaluative nouns to be linked to the presence of a degree argument (e.g., Bolinger, 1972; Matushansky, 2002). If some nouns are more likely candidates than others to denote gradable properties, those are evaluative nouns, *idiot* being the

quintessential example (Bolinger, 1972; Morzycki, 2009, 2012b, 2014; de Vries, 2010; cf. Constantinescu, 2011, 2013; Sassoon, 2013c). This section reviews the arguments in favor of evaluative nouns containing a degree argument and shows that being gradable is not enough to explain their distribution in the constructions presented above. I then argue that evaluative nouns denote extreme degrees of a property.

Evaluative nouns are gradable

A distinguishing property of gradable predicates is that they are monotone in the sense of Heim (2000).[58] Monotonicity is detectable, for instance, in the modification by evaluative adverbs such as *surprisingly* or *unbelievable* (Nouwen, 2011). Observe the contrast in (355) (due to Zwicky, 1970). The examples in (355a), with a downward-monotone modifier, have a degree reading according to which Mary is tall to a surprising, unbelievable or incredible degree. By monotonicity, had she been taller, she would also have been tall to that surprising degree. By contrast, no degree reading is available in (355b), where the adverbs are upward-monotone and, therefore, entailment-preserving. In fact, the latter are not informative as degree statements: everyone is tall to an unsurprising degree (cf. Morzycki, 2008a).[59]

---

[58]A degree predicate is monotone if, and only if, whenever it holds of a degree d it holds of any degree d' lower than d. For instance, if John is 1.75 meters tall, he is also 1.74, 1.73, and so on meters tall.

   (i) A function f of type $\langle d, \langle e, t \rangle \rangle$ is **monotone** iff
       $\forall x \forall d \forall d' [f(d)(x) = 1 \land d' < d \rightarrow f(d')(x) = 1]$ (Heim, 2000, 41)

[59]Evaluative adverbs are downward monotone, and as such they reverse entailment relations (Nouwen, 2011). For instance, adding *surprising* reverses the entailment (ib) of the unmodified sentence (ia). Upward-monotone modifiers such as *unsurprising* are entailment preserving (ic).

   (i) a. Inma read a Russian novel. $\Rightarrow$ Inma read a novel.
       b. It is surprising that Inma read a Russian novel. $\Leftarrow$ It is surprising that Inma read a novel.
       c. It is unsurprising that Inma read a Russian novel. $\Rightarrow$ It is unsurprising that Inma read a novel.

(355) a. Mary is surprisingly/unbelievably/incredibly tall.

　　　 b. Mary is unsurprisingly/believably/credibly tall.

If a predicate is gradable, it should have a degree reading with downward-entailing modifiers such as *unbelievable*, but not with upward-entailing ones such as *believable* (de Vries, 2010, 2015). That is what happens with evaluative nouns in Spanish (356–357) (for English, see de Vries, 2010). The modifiers in (356) give rise to degree readings, but not those in (357). For instance, *una pesadilla notable* is a nightmare to a high degree of terribleness, but *una pesadilla común* is just a common nightmare, and it is even difficult to get the evaluative reading of *nightmare*. For non-evaluative nouns, such as *doctor* or *cat*, none of the modifiers, either downward- or upward-entailing, triggers a degree reading (358).

(356) a. Juan es un {idiota / ?genio   / friki} increíble.
　　　　　 Juan is a   idiot   genius   nerd incredible
　　　　　 'Juan is an incredible {idiot / genius / nerd}.'   DEGREE

　　　 b. La clase fue una {pesadilla   / ?maravilla / desastre} notable.
　　　　　 the class was a   nightmarte   marvel   mess   remarkable
　　　　　 'The class was a remarkable {nightmare / marvel / mess}.'   DEGREE

(357) a. Juan es un {idiota / genio   / friki} creíble.
　　　　　 Juan is a   idiot   genius   nerd credible
　　　　　 'Juan is an incredible {idiot / genius / nerd}.'   NO DEGREE

　　　 b. La clase fue una {pesadilla   / ?maravilla / desastre} común.
　　　　　 the class was a   nightmarte   marvel   mess   common
　　　　　 'The class was an unremarkable {nightmare / marvel / mess}.' NO DEG

(358) a. Juan es un médico {notable   / común}.
　　　　　 Juan is a doctor remarkable   common
　　　　　 'Juan is a(n) {remarkable / unremarkable} doctor.'   NO DEGREE

　　　 b. Nietzsche era un gato {increíble / creíble}.
　　　　　 Nietzsche was a cat incredible   credible
　　　　　 'Nietzsche was a(n) {incredible / credible} cat.'   NO DEGREE

This is related to degree readings of size adjectives (Morzycki, 2009; de Vries, 2010; Nouwen, 2011, fn. 8; Sassoon, 2013a; see also section 4.3.2.1). When combined with some of the nouns under consideration, size adjectives receive an intensifying reading that has been identified as arising from degree modification, although not all evaluative nouns are equally felicitous (359b). Compare *un idiota enorme* 'a huge idiot', where the property of being an idiot is said to hold to a high degree (359a), to *un jugador de baloncesto enorme* 'a huge basketball player', where only great physical size is predicated of Juan (359c).

(359) a. Juan es un {idiota / inútil / ?genio} enorme.
         Juan is a idiot inept   genius huge

         'Juan is a huge {idiot / inept / genius}.'

      b. La clase era un(a) {?pesadilla / desastre / ??maravilla} enorme.
         the class was a   nightmare mess   wonder   huge

         'The class was a huge {nightmare / mess / wonder}.'

      c. # Juan es un {jugador de baloncesto / fumador} enorme.
          Juan is a   player of basketball   smoker   huge

          'Juan is a huge {basketball player / smoker}.'

Two facts characterize degree uses of size adjectives according to Morzycki (2009), the bigness generalization and the position generalization. Modification of evaluative nouns is subject to them. The bigness generalization states that only adjectives of bigness get degree readings, adjectives of smallness do not (360) (cf. Xie, 2010). The incompatibility of small size modifiers with degree readings may be due to the same reason upward-entailing modifiers such as *credible* (355) are excluded: asserting a small degree of these properties is trivial (Morzycki, 2009).

(360) a. Juan es un {#pequeño / ??diminuto / ??minúsculo} idiota.
         Juan is a   small   tiny   minuscule idiot

      b. La habitación era un {?pequeño / ??diminuto / ??minúsculo}
         the room   was a   small   tiny   minuscule
         desastre.
         mess

The position generalization asserts that degree readings of size adjectives are only possible in attributive position. In predicative position, the reading is the literal size one (Morzycki, 2009). This is true for Spanish as well (361). Moreover, it is preferred in prenominal position (362). Morzycki (2009) derives this generalization from the fact that degree operators need to be adjacent to the element that provides the degree argument (the noun in this case).[60]

(361) a. # Juan es un idiota, y   es {grande / enorme / gigantesco}.
          Juan is a idiot and is big   huge   gigantic

      b. ?? Ese desastre es {grande / enorme / gigantesco}.
             that mess   is big   huge   gigantic

(362) a. # Juan es un idiota {grande / enorme / gigantesco}.
          Juan is a idiot big   huge   gigantic

      b. ?? La habitación era un desastre {grande / enorme / gigantesco}.
             the room   was a mess   big   huge   gigantic

In Spanish, some evaluative nouns may be modified by degree expression *muy* 'very' (363a–b). This seems to be restricted to nouns that refer to animate individuals (363c). *Muy* can also force a stereotypical reading of some usually non-evaluative nouns, such as *señor* 'gentleman' or *payaso* 'clown' (Espinal, 2013) (see also section 3.4.1.2).

(363) a. Se   ve que Richards era muy genio... pero también, ejem, muy
          IMPRS see that Richards was very genius but also   ahem very
          feo.[61]
          ugly
          'It seems that Richards was very much a genius... but, ahem, he was
          also very ugly.'

---

[60]The restriction to attributive position is consistent with a degree analysis of size adjectives, although it does not necessarily argue in favor of it (Constantinescu, 2011). There are in fact several adjectives in Spanish and other Romance languages that are only possible in prenominal position independently of the gradability of the noun (e.g., *mero* 'mere', *presunto* 'alleged'; see section 2.2). However, the other tests in this section seem to indicate that it is degree modification what is at stake in this case.

[61]http://www.guioteca.com/rock/las-portadas-mas-provocadoras-de-rolling-stone-la-revista-que-desnudo-a-las-grandes-estrellas/

    b. Yo siempre he   sido muy desastre en el   colegio.[62]
       I   always have been very mess   in the school

      'I've always been very much a mess at school.'

    c. ?? La clase fue muy {tragedia / maravilla}.
        the class was very   tragedy   wonder

       Intended: 'The class was very much of a {tragedy / wonder}.'

More evidence for the gradability of evaluative nouns comes from interrogatives. Evaluative nouns can appear in degree interrogatives with *cómo de* 'how' in Spanish (364b), just like gradable adjectives (364a). Non-evaluative nouns are excluded (364c).[63] In addition to this, quantity exclamatives with *cuán* 'how' (apocope of *cuánto* 'how much/many') and exclamatives with *qué* 'what' receive the same interpretation both with adjectives (365) and with evaluative nouns (366) (cf. (241)). That is not the case for non-evaluative nouns (367), for which *qué*-exclamatives only receive a type reading (367a), and *cuán* is not acceptable (367b).

(364) a. ¿Cómo de {alto / guapo}   es Juan?
         how of tall   handsome is Juan

       'How {tall / handsome} is Juan?'

    b. ¿Cómo de {genio / merluzo / desastre} es Juan?
       how of genius   fool   mess   is Juan

      'How much of a {genius / fool / mess} is Juan?'

    c. ?? ¿Cómo de {médico / padre / fumador} es Juan?
        how   of doctor / father smoker   is Juan

       'How much of a {doctor / father / smoker} is Juan?'

(365) a. ¡Qué {alto / guapo}   (que) es Juan!
         how tall   handsome that is Juan

---

[62]http://www.diariovasco.com/culturas/tv/201603/08/elio-gonzalez-actor-desastre-20160308001529-v.html

[63]Thanks to Z. Zato (p.c.) for bringing these examples to my attention.

   b. ¡Cuán {alto / guapo}   (que) es Juan!
        how   tall   handsome that is Juan

      'How {tall / handsome} Juan is!'

(366) a. ¡Qué {genio / merluzo / desastre} (que) es Juan!
         how genius fool   mess   that is Juan

   b. ¡Cuán {genio / merluzo / desastre} (que) es Juan!
        how   genius fool   mess   that is Juan

      'How big a {genius / fool / mess} Juan is!'

(367) a. ? ¡Qué {médico / padre / fumador} (que) es Juan!
          how   doctor   father   smoker   that is Juan

         'What a {doctor / father / smoker} Juan is!'

   b. ?? ¡Cuán {médico / padre / fumador} (que) es Juan!
          how   doctor   father   smoker   that is Juan

      Intended: 'How great a {doctor / father / smoker} Juan is!'

So far, the arguments in favor of evaluative nouns being gradable are based on
the degree reading that arises with downward-entailing modifiers and in interrog-
atives and exclamatives. In the next section I show that having a degree argument
is not enough to explain the data in (349–354). But, given the gradability of
these nouns, a reasonable question at this point is what type of scale structure
they use (see section 2.4.1.4). The data in section 4.5.1 already showed that ACs
do not have a clear-cut behavior as maximizers when modifying evaluative nouns,
arguing against them using upper-closed scales.

The data from entailments of the comparative construction point to these nouns
actually lexicalizing lower-closed scales. Evaluative nouns pattern with minimum-
standard adjectives in triggering entailments to the unmarked form (368) (Con-
stantinescu, 2011; see also de Vries, 2015).[64] That is, if someone is more of an

---

[64]This is in line with Bierwisch's (1989) analysis of evaluative adjectives (*beautiful*, *stupid*), according
to which they behave (in degree semantics terms) like lower-closed scale adjectives. However, most
of the nouns related to evaluative adjectives (*belleza* 'beauty', *estupidez* 'stupidity') are nonsubjective
and not lexically gradable (section 4.3). Many of the evaluative nouns under discussion in this
section have adjectival counterparts (*idiota* 'idiotic', *maravilloso* 'wonderful', *desastroso* 'terrible'),

idiot than someone else, it is entailed that the first person is an idiot.[65,66]

(368) a. John is {more of an idiot / a bigger idiot} than George. ⊭ George is
           not an idiot.   (Constantinescu, 2011)

       b. ? Juan es más   un idiota que Pablo. ⊨ Juan es un idiota.
             Juan is more a   idiot than Pablo   Juan is a   idiot
           'Juan is more of an idiot than Pablo.' ⊨ 'Juan is an idiot.'

       c. ? Mi clase es más   (un) desastre que   la   tuya. ⊨ Mi clase es un
             my class is more a   mess   than the your   my class is a
             desastre.
             mess
           'My class is more of a mess than yours.' ⊨ 'My class is a mess.'

All in all, evaluative nouns are gradable and seem to have minimum standards.
That means that having only a small degree of the relevant property (idiocy,
messiness, and so on) is enough to qualify as an idiot, a mess, etc.[67]

Being gradable is not enough

Some of the tests for evaluative nouns discussed at the beginning of section 4.5.2.1
also allow adjectives in the relevant positions. Since gradability is an established
fact in the semantics of adjectives (independently of whether the approach in-
volves degrees or not, see **??**), they can be used to verify whether denoting
gradable properties is the crucial factor for a predicate to appear in these con-
structions.

---

   which are gradable and often extreme (see below). Interestingly, in this case, the adjectives are
   often derived from the nouns and not the other way around.
[65]Although evaluative nouns in comparative constructions in Spanish are slightly degraded, speakers
   find that the entailments still come through.
[66]Note that the indefinite article can be left out in comparatives of evaluative nouns (see also (378)),
   bringing them closer to adjectival comparatives (cf. (425b)).
[67]De Vries argues that this is related to the fact that these nouns do not have a prototype that may
   constitute an upper bound (for details, see de Vries, 2010, 2015).

It has been argued that the first noun in the *N of an N* construction must be gradable (Bolinger, 1972; Matushansky, 2002; cf. Milner, 1978; Ruwet, 1982; Napoli, 1989; Hulk and Tellier, 2000; den Dikken, 2006; Villalba and Bartra-Kaufmann, 2010; Constantinescu, 2011). In Spanish, the inversion construction may include adjectives as its first element (369) (Suñer Gratacós, 1990, 1999; Español-Echevarría, 1998; Casillas Martínez, 2003). Being gradable is not sufficient to appear in that position. Examples in (369a) show gradable adjectives that are banned from the construction, whereas the ones in (369b) are acceptable. The latter include some sort of affective, especially pejorative, meaning in addition to being gradable. Examples (370) illustrate the same fact in Romanian.

(369) a. ?? la   {alta / delgada / vieja / sana}   de la   vecina
              the tall   thin   old   healthy of the neighbor

           'that {tall / thin / old / healthy} neighbor'

       b. la   {gorda / ingrata   / tonta} de la   vecina
           the fat   ungrateful   stupid of the neighbor

           'that {fat / ungrateful / stupid} neighbor'

(370) a. ?? {înaltul / slabul} de Petre   Romanian
              tall.the   thin.the of Petre

       b. grasul de Petre
           fat.the of Petre

           'that fat Petre'   (examples from Constantinescu, 2011)

As for nonverbal exclamative constructions, when the main predicate is an adjective, being gradable is not enough either (371) (cf. (353)). Non-gradable adjectives such as relational adjectives are excluded (371b), but dimensional adjectives, that is, gradable adjective that do not express a subjective evaluation, are ruled out as well (371c–d) (Vinet, 1991; Hernanz and Suñer Gratacós, 1999; Hernanz, 2001; Munaro, 2006). Note that the exclamatives are felicitous with an extreme adjective (*gorgeous*, *delicious*), but quite degraded with the non-extreme adjective that uses the same scale (*beautiful* for beauty, *good* for

tastiness) (372). Adding a degree modifier does not always improve acceptability (373) (see Hernanz and Suñer Gratacós, 1999, §39.2.2).

(371) a. ¡{Fantásticas / Maravillosas}, las iglesias de Segovia!
           fantastic   wonderful   the churches of Segovia

       '{Awesome / Wonderful}, the churches of Segovia!'

    b. * ¡Románicas, las iglesias de Segovia!
         Romanesque the churches of Segovia

    c. * ¡Pequeñas, las iglesias de Segovia!
         small   the churches of Segovia

    d. * ¡Limpias, las copas!
         clean   the glasses

                                    (examples from Hernanz, 2001)

(372) a. ¡{??Bonitas   / Preciosas}, las iglesias de Segovia!
           beautiful   gorgeous   the churches of Segovia

       '{Beautiful / Gorgeous}, the churches of Segovia!'

    b. ¡{??Buena / Deliciosa}, esta tarta!
        good   delicious   this cake

       '{Good / Delicious}, this cake!'

(373) a. ¡{Superpequeñas / ??demasiado pequeñas}, las iglesias de
           super.small   too   small   the churches of
           Segovia!
           Segovia

       '{Super small / too small}, the churches of Segovia!'

    b. ¡{Limpísimas / ?muy limpias}, las copas!
        clean.SUPL   very clean   the glasses

       'Very clean, the glasses!'   (examples based on Hernanz, 2001)

To sum up, although there are compelling reasons to consider evaluative nouns gradable, such as their monotonicity, gradability does not seem to be the only defining feature (cf. Morzycki, 2009). In this section I have looked at two of the constructions used to distinguish evaluative nouns when they involve adjectives.

In neither of them being gradable was enough for the felicitousness of the construction. Rather, extremeness and expression of a value judgment seemed to be relevant as well. In the next section I continue arguing for a characterization of evaluative nouns in terms of degrees, with a nuance: they express extreme degrees. After that, the following sections are devoted to pin down the expressive component.

Extremeness

Extreme adjectives constitute a class of adjectives that encode extremeness as part of their lexical semantics (Cruse, 1986; Paradis, 1997, 2001; Martin, 2006; Morzycki, 2012a; Umbach, 2012). The idea is that adjectives such as *excellent* or *gigantic* convey a meaning similar to that of superlatives, that is, a very high or the highest degree of a property (Cruse, 1986). Extremeness is not a property exclusive of adjectives, but it may be found in other categories as well. I argue that evaluative nouns denote extreme degrees of a property, following an idea pointed out in Morzycki (2012a, 2014) (see also Constantinescu, 2011, §4.2.3). Intuitively, in order for someone to qualify as an idiot, just some degree of idiocy (e.g., just occasionally messing up) is not enough, it needs to be remarkably idiotic; for something to be a tragedy, a couple of setbacks are not enough, it needs to get really dramatic.

Several properties characterize extreme predicates. First, they have their own specialized degree modifiers. As shown in (374a–b), *sencillamente* 'simply' or *directamente* 'downright' do not occur with non-extreme adjectives. Other degree modifiers that mark a high degree of a property, such as *bastante* 'fairly' or *muy* 'very' are not possible with extreme adjectives (375) (Cruse, 1986; Paradis, 1997; Hernanz, 2001; Morzycki, 2012a; a.o.). Evaluative nouns appear with adnominal correlates of extreme degree modifiers (376). When the noun is not evaluative, the adjectives receive their literal interpretation (*un sencillo médico* can only mean

'a modest doctor', *un valiente italiano* is interpreted as 'a brave Italian', and so on) (376b, 376c) (Hernanz, 2001).[68],[69]

(374) a. Tus   zapatos son sencillamente {gigantescos / preciosos / ?grandes /
            your shoes   are simply   gigantic   gorgeous   big
            ??bonitos}.
               beautiful

       b. Su hermano es directamente {horrible / diminuto / maravilloso /
          her brother is downright   horrible   tiny   wonderful
          ?feo / ??bajo / ??bueno}.
           ugly   short   good

(375) a. bastante {??enorme / ??precioso / grande / bonito}
          fairly   huge   gorgeous   big   beautiful

       b. muy {??horrible / ??diminuto / ??maravilloso / feo   / bajo /
          very   horrible   tiny   wonderful   ugly   short
          bueno}
          good

(376) a. Clyde is a {flat-out / downright / full-on} {fool / idiot}.

                                                          (Morzycki, 2012a)

       b. Juan es un sencillo {idiota / genio   / #médico / #padre}.
          Juan is a simple   idiot   genius   doctor   father

          'Juan is a downright {idiot / genius / doctor / father}.'

       c. Juan es un valiente {desastre / friki / merluzo / #italiano} .
          Juan is a brave   mess   nerd   fool   Italian

          'Juan is a straight-up {mess / nerd / fool / Italian}.'

---

[68]The examples in (363) showed that some evaluative nouns do combine with the non-extreme degree modifier *muy* 'very'. In all the acceptable cases such as *muy genio* lit. 'very genius', the combination sounds hyperbolic, close to saying that something is *very wonderful*, so this fact does not argue against evaluative nouns being extreme (cf. Morzycki, 2012a, 604-606).

[69]Cruse (1986) mentions *absolutely* as one of the extreme degree modifiers. Paradis (1997); Morzycki (2012a) show that not only *absolutely*, but also the other maximizers (*totally*, *utterly*) are possible with extreme adjectives, as well as with upper-bound scale adjectives. This is true for Spanish too. The data for ACs with evaluative nouns have already been introduced in section 4.5.1. Since adnominal maximizers are the central issue of this chapter, I put off the discussion of their interaction with extremeness until section 4.5.3.

   d. La clase es un(a) soberano/a   {tragedia / maravilla / *acto}
      the class is a   supreme.M/F tragedy   wonder   event

      'The class is a full-on {tragedy / wonder / event}.'

Second, related to their resistance to some degree modifiers, extreme predicates
are not very natural in comparatives, with different degrees of acceptability among
speakers (377) (Cruse, 1986; Paradis, 1997; Morzycki, 2012a). As mentioned
above, evaluative nouns are also slightly degraded in comparatives (368b–c) (cf.
(379)).

(377) ?? Tus zapatos son más {preciosos / gigantescos / horribles} que los
         your shoes   are more gorgeous   gigantic   horrible   than the
      míos.
      mine

      'Your shoes are more {gorgeous / gigantic / horrible} than mine.'

(378) a. ? Juan es más (un) {genio / merluzo} que Pablo.
           Juan is more a   genius fool   than Pablo

         'Juan is more of a {genius / fool} than Pablo.'

      b. ? Mi clase es más (un) desastre que la   tuya.
           my class is more a   mess   than the your

         'My class is more of a mess than yours.'

(379) a. ?? Juan es más (un) padre que Pablo.
            Juan is more a   father than Pablo

         Intended: 'Juan is more of a father than Pablo.'

      b. ?? Mi clase es más (un) espacio de aprendizaje que la   tuya
            my class is more a   space   of learning   than the your

         Intended: 'My class is more of a learning environment than yours.'

Third, extreme predicates are better in equatives (380–381) (Morzycki, 2012a).
These examples show that entailments to the positive form come through for
these predicates (see Rett, 2008). This, as mentioned above, is the behavior of
adjectives that use a scale closed in its lower end (368).

(380) a. Tus zapatos son tan {horribles / diminutos} como los míos. ⊨ Tus
          your shoes   are as   horrible   tiny   as   the mine   your
          zapatos son {horribles / diminutos}.
          shoes   are horrible   tiny

          'Your shoes are as {horrible / tiny} as mine.' ⊨ 'Your shoes are {horrible
          / tiny}.'

(381) a. Juan es tan merluzo como Pablo. ⊨ Juan es un merluzo.
          Juan is as fool   as   Pablo   Juan is a fool

          'Juan is as much of a fool as Pablo.' ⊨ 'Juan is a fool.'

      b. Tu   clase es tan desastre como la   mía. ⊨ Tu   clase es un
          your class is as mess   as   the mine   your class is a
          desastre.
          mess

          'Your class is as much of a mess as mine.' ⊨ 'Your class is a mess.'

Fourth, extreme predicates also can be intensified via prosodic prominence (382,
383) (Cruse, 1986; Bolinger, 1972; Morzycki, 2012a). This is related to the
fact that only adjectives expressing an extreme degree are possible in nonverbal
exclamatives (371–373).

(382) Kevin Spacey is {fan*taaaa*stic / ??*goooooooooood*}!   (Morzycki, 2012a)

(383) a. La vecina   es una {i*dioooo*ta / ??*méeeee*dica}.
          the neighbor is a   idiot   doctor

      b. Mi clase es un {de*saaaaas*tre / ??*espaaaaa*cio de aprendizaje}.
          my class is a   mess   space   of learning

          'My class is a {*meeeess* / *leeeeear*ning environment}.'

Fifth, extreme predicates license entailments to their weaker counterparts (384).
If something is gorgeous, it is necessarily beautiful. Likewise, evaluative nouns
entail their neutral related adjectives (385). For instance, *genius* entails *smart*,
and *tragedy* entails *bad*.

(384) Tus zapatos son preciosos. ⊨ Tus zapatos son bonitos.
          your shoes   are gorgeous   your shoes   are beautiful

(385) a. La vecina   es un genio. ⊨ La vecina   es lista.
           the neighbor is a   genius   the neighbor is smart

       b. El   viaje fue una tragedia ⊨ El   viaje fue malo.
           the trip   was a   tragedy   the trip   was bad

To sum up, it has been argued that evaluative nouns are gradable. In particular, they encode extremeness in their lexical semantics.[70] This establishes a parallelism between their distribution and that of adjectives in the *N/A of an N* construction and nonverbal exclamatives. It also explains their behavior with respect to degree structures such as comparatives and equatives. This idea is implemented in the following section.

Analysis

Evaluative nouns denote extreme degrees of properties. Here, I adopt Morzycki's (2012a) analysis of extreme adjectives to account for the truth-conditional component of evaluative nouns. The basic intuition is that different contexts provide different subsets of scales as relevant, and extremeness consists in going off the relevant scale, to a point where no further distinctions between degrees are made (Morzycki, 2012a). For instance, in order to be a genius, someone has to be smart

---

[70]Not all extreme adjectives are lexically extreme. Some of them do not have their extremeness built-in, but are only contextually extreme (Morzycki, 2012a). Likewise, the meaning of some nouns can be constructed as evaluative. In the right context, they become possible, for instance, in the first position of the qualitative nominal construction (ib) (cf. (349)) (Ruwet, 1982; Fernández Lagunilla, 1983; den Dikken, 2006). For example, in a situation where communism is the rule, it is odd to assert (ia). Examples (ia–ib) become perfectly felicitous in a situation where capitalism and liberalism is expected and Juan shows a strong preference for state's intervention or social protection.

   (i) a. Juan es un soberano comunista.
            Juan is a   supreme communist

            'Juan is a full-on communist.'

        b. el   comunista de tu   primo Juan
            the communist of your cousin Juan

            'that communist of your cousin Juan'

to a degree above any expectation, off the relevant scale for the adjective *smart*, in a zone of indifference between degrees of smartness.

This idea connects with contextual domain restriction. In the same way quantifiers are contextually restricted (e.g., von Fintel, 1994), degree quantification is also subject to contextual variation in their domains (e.g., Zanuttini and Portner, 2003). Contextual domain restriction is thus introduced in the denotation of ordinary adjectives (Morzycki, 2012a). The semantics for *smart* in (386a) includes the restriction that the degree d has to be in the salient set of degrees in the contextual scale C. In the absence of degree morphology, the null morpheme POS saturates the degree argument and establishes the requirement that the degree exceeds the standard (386b).[71]

(386) a. $[\![smart_C]\!] = \lambda d \lambda x [d \in C \wedge \mathbf{smart}(d)(x)]$

     b. $[\![\text{POS } smart_C]\!] = \lambda x.\exists d[d \in C \wedge \mathbf{smart}(d)(x) \wedge d \succeq \mathbf{stnd}([\![smart_C]\!])]$

Extreme predicates have the requirement of having exceeded the contextually-provided set of degrees. This is reflected in their denotation, which includes the condition that their degree d of the property is greater than the maximal degree in the contextual scale C (Morzycki, 2012a). The denotation for some evaluative nouns are in (387).

(387) a. $[\![genio_C]\!] = \lambda x \lambda d[d > \mathbf{max}(C) \wedge \mathbf{smart}(d)(x)]$

     b. $[\![idiota_C]\!] = \lambda d \lambda x[d > \mathbf{max}(C) \wedge \mathbf{dumb}(d)(x)]$

     c. $[\![cielo_C]\!] = \lambda d \lambda x[d > \mathbf{max}(C) \wedge \mathbf{nice}(d)(x)]$

     d. $[\![desastre_C]\!] = \lambda d \lambda x[d > \mathbf{max}(C) \wedge \mathbf{sloppy}(d)(x)]$

Under this analysis, evaluative nouns have degree arguments and are lexically associated with scales, analogously to gradable adjectives in a degree-based

---

[71]Adjectives are of type $\langle e, \langle d, t \rangle \rangle$ in Morzycki (2012a). This choice has to do with the internal subject hypothesis, the assumption that the subject starts low in the structure. I have switched to $\langle d, \langle e, t \rangle \rangle$ here to keep the type of evaluative nouns parallel to that of property concept nouns and eventive nominalizations in the previous sections, although nothing really hinges on this decision.

framework. Just like in the case of adjectives, a degree morpheme is necessary to get to a property of individuals. If no overt degree word is present, I assume a null POS morpheme saturates the degree argument (Morzycki, 2009).[72] According to (388a), an individual is a genius if, and only if, she is smart to a degree d that exceeds the standard for the predicate in C and that is greater than the highest salient degree of smartness in C. In this case, the standard and the domain restriction interact: for the standard to be relevant, it must be beyond the perspective scale. The same applies to *idiota* (388b).

(388) a. $[\![\text{POS } genius_C]\!] = \lambda x.\exists d[d > \textbf{max}(C) \wedge \textbf{smart}(d)(x) \wedge$
            $\wedge\ d \succeq \textbf{stnd}([\![genius_C]\!])]$

       b. $[\![\text{POS } idiota_C]\!] = \lambda x.\exists d[d > \textbf{max}(C) \wedge \textbf{dumb}(d)(x) \wedge$
            $\wedge\ d \succeq \textbf{stnd}([\![idiota_C]\!])]$

Evaluative nouns are fundamentally adjective-like. Proof of this is their similar distribution in inversion constructions (349, 369), exclamatives (353-354, 365-366) and questions (364). The denotations in (387) reflect this adjective-like condition of evaluative nouns not only by giving them gradable semantics, but by using adjectival measure functions. In addition to this, by including the measure function of the non-extreme or more neutral adjective, the denotation of evaluative nouns accounts for the entailments (385). Any individual smart enough to be a genius must have a degree of smartness beyond C; by monotonicity, any individual smart to that degree is smart to all the lower degrees, including the standard for *smart*.

Hernanz (2001) argues that evaluative expressions have a *wh*-feature that explains their occurrence in inversion constructions, exclamatives, and other *wh*-like behavior. In the analysis of evaluative nouns put forward here, they include a widening in the domain of degrees. In particular, evaluative nouns refer to degrees

---

[72]Looking ahead, ACs are argued to be overt degree morphemes in section 4.5.3. Morzycki (2009) already takes ACs, but also other modifiers such as *true* or *real* (cf. section 3.4.3), to actually be adnominal degree morphemes, but his analysis differs from ours in that his gradable nouns do not denote extreme degrees.

that exceed the maximal degree in the salient set of degrees. This connects with Zanuttini and Portner's (2003) analysis of *wh*-exclamatives, according to which exclamatives involve domain widening by the combination of a *wh*-word and a factive operator. Thus, there seems to be a connection between *wh*-behavior and evaluativity that could be made explicit by our analysis.

One way of doing this could be to link extremeness to mirativity (DeLancey, 1997; for an overview, see Rett and Murray, 2013),[73] and, ultimately, to expressivity (see Martin, 2007 for extreme adjectives; see Hernanz, 2006 for a syntactic implementation). More specifically, the fact that the individual has a property to an unexpectedly high degree is accompanied by an emotion (surprise, but also other emotions such as annoyance) by part of the speaker. This emotional attitude arises from the truth-conditional meaning of evaluative nouns and constitutes their expressive meaning. For instance, if someone is smart to so extreme a degree to qualify as a genius, this causes in the speaker an emotional attitude of surprise or admiration towards that individual.

In short, evaluative nouns have been given a denotation that involves extreme degrees, following the analysis for extreme adjectives in Morzycki (2012a). In particular, they are gradable properties of individuals, with the requirement that the degree of the property exceed the contextually salient set of degrees. In the next section, I turn to their expressive or non-truth-conditional component, which I formalize using multidimensional semantics (Potts, 2005; Gutzmann, 2013b; McCready, 2010; a.o.).

4.5.2.2 Expressive content

Being evaluative, that is, expressing a value judgment, is related to having an expressive component in the sense of Potts (2005); Gutzmann (2013b); McCready (2010). Expressive meaning is non-truth conditional and it is found across all

---

[73]For analyses of exclamatives as mirative constructions (i.e., as expressing speaker surprise), see, e.g., Michaelis, 2001; Castroviejo Miró, 2006; Merin and Nikolaeva, 2008.

levels of language, from word level (e.g., epithets, modal particles) to the syntactic (e.g., appositives) or phonological one (e.g., verum focus). Common examples are expressions such as *bastard* or *damn*, which manifest an emotional attitude with a high degree of affectedness and have no truth-conditional contribution. For instance, the meaning of (389) consists of two parts: the speaker hears the addressee's dog barking (truth conditional) and some negative expressive content associated with *damn* (non-truth conditional).[74]

(389) I hear your damn dog barking.   (Potts, 2005)

In addition to pure expressives, there are mixed expressions. That is, expressions that have both an ordinary truth-conditional denotation and an expressive component that conveys an attitude towards the denotation. For instance, terms like *cur* or *steed* (Frege, 1897/1979; Gutzmann, 2013b; McCready, 2010) have a truth-conditional denotation and, besides, contribute a negative or positive attitude from the speaker towards the individual being described (390).[75]

(390) This cur howled the whole night.   (Gutzmann, 2013b)
        AT-ISSUE: This dog howled all night.
        EXPRESSIVE: The speaker holds a negative attitude towards this dog.

Expressive content conforms a dimension of meaning different from descriptive content and, as such, displays a series of characteristics that sets it apart. I follow Potts (2007) and Gutzmann (2013b) here to show that evaluative nouns share these properties and have an expressive contribution to meaning. The picture that emerges is illustrated in (391).

---

[74]Non-truth-conditional meaning is usually referred to as *expressive* (Cruse, 1986; Kaplan, 1979; Potts, 2005, 2007) or *use conditional* (Gutzmann, 2013b). Other labels include *affective* (Frege, 1897/1979) or *evaluative* (Jakobson, 1960).

[75]A different type of mixed expressives do not direct the positive or negative attitude towards the individual, but towards the whole class the individual belongs to. A systematic example are ethnic slurs, expressions that refer to an ethnic group and, at the same time, display a racist attitude towards it (Hom, 2008; Williamson, 2009; McCready, 2010; a.o.). For instance, *Kraut* is a derogative variant of *German*. Its truth-conditional content equals that of *German* and its use conditional content consists of a negative attitude from the speaker towards people from this nationality.

(391) a. La vecina   es una idiota.
           the neighbor is a   idiot

           'The neighbor is an idiot.'

           AT ISSUE: The neighbor is dumb to an extreme degree.

           EXPRESSIVE: The speaker holds a negative attitude towards the neighbor
           (she's angry/annoyed).

       b. La clase es un desastre.
           the class is a   mess

           AT ISSUE: The class is sloppy to an extreme degree.

           EXPRESSIVE: The speaker holds a negative attitude towards the class
           (she's frustrated/angry).

       c. La vecina   es un cielo.
           the neighbor is a   sky

           'The neighbor is an angel.'

           AT ISSUE: The neighbor is nice or sweet to an extreme degree.

           EXPRESSIVE: The speaker holds a positive attitude towards the neighbor
           (she's surprised/moved).

The first property of expressive content is its independence from descriptive content. That is, it contributes to a dimension of meaning that is separated from the regular descriptive content (Potts, 2007).[76] As such, the expressive content of an expression cannot be targeted by logical operators like negation. Examples in (392) are odd out of the blue, and have a strong echo or metalinguistic reading (see Milner, 1978; Hernanz, 2001; a.o.). The speaker seems to disagree with a previous utterance in which the property of being an idiot, a mess, and so on has been assigned to the referent. In none of them, however, the attitude of the

---

[76]A precision is to be made here. Expressives in the narrow sense, or pure expressives, are elements that only contribute use-conditional meaning and, as a consequence, they can be omitted with no effect on the truth-conditional content. That is the case for epithets such as *bastard* or *idiot* in examples like (389), but not when those expressions are predicative, such as in *He's a bastard*. In that case, omitting the expressive leads to ungrammaticality (see, e.g., Gutzmann, 2013b; Castroviejo et al., 2013).

original speaker towards the neighbor is negated (i.e., it is not denied that who said that the neighbor was an idiot had a negative attitude towards her).[77]

(392) a. La vecina   no es un(a) {idiota / desastre / genio}.
          the neighbor NEG is a   idiot   mess   genius
          'The neighbor is not a(n) {idiot / mess / genius}.

      b. La vecina   no es un {cielo / amor}.
          the neighbor NEG is a   sky   love
          'The neighbor is not a(n) {angel / sweetheart}.

When the negation is not metalinguistic, expressive content does not seem to be able to project. Compare the negation of a sentence containing a pure expressive such as *fucking* and one including an evaluative noun (393). The examples with evaluative nouns (394) do not seem to include any emotional involvement of the speaker. I suggest that this is related to the fact that evaluative nouns are mixed expressives. Their expressive component is dependent on whether their descriptive component holds, that is, it presupposes it. When someone asserts, for instance, that the neighbor is not an idiot, her negative attitude towards her does not have a reason to exist. Having a use conditional content dependent on the assertion of the truth-conditional one is not exclusive of evaluative nouns, but happens with other hybrid expressions (see, e.g., Gutzmann, 2016; Beltrama and Bochnak, 2015).

(393) a. Clyde didn't see a fucking goat.
          SUGGESTS: speaker is agitated

---

[77]Examples (392b–a) may also accept a litotes interpretation whereby the opposite is asserted. For instance, saying that the neighbor is not a genius means that she is rather dumb. In this case, the NPI *ningún* is preferred over *un* (i).

   (i) La vecina   no es ningún genio.
        the neighbor NEG is a.NPI   genius
        'The neighbor is no genius.'

b. Clyde didn't see a(n) {idiot / disaster / genius}.

DOESN'T SUGGEST: speaker is agitated

(examples from Morzycki, 2014)

(394) a. No   me encontré ningún idiota en la   fiesta.
       NEG found   a.NPI idiot in the party
       'I didn't run into any idiot at the party.'

b. La   clase no   resultó   ser un desastre.
   the class NEG turned.out be a   mess
   'The class didn't turn out to be a mess.'

The projection through negation is also manifested in dialog (Jayez and Rossari, 2004; Gutzmann, 2013b). The dialogs in (395) show that the emotional state of the speaker cannot be negated in the case of *idiota* or *cielo* (although it can be addressed and refused to various extents, see Castroviejo et al. (2013)). The acceptable responses (B$_2$) do not really negate the ascription of the property, but rather disagree with it (see section 4.5.2.2). Note that they do so by using an evaluative adjective of an opposite polarity as the one whose measure function is in the semantics of the noun (see discussion on extremeness in section 4.5.2.1).

(395) a. A: La vecina es una idiota.
             'The neighbot is an idiot.'

       B$_1$: # No, {la vecina te cae bien / no estás enfadada con ella}.
                'No, {you like the neighbor / you're not mad at her}.'

       B$_2$: No, es bien agradable.
                'No, she's very nice.'

b. A: La vecina es un cielo.
        'The neighbot is an angel.'

       B$_1$: # No, la vecina te cae mal.
                'No, you don't like the neighbor.'

       B$_2$: No, es una borde.
                'No, she's nasty.'

Another diagnostic for use-conditional content is whether it can be part of an interrogative (Gutzmann, 2013b). Questions including evaluative nouns are odd (396). It is interesting to compare nouns like *idiot* or *genius* with predicates of personal taste. In questions, an exocentric perspective is adopted for the latter (Lasersohn, 2005; Stephenson, 2007) (see also section 3.4.2 and below). For example, in (397) the speaker wants to know whether the *hearer* finds the cake tasty. If (396a) were to be interpreted, it would also be asking about the hearer's opinion. However, the expressive component gets in the way and excludes evaluative nouns from questions.[78]

(396) a. ?? ¿Es la   nueva vecina   un(a) {idiota / desastre / genio}?
               is the new   neighbor a   idiot   mess   genius
           'Is the new neighbor a(n) {idiot / mess / genius}?'

       b. ?? ¿Es la   nueva vecina   un {amor   / cielo}?
               is the new   neighbor a   sweetheart sky
           'Is the new neighbor a(n) {sweetheart / angel}

(397) ¿Está rica esa tarta?
          is   tasty that cake
       'Is that cake tasty?'

Second, expressives predicate something of the utterance situations and, as such, are nondisplaceable (Cruse, 1986; Potts, 2007; Gutzmann, 2013b). The expressive content of these expressions cannot be shifted to a nonactual context by attitude reporting verbs, modal operators or occurring in the antecedent of a conditional. Evaluative nouns do not show a uniform behavior with respect to this test. To begin with, some of them seem to be displaceable under attitude

---

[78]This is also the behavior of extreme adjectives (i) (Morzycki, 2012a).

   (i) a. ? Are murderers downright dangerous?   (Morzycki, 2012a)
        b. ?? ¿Es el   nuevo estadio {gigantesco / precioso}?
                is the new   stadium gigantic   gorgeous
            'Is the new stadium {gigantic / gorgeus}?'

verbs (398), but are infelicitous under modal operators (399). The expressive component is clearly shifted to the subject in (398b), but not in (398a), as the continuations show. This reflects the dependence of the use-conditional content on the truth-conditional content. When disagreeing upon the descriptive content, the affective part does not project.

(398) a. Inma cree   que la idiota de la vecina   se ha dejado la puerta
        Inma believes that the idiot of the neighbor SE has left   the door
        abierta otra   vez. #A mí me   cae bien.
        open   another time to me DAT.1SG falls well
        'Inma thinks that that idiot of the neighbor has left the door open again.
        #I like her.'

     b. Paz cree   que la clase es un desastre. Yo creo   que no está tan
        Paz believes that the class is a mess   I believe that NEG is   so
        mal.
        bad
        'Paz believes that the class is a mess. I think that it is not that bad.'

(399) ?? Quizás {la vecina   es una idiota / la   clase es un desastre}.
         maybe the neighbor is a   idiot   the class is a mess
         'The neighbor may be an idiot.' / 'The class may be a mess.'

In addition, evaluative nouns are acceptable to various degrees in conditionals (400). These conditionals have again a strong preference for a metalinguistic reading. They seem to be reactions to someone fearing the possibility the neighbor may be an idiot or the class be a mess (cf. (392)). However, in the consequent of the conditionals, the expressive content of evaluative nouns appears not to be asserted. In (401), a precondition for my negative attitude towards the neighbor is that she calls her grandson names. If the condition does not happen, my negative attitude would not hold either. Again, the emotional involvement of the noun depends on the assertion of its descriptive content.

(400) a. ? Si la vecina   es una idiota, no atenderá   a razones.
          if the neighbor is a   idiot   NEG pay.attention to reasons

          'If the neighbor is an idiot, she won't listen to reason.'

       b. Si la   clase resulta   ser un desastre, contrataremos a   otro
           if the class turns.out be a   mess   hire.FUT.1PL   DOM another
           profesor.
           teacher

           'If the class turns out to be a mess, we'll hire another teacher.'

(401) Si la vecina   insulta a   su nieto,   es una idiota.
       if the neighbor insults DOM her grandson is a   idiot

       'If the neighbor calls her grandson names, she's an idiot.'

Nondisplaceability has however been shown not to be that strong a property of expressive content. In fact, under the right conditions, some expressives can be shifted. In (402), the negative attitude of *bastard* is attributed to the father and not to the speaker (see Amaral et al., 2007; Anand, 2007; Potts, 2007).

(402) My father screamed that he would never allow me to marry that bastard
       Webster.   (Kratzer, 1999)

Third, Potts (2007) argues that examples like (402) do not challenge the nondisplaceability of expressive content, but actually point to their perspective dependence. Expressive items are evaluated from a particular perspective, that of the contextual judge, which is generally the speaker's (e.g., (398a)). This is related to the fact that expressives are used not to make objective statements about the world, but to introduce emotions and attitudes (Potts, 2007).

Fourth, expressives are close to performatives in their immediacy. In particular, expressives achieve their intended act simply by being uttered (Potts, 2007; see also Gutzmann, 2008). Evaluative nouns perform a change in the actual context as well (403). Just like it is not possible to take back that one has just made a promise, it is not felicitous to deny that one has conveyed a negative attitude

towards the neighbour after using *idiot*. For this reason, it cannot be negated
(403a). The same applies to (403b).[79]

(403) a. La vecina   fue una idiota anoche   al   insultar a   su
          the neighbor was a   idiot last.night to.the insult.INF DOM her
          nieto. (#Pero no   he   expresado ninguna actitud negativa
          grandson but NEG have.1SG expressed any   attitude negative
          hacia   ella ahora.)
          towards her now

          'The neighbor was an idiot last night when she called her grandson
          names. (But I haven't expressed any negative attitude towards her
          now.)'

      b. Mi clase de la semana pasada fue un desastre. (#Pero ahora estoy
          my class of the week   past   was a mess   but now am
          contenta con cómo fue.)
          happy   with how went

          'My class last week was a mess. (But now I'm happy with how it went.)'

Finally, Potts (2007) includes descriptive ineffability and repeatability as a prop-
erties of expressives. As for the former, the impossibility to be paraphrased
satisfactorily is not a unique characteristic of expressive content, but it is true that
expressive and descriptive content have different functions and it is difficult to
express one in terms of the other (Geurts, 2007; Gutzmann, 2013b). Regarding
the latter, is it not exclusive of expressive content either, but descriptive content

---

[79]The perspective dependence and immediacy of evaluative nouns have to do with their preference
for predicative position. It is somewhat unnatural to use them out of the blue without explicitly
predicating them of an individual (i).

  (i) a. ? Un idiota vino a la fiesta.
          a   idiot   came to the party

          'An idiot came to the party.'

      b. ? He   cocinado un desastre.
          have.1SG cooked   a mess

          'I've cooked a mess.'

can be repeated with the same result in some cases (e.g., *many, many years ago*) (Geurts, 2007; Gutzmann, 2013b).

As a summary, the tests in this section have shown that evaluative nouns convey a negative or positive attitude of the speaker that belongs to the expressive dimension of meaning. This is manifested in their behavior under logical operators such as negation, their displaceability, their speaker dependence and their immediacy. In having a descriptive component, on which the expressive content is dependent, evaluative nouns differ from pure expressives such as *damn*. Next section introduces the formal framework for the implementation of the expressive component in the semantics of evaluative nouns.

Multidimensional semantics

In order to combine the descriptive and the expressive content, I follow the compositional system and notation developed in McCready (2010) and Gutzmann (2011), which extends Potts's (2005) multidimensional logic for conventional implicatures, $\mathcal{L}_{\text{CI}}$. This extension permits to accommodate cases of mixed expressives (i.e., items that contribute both a descriptive and an expressive content) such as evaluative nouns.

The type system of $\mathcal{L}_{\text{CI}}$ incorporates a new basic type ε for expressive, besides the descriptive types e and t (Potts, 2005, 2007). In McCready (2010) and Gutzmann (2011), the formation rules for complex types are extended to allow for mixed types. Mixed expressive types are possible in Gutzmann's (2011) extension ($\mathcal{L}_{\text{CI+EM+ME}}$). These items have two independent parts. First, there is a complex type that takes a descriptive type σ as its argument and returns a descriptive type. Second, there is a hybrid expressive type that takes the descriptive type σ as its argument and yields an expressive type ε. That is, mixed expressives such as *cur* combine with one descriptive argument and contribute meaning to both dimensions. The construction rules for the different types is given in (404). The diamond sign is used to separate the two dimensions of meaning.

(404) a. If σ and τ are descriptive types, then $\langle\sigma,\tau\rangle$ is a descriptive type.

   b. If σ is a descriptive type and τ is a (hybrid or pure) expressive type, then $\langle\sigma,\tau\rangle$ is a hybrid expressive type.

   c. If σ and τ are (hybrid or pure) expressive types, then $\langle\sigma,\tau\rangle$ is a pure expressive type.

   d. If σ and τ are descriptive types and ε is a pure expressive type, then $\langle\sigma,\tau\rangle \diamond \langle\sigma,\varepsilon\rangle$ is a mixed type

(adapted from Gutzmann, 2011, 136)

A new rule of semantic composition is needed for multidimensional semantics. The rule of mixed application introduced by Gutzmann (2011) ensures that the two parts of the type of a mixed expressive (the descriptive part α and the expressive part β) combine with the descriptive argument γ and distributes the resulting meanings to the right dimensions up the tree (cf. Potts, 2005; McCready, 2010). The bullet sign • is used to show that the two dimensions are isolated from each other at the same node.

(405) **Mixed application** (MA)
   If $\{\alpha \diamond \beta, \gamma\}$ is the set of δ daughters, and $[\![\alpha \diamond \beta]\!]$ is of a mixed type $\langle\sigma,\tau\rangle \diamond \langle\sigma,\varepsilon\rangle$ and it includes γ in its domain, then $[\![\delta]\!] = \alpha(\gamma) : \tau \bullet \beta(\gamma) : \varepsilon$

In order to get the entire meaning of a sentence (both its descriptive and its expressive content), Potts (2005) introduces parsetree interpretation (406). By this mechanism, the whole tree is interpreted (not just the root node), and the different types of meanings are distributed into two dimensions. The descriptive dimension (the first element in the tuple) is given by the interpretation of the descriptive expression at the root node of the parsetree, α. The expressive dimension comes from the collection of all use-conditional expressions of expressive β (Gutzmann, 2011; see also McCready, 2010).

(406) **Parsetree Interpretation**

Let $\mathscr{T}$ be a semantic parsetree with the descriptive term $\alpha : \sigma$ on its root node, and distinct expressive terms $\beta_1 : \varepsilon, \ldots, \beta_n : \varepsilon$ on nodes in it. Then the interpretation of $\mathscr{T}$ is the tuple $\langle [\![\alpha : \sigma]\!], [\![\beta_1 : \varepsilon]\!], \ldots, [\![\beta_n : \varepsilon]\!] \rangle$.

(Gutzmann, 2011, 127)

To sum up, the system for multidimensional semantics includes a new basic type ε for expressive items. Mixed expressives have a descriptive and an expressive dimension of meaning, which are independent from each other. In other to combine with other expressions, the rule of mixed application, which ensures that the meaning is distributed to the appropriate dimension applies. The analysis of the expressive component of evaluative nouns is implemented next.

Analysis

The contribution of evaluative nouns to the expressive dimension consists of a general positive or negative attitude that can be concreted in a wide range of emotional states (see (391)). For instance, in referring to someone as an idiot, the speaker may convey anger, but also annoyance, or even disappointment. This emotional involvement is part of the evaluative noun. Without that emotion, it does not seem felicitous to use those expressions.

Hence, the expressive component of pure evaluative nouns is represented as either a function **neg-att** (for negative attitudes) or **pos-att** (for positive attitudes). These functions take the contextual judge c_j and an individual x and return true if the judge, usually the speaker, has a negative or positive attitude, respectively, towards x (407). In this dimension, evaluative nouns are hybrid expressions of type $\langle e, \varepsilon \rangle$. That is, they take an individual of a descriptive type e and yield something of an expressive type ε.[80]

---

[80]The subscripts EXPR and DESC stand for *expressive* and *descriptive* respectively.

(407) $\llbracket idiota_{\text{EXPR}} \rrbracket = \lambda x.\textbf{neg-att}(c_j)(x)$ (not final)

However, recall from section 4.5.2.2 that the expressive content of evaluative nouns is dependent on the truth of their descriptive component. As a consequence, whenever the negation is not metalinguistic, the emotional attitude of the speaker vanishes under negation (393–394). The denotation in (408) includes this by making the application of the expressive function **neg-att** conditional on the truth of the descriptive component.[81],[82]

(408) $\llbracket idiota_{\text{EXPR}} \rrbracket = \lambda x[\llbracket idiota_{\text{DESC}} \rrbracket(x) = 1 \rightarrow \textbf{neg-att}(c_j)(x)]$

Therefore, the denotation of an evaluative noun such as *idiot* includes both a descriptive and an expressive component. The former asserts that the individual x has a degree d of idiocy that surpasses the contextual maximum. In other words, it is dumb to an extreme degree. The latter consists of a negative attitude directed to the referent of the at-issue description, the individual x. Hence, evaluative nouns are of type $\langle d, \langle e, t \rangle \rangle \diamond \langle e, \varepsilon \rangle$.

(409) $\llbracket idiota_C \rrbracket = \lambda d \lambda x[d > \textbf{max}(C) \wedge \textbf{dumb}(d)(x)] : \langle d, \langle e, t \rangle \rangle \diamond$
$\diamond \ \lambda x[\llbracket idiota_{\text{DESC}} \rrbracket(x) = 1 \rightarrow \textbf{neg-att}(c_j)(x)] : \langle e, \varepsilon \rangle$ (final)

Following this denotation and Gutzmann's (2011) model for mixed application, the composition for the sentence *Juan es un idiota* 'Juan is an idiot' is as in (410). Given that the noun is gradable, the extended NP includes a nominal degree

---

[81]The conditional can be satisfied by non-idiots (if the antecedent is false, the entire formula is true). I think this is a desirable result, since even if the neighbor turns out not to be an idiot in the descriptive sense (e.g., her degree of dumbness is within the contextual set of relevant degrees, she is not dumb to an extreme degree), the negative attitude of the speaker towards the neighbor still holds.

[82]Technically, $\llbracket idiota_{\text{DESC}} \rrbracket$ takes an individual and a degree argument. However, the expressive part is a function only from individuals and would be no way of binding the degree variable in this dimension. This is related to the *Binding Problem* (Karttunen and Peters, 1979), see Potts (2005, §3.10); Amaral et al. (2007); Gutzmann (2013a). The antecedent of the conditional in our representation is to be understood as "if the descriptive content is true".

phrase, Deg_NP (410b). First, the degree argument is saturated by a null POS morpheme. Then, the individual argument is saturated in both dimensions of meaning by mixed application (MA) (410c). The result of the composition is a complete sentence.[83]

(410)
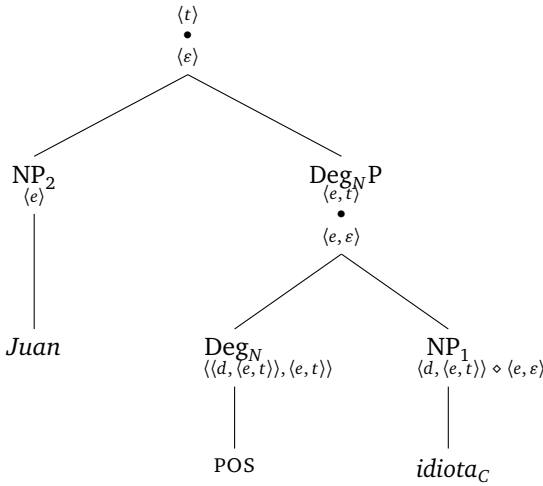
a. $\llbracket \text{NP}_1 \rrbracket = \lambda d\lambda x[d > \textbf{max}(C) \wedge \textbf{dumb}(d)(x)] \diamond \lambda x[\llbracket idiota_{\text{DESC}} \rrbracket(x) = 1 \rightarrow \textbf{neg-att}(c_j)(x)]$

b. $\llbracket \text{Deg}_N\text{P} \rrbracket = \lambda x.\exists d[d > \textbf{max}(C) \wedge \textbf{dumb}(d)(x) \wedge d \succeq \textbf{stnd}(\llbracket idiota_C \rrbracket)] \bullet \lambda x[\llbracket idiota_{\text{DESC}} \rrbracket(x) = 1 \rightarrow \textbf{neg-att}(c_j)(x)]$ (FA)

c. $\llbracket \textit{Juan es un idiota} \rrbracket = \exists d[d > \textbf{max}(C) \wedge \textbf{dumb}(d)(\textbf{Juan}) \wedge d \succeq \textbf{stnd}(\llbracket idiota_C \rrbracket)] \bullet \llbracket idiota_{\text{DESC}} \rrbracket(\textbf{Juan}) = 1 \rightarrow \textbf{neg-att}(c_S)(\textbf{Juan})$ (MA)

To sum up, evaluative nouns have been argued to be gradable, based on their distribution in adjective-like contexts and their entailments. In particular, they

---

[83] Some syntactic details, such as the DP where the indefinite article is situated and the Pred head that introduces the subject, have been omitted. The exploration of the role of the determiner (see also (351–352)) is left for future study (for a related construction in German, see Gutzmann and Turgay, 2015).

involve extremeness in their denotation. In addition to this, these nouns involve
an attitude of the speaker towards the referent of the expression. This expressive
component is dependent on the truth of the descriptive one. Before proceeding
to the analysis of ACs, let me briefly discuss the role subjectivity plays in the
semantics of evaluative nouns.

Subjectivity

The notion of subjectivity is related to evaluativity, but cannot be equated with it.
Subjective predicates are perspective dependent, but do not necessarily include
an expressive component.[84] For instance, evaluative adjectives such as *guapo*
'handsome' or *vago* 'lazy' are subjective but do not make a contribution to the
use-conditional dimension of meaning. This is illustrated by the fact that they
can be negated (411a), denied (411b) or they can be part of an interrogative
(411c). The example in (411a) does not necessarily have an echo interpretation
(cf. (392)).

(411) a. Juan no   es {guapo   / vago}.
           Juan NEG is   handsome   lazy

           'Juan is not {handsome / lazy}.'

       b. A: Juan es guapo.
               'Juan is handsome.'

           B: No, a mí me parece feo.
               'No, I find him ugly.'

       c. ¿Es Juan {guapo   / vago}?
            is Juan handsome   lazy

           'Is Juan {handsome / lazy}?'

---

[84]See section 3.4.2 for a more detailed discussion on subjectivity; cf. Gutzmann (2016) for an
   expressive analysis of predicates of personal taste.

Evaluative nouns are speaker dependent and, consequently, they pass the tests
for subjective predicates (see, e.g., Sæbø, 2009; Bouchard, 2012; see also sec-
tion 3.4.2). The examples in (412) show that they can appear as the complement
of subjective attitude verbs.

(412) a. La vecina   me   parece   un(a) {idiota / granuja / genio /
          the neighbor DAT.1SG seem.3SG a   idiot   crook   genius
          amor}.
          sweetheart

          'I find the neighbor to be a(n) {idiot / crook / genius / sweetheart}.'

      b. La clase me   parece   {un desastre / una maravilla}.
         the class DAT.1SG seem.3SG a mess   a   wonder

         'I find the class to be {a mess / a wonder}.'

Evaluative nouns also give rise to faultless disagreement (Lasersohn, 2005, 2009;
Stephenson, 2007). In the dialogs in (413), no contradiction arises from speaker
B denying that the neighbor is an idiot or the class is a mess. Rather, both speakers
can be right about it because it is a matter of opinion. Note, however, that the
negative attitude of A towards the neighbor or the class is not challenged (cf.
(395)).

(413) a. A: La vecina   es una idiota.
             the neighbor is a   idiot

             'The neighbor is an idiot.'

          B: No, no lo es.
             NEG, NEG CL is

             'No, she's not.'   FAULTLESS DISAGREEMENT

      b. A: La clase es un desastre.
            the class is a   mess

          B: No, no lo es.
             NEG, NEG CL is

             'No, it's not.'   FAULTLESS DISAGREEMENT

Evaluative nouns seem to obtain their subjectivity from two sources. To begin with, the expressive component is judge dependent by definition (Potts, 2005, 2007; Gutzmann, 2013b). The emotional content contributed when uttering *idiot* is always attributed to the speaker or the contextual judge. In addition to this, the descriptive component of evaluative nouns also includes speaker dependence by means of a subjective measure function in their semantics. The measure functions argued to be used by evaluative nouns in section 4.5.2.1 are the same in the lexical semantics of evaluative adjectives such as *dumb* (for *idiota* 'idiot'), *nice* (for *cielo* 'angel') or *sloppy* (for *desastre* 'mess'). In the next section, I put forward the analysis of ACs when modifying evaluative nouns.

4.5.3 ACs are maximality modifiers

Evaluative nouns denote gradable properties, so an analysis of ACs as degree modifiers can be maintained. However, some difficulties arise. Maximizers are sensitive to scale maximums, but the nouns under scrutiny seem to use scales open in their upper end (see section 4.5.2.1). Therefore, the maximum for ACs must be provided by something else than a bound in a lexical scale; alternatively, ACs may have to be analyzed as nonmaximizers. In this section I argue for the first option, showing that the special behavior of ACs with evaluative nouns can be derived from the particularities of the notion of extremeness the latter include in their lexical meaning.

For extreme adjectives, Paradis (1997) observes that they have an inherent superlativiy, and, in this sense, they represent the ultimate point of a scale. She argues that maximizers combine with adjectives such as *excellent* to reinforce their extremeness. In the approach to extremeness adopted here (Morzycki, 2012a), the contextually provided scale contributes a sort of maximum: the degrees above it. These degrees are undifferentiated and can be thought of as a single one. For instance, for an evaluative noun such as *genius*, it is not that there is a ceiling of intelligence, but rather that, above certain degree, we do not introduce any

distinction between the degrees of intelligence of the individuals. In a sense, that set of indistinct degrees acts as a maximum (see Morzycki, 2012a, 606).

If the degrees above the salient scale form a sort of boundary, this may constitute an appropriate maximum for maximizers. I propose that it is in fact a degree that can be returned by the **max** function in the semantics of maximality modifiers. ACs can thus be analyzed as maximizers, maintaining the denotation they have been given in the previous sections (414) (see also Morzycki, 2009).

(414) $[\![AC]\!] = \lambda G_{\langle d, \langle e,t \rangle \rangle} \lambda x. \exists d[d = \mathbf{max}(S_G) \wedge G(d)(x)]$

The composition of an AC with an evaluative noun is provided in (415a), which omits the expressive component for clarity. The AC, the head of the Deg_NP, saturates the degree argument of the evaluative noun and sets its value to the maximum of the scale. Two restrictions apply on the degree d. It must be above the relevant set of degrees in C and it must be the maximum (of the degrees off the scale lexicalized by *dumb*). The final denotation for *complete idiot* is in (415b).[85]

(415) a. $[\![completo]\!]([\![idiota_C]\!]) = \lambda x. \exists d[d = \mathbf{max}(S_{idiot_C}) \wedge [\![idiota_C]\!](d)(x)] =$
            $= \lambda x. \exists d[d = \mathbf{max}(S_{idiot_C}) \wedge d > \mathbf{max}(C) \wedge \mathbf{dumb}(d)(x)]$

       b. $[\![completo\ idiota_C]\!] = \lambda x. \exists d[d = \mathbf{max}(S_{idiot_C}) \wedge d > \mathbf{max}(C) \wedge$
            $\wedge \mathbf{dumb}(d)(x)] \diamond \lambda x[[\![idiota_{\text{DESC}}]\!](x) = 1 \rightarrow \mathbf{neg\text{-}att}(c_j)(x)]$

The denotation for *Juan es un completo idiota* 'Juan is a complete idiot' is as in (416). Once the AC has set the value of the degree argument of the evaluative

---

[85]This analysis of ACs is different from considering them extreme degree modifiers in Morzycki's (2012a)'s terms. In his analysis, modifiers such as *downright* widen the domain of degrees themselves to accommodate a new standard for the predicate. Roughly, the standard for *downright gigantic* is situated above the already expanded domain for *big* in the semantics of *gigantic*. In our analysis, ACs target the widened set of degrees used by evaluative nouns, but do not have a widening effect themselves. This is consistent with the fact that ACs do not turn a non-gradable evaluative noun into one (see (423) below). This analysis is compatible as well with other degree uses of ACs (e.g., the ones described in section 4.3 and section 4.4) and their adverbial counterparts (see section 4.2), where no such effect is perceived (for how this may connect with a granularity view of imprecision, see Morzycki, 2012a, 603-604).

noun to the maximum in the scale, the individual argument is saturated in both dimensions of meaning via mixed application.

(416) $[\![Juan\ es\ un\ completo\ idiota]\!] = \exists d[d = \mathbf{max}(S_{idiot_C}) \wedge d > \mathbf{max}(C) \wedge$
$\wedge\ \mathbf{dumb}(d)(\mathbf{Juan})]\ \diamond\ [\![idiota_{\mathrm{DESC}}]\!](\mathbf{Juan}) = 1 \rightarrow \mathbf{neg\text{-}att}(c_j)(\mathbf{Juan})$

According to the denotation above, Juan is a complete idiot if, and only if, he has a degree of dumbness above the salient set of degrees in the context, that degree constitutes a maximum, and the contextual judge holds a negative attitude towards him. A consequence of the fact that no distinction is made among the degrees above the relevant set of degrees in C is that there is not a clear difference between the unmodified and the modified evaluative noun. In other words, there is not a sharp distinction between being an idiot and being a complete idiot. This does not mean that ACs have no effect. By means of the maximality function, the degree of idiocy of *complete idiot* is always higher than that of *idiot*. But due to the fact that these degrees do not have exact, determinate values, the contrast is fuzzy.[86] This may be at least part of the reason for the oddness of the sentences in (417), where the metalinguistic interpretation of the negation seems to be less strong than in other contexts (cf. (420c)).

(417) a. ?? Juan es un idiota, pero no   un completo idiota.
           Juan is a idiot   but NEG a   complete idiot
        'Juan is an idiot, but not a complete idiot.'

---

[86]This happens as well with other proportional modifiers in combination with extreme adjectives, such as *medio* 'half'. To say (i) does not mean that Juan has a degree of idiocy halfway through the scale, but rather that he is an idiot, although probably not as much as he could be. Most speakers find that (i) entails that Juan is an idiot (cf. *the glass is half full*, which does not entail *the glass is full*) (for English *half*, see Bochnak, 2013b).

(i) Juan es medio idiota.
     Juan is half   idiotic

     'Juan is pretty idiotic.'

    b. ?? La clase es un desastre, pero no   un absoluto desastre.

        the class is a   mess   but NEG a   absolute mess

     'the class is a mess, but not an absolute mess.'

We can now explain the nonmaximizer behavior of ACs described in section 4.5.1. Regarding the entailment that the end of the scale has been reached, recall that sentences with ACs and evaluative nouns result in a contradiction when the degree of the property of the same individual is being compared (345), but not when the comparison is drawn between the degrees of two different individuals (346). For instance, saying that Juan is a complete idiot, but he could be more of an idiot is as contradictory as saying that a tank is completely full, but could be fuller (see (213)). By contrast, there is not so strong a conflict when asserting that Juan is a complete idiot, but someone else exceeds his degree of idiocy.

If Juan is a complete idiot, he has a maximal amount of idiocy, although the particular degree that corresponds to cannot be pinpointed, due to the fact that that degree is beyond the salient scale. It feels unnatural to recalculate that maximum when considering the same individual (unless some new facts are learned about Juan) because the speaker is contradicting her own property assignment. However, given that the maximum is undetermined, the speaker can situate it at a higher value than she originally did if the context changes (for instance, she meets Juan's brother). In fact, note that the sentences improve if *todavía* 'even' is added (418).

(418) Juan es un completo idiota, pero su hermano lo es todavía más.

      Juan is a   complete idiot   but his brother   CL is even   more

      'Juan is a complete idiot, but his brother is even more of an idiot than him.'

As for the incompatibility with *casi* 'almost' (347), I suggest that it has to do with this expression presupposing an identifiable maximum. *Almost* targets a value that is close to the maximum, but has not reached it. If the maximum for, say, being an idiot cannot be singled out, the expression *un casi completo idiota* 'an

almost complete idiot' would not return a concrete value either, and the difference between being a complete idiot and being an almost complete idiot would be trivial (see also Paradis, 1997, §3.3.3).[87]

Exceptive phrases were fairly acceptable with the combination of an AC and an evaluative noun (348), as expected from a total construct. The presence of an AC usually has the side effect of decreasing the amount of imprecision allowed in the context. As a consequence, the number of exceptions is reduced, making exceptives slightly less felicitous than in the sentences without the maximizer.

In short, ACs are maximizers of evaluative nouns. They set the degree of the property denoted by these nouns to its maximum value. However, since those degrees exceed the contextually provided scale and no distinctions are made among them, the combination of ACs and evaluative nouns presents a mixed behavior with respect to maximality. In the next section, I discuss a few consequences of the analysis, especially regarding negation.

4.5.3.1   Consequences

A first prediction of the analysis of ACs as degree modifiers is that they must be barred from predicative position (see also sections 4.3.3.3 and 4.4.4). This is clearly borne out in the case of ACs modifying evaluative nouns (419) (Demonte, 1999a, 2008; Bouchard, 2002; a.o.).

(419) a. * Este idiota es {completo / total / absoluto}.
              This idiot   is   complete   total   absolute
       b. ?? El   desastre es {completo / total / absoluto}.
              The mess   is   complete   total   absolute

Modification of evaluative nouns by ACs differs from their modification of PC nouns and eventive nominalizations in its behavior under negation. In particular,

---

[87]*Casi* 'almost' is acceptable if it modifies the whole DP, as in *Juan es casi un completo idiota.* 'Juan is almost a complete idiot'. In this case, however, it is not related to the maximality of the AC, since it can appear without the modifier (*Juan es casi un idiota.* 'Juan is almost an idiot.').

the former often receives an echo reading when it is negated (420). In (420a–b), it is asserted that the freedom the press has is not all the freedom it can have and that the process of destroying the city did not develop up to its maximal endstate. However, when the noun is evaluative (420c), the preferred interpretation is not one according to which Juan is not as big an idiot as he could be, but one in which the speaker disagrees with a former utterance in which it has been predicated of Juan the property of being a complete idiot.[88]

(420) a. La prensa no   tiene completa libertad.
            the press   NEG has   complete freedom

            'The press does not have complete freedom.'

       b. No se   consiguió   una total destrucción de la ciudad.
           NEG IMPRS achieved.3SG a   total destruction of the city

           'A total destruction of the city was not achieved.'

       c. # Juan no   es un completo idiota.
             Juan NEG is a   complete idiot

             'Juan is not a complete idiot.'

Sensitivity to negative polarity environments is common for degree modifiers. Some of them, such as *extremadamente* 'extremely', or *bien* lit. 'well', cannot occur in these environments (421) (Bosque, 1980; González Rodríguez, 2006; Castroviejo and Gehrke, 2015). The only reading available in (421) is metalinguistic. This seems to be the case for ACs as well (420c, 421c).[89]

---

[88]According to the results in the questionnaire (see figure A.3 in chapter A), evaluative nouns modified by ACs differ greatly with respect to their interaction with negation. For instance, *idiota* 'idiot' and *desastre* 'mess' allow the literal negation (i.e., that the individual is not completely an idiot), but the metalinguistic reading is favored for *genio* 'genius' or *cielo* 'angel'.

[89]Some degree modifiers receive a litotes reading (i.e., an understatement by negation) under negation (Bolinger, 1972). For instance, saying that someone is not very tall does not mean that she is somewhat tall, but rather that she is somewhat short. That is not true for ACs, however. Example (420a) does not mean that the press has rather little freedom. Consistently, (420c) cannot be used to convey that Juan is rather bright.

(421) a. * Su novio   no   es extremadamente dicharachero.
          his boyfriend NEG is extremely   talkative

          'His boyfriend is not extremely talkative.'

   b. * Irene no   es bien espabilada.
          Irene NEG is well bright

          'Irene is not very bright.' (examples from González Rodríguez, 2006)

   c. # Juan no   es un absoluto cielo.
          Juan NEG is a   absolute sweetheart

          'Juan is not an absolute angel.'

Finally, the fact that the negation of ACs with evaluative nouns strongly receives a metalinguistic reading seems to be partly due to the semantics of the noun as well. The negation of an evaluative noun is itself metalinguistic (see (392)), as often is the negation of extreme adjectives (422). ACs thus behave as degree modifiers. They compose with the noun but do not change the part of their meaning (the expressive component or the fact that they involve domain-widening, see (Morzycki, 2012a, 597-602)) that makes them resist embedding in NPI environments (see fn. 78).

(422) ?? El   nuevo estadio   no   es {precioso / gigantesco}.
           the new   stadium NEG is gorgeus   gigantic

        'The new stadium is not {gorgeus / gigantic}.'

Moreover, since ACs are degree modifiers, they are not expected to combine with other nouns that include an expressive component (and are thus acceptable in the constructions in the beginning of section 4.5.2), but are not gradable, such as *matasanos* 'quack', *abuelaza* 'good grandmother' (see fn. 54). That is actually the case (423). Note that contextual evaluative nouns such as *comunista* 'communist', which are coerced into an extreme degree reading, are more acceptable (423c) (see fn. 70). This gives more evidence for a degree analysis of ACs and reveals that the expressive component is not the relevant feature for the combination of ACs with evaluative nouns. Also, it shows that ACs themselves do not include an

expressive component (cf. McCready and Kaufmann, 2013 for Viennese German *ur* 'total' and Gutzmann and Turgay, 2015 for other expressive intensifiers in German).

(423) a. *un completo matasanos; *un absoluto chucho
           a   complete quack   a   absolute cur
       'a complete quack'; 'an absolute cur'

   b. *una total politicastra;   *una completa abuelaza
        a   total politician.PEJ a   complete grandmother.AUG
       'a total politician(pej.)'; 'a complete great grandmother'

   c. ?un completo comunista; ?un absoluto dinosaurio
        a   complete communist a   absolute dinosaur
       'a complete communist'; 'an absolute dinosaur'

To sum up, ACs display the behavior expected as degree modifiers with respect to their position, negation, and their distribution. Previous analyses of ACs in combination with evaluative nouns are discussed next.

4.5.3.2   Previous analyses

Alternative analyses of ACs take them to universally quantify over properties or dimensions associated with the noun. This section reviews a non-degree and a degree proposal along these lines and shows that they are not sufficient to capture the distribution of ACs with evaluative nouns.

Constantinescu (2011) argues that ACs in their intensifying use with nouns like *idiot* need not be analyzed as degree expressions. Instead, they signal the extent to which the property denoted by the noun holds of the object in question. In line with the proposals in Bouchard (2002) and Demonte (2008) for prenominal adjectives in Romance, Constantinescu (2011) puts forward that ACs apply to the characteristic function included in the meaning of the noun and assert that the properties displayed by the individual match those associated with the noun, in

the speaker's opinion. However, the noun's defining criteria does not have to be exhaustively satisfied, as shown by the nonmaximal behavior of ACs in these uses (see (345–348)), it is enough if the relevant properties are clearly manifested in a salient way. For instance, for a workshop to be a complete failure, it may be enough if it is a failure in an aspect especially relevant to the speaker (e.g., quality of the talks), even if it is not in other less salient respects (e.g., quality of the coffee).

The idea that ACs indicate that the referent fully matches the definition of the noun is problematic. All nouns have a set of criteria an individual must satisfy to qualify as them (in Bouchard's (2002) terms, all nouns have a characteristic function). However, this reading of ACs is only available for evaluative nouns. If the role of ACs were to assert that the noun is right for the individual, they would be expected to have this function with all nouns. For instance, the examples in (424) would be predicted to convey that those particular instances deserved to be referred to as *a novel* and *a conference*, respectively, but that is not the case.

(424) a. Esta es una completa novela.
           this is a   complete novel
           'This is a comprehensive novel.'

       b. Aquella fue una absoluta conferencia.
           That   was a absolute workshop.
           'That was an absolute workshop.'

The intuition that ACs indicate that the referent is an N in all the relevant dimensions associated with the noun can be recast in a degree-based framework. Sassoon (2013c) argues that nouns that include an evaluative component are similar to adjectives in their occurrence with *with respect to* phrases (425a) and their (greater) acceptability in comparatives without *of* (425b) (Sassoon, 2013c, 2017b; see also sections 3.4 and 4.5.2.1). In Sassoon's (2013b; 2013c) framework, being adjective-like means that the dimensions of the predicate are accessible (see also Sassoon, 2011).

(425) a. Dan is an idiot {with respect to money / in every respect}.

                                                        (Sassoon, 2013c)

       b. ? This girl is more a genius than a child.   (Sassoon, 2017b)

Relatedly, de Vries (2010, 2015) argues that evaluative nouns are gradable and
use open scales (see also Morzycki, 2009 and section 4.5.2.1). ACs are analyzed
as modifiers that assert that the individual has every dimension associated with
the noun. For instance, a *total nerd* would be someone who is nerdy with respect
to his looks, social skills, intelligence, hobbies, etc. This predicts that nouns
modified by ACs do not accept *with respect to*-phrases, but this is not borne out.
Examples in (426) illustrate that someone can be a total idiot, a complete mess
or an absolute nerd only with respect to one dimension.

(426) a. Era un idiota total en cuanto a   calorías, alimentos y   cosas de
           was a   idiot   total with regard to calories food   and things of
           esas.[90]
           those

           'I was a total idiot regarding calories, food, and things like that.'

       b. Soy un completo desastre con respecto a las lanas y   los
           am a   complete mess   with respect to the yarns and the
           proyectos.[91]
           projects

           'I'm a complete mess with respect to yarn and (DIY) projects.'

       c. Es un absoluto friki con respecto a cómo se viste.
           is a   absolute nerd with respect to how   SE dresses

           'He's an absolute nerd with respect to what he wears.'

This said, I am not completely sure that all the *with respect to* phrases in (425a,
426) target actual dimensions of the noun. What properties make someone an
idiot? Someone may consider that not knowing how to manage money makes

---

[90]http://1medbio.blogspot.com.es/2012/09/medicina-biologica-dr-german-duque_22.html
[91]http://www.waselwasel.com/crisis-tejeril/

you an idiot, but that is certainly neither a necessary nor a sufficient condition to qualify as one. Rather, it seems one of the many ways in which someone can be an idiot. Consider a noun like *smoker* instead, which has clear(er) dimensions (Morzycki, 2012b). A smoker is someone who smokes a certain amount of cigarettes with a specific frequency. Some degree in both dimensions is necessary for someone to qualify as a smoker. A complete smoker would be someone who has a high degree in both dimensions. However, ACs are not felicitous with this noun (427).

(427) # complete smoker   (Morzycki, 2012b)

Morzycki (2012b) argues that nouns like *idiot* or *disaster* are only associated with one dimension (idiocy and disastrousness, respectively). ACs are analyzed as modifiers that assert that the measurement of the individual along the dimension associated with the noun is large (428). For instance, Clyde is an utter idiot if, and only if, his measure along the unique dimension associated with idiot, idiocy, is large. ACs include the requirement that the noun have only one dimension (represented by the iota operator), accounting thus for their distribution.

(428) $\llbracket utter \rrbracket^c = \lambda f_{\langle e,t \rangle} \lambda x.\textbf{large}_c(\mu(\iota D[D \in \textbf{dimensions}(f)])(x))$

(Morzycki, 2012b, 194)

Our analysis resembles Morzycki's (2012b) in that it assumes that the only dimension of measurement relevant for evaluative nouns is the one provided by the measure function of their related adjectives. However, we have considered evaluative nouns to be gradable (extreme, in particular) (cf. Morzycki, 2009; Gutzmann and Turgay, 2015), and have argued that ACs can be analyzed as maximality modifiers, unifying thus all their degree uses.

As a summary, an analysis of ACs as quantifying over the characteristics or dimensions associated with the noun does not fully cover the data. For this reason, ACs are better understood in terms of maximality modifiers of evaluative nouns.

4.5.4   Conclusion

This section has been devoted to ACs when they modify evaluative nouns. It has been argued that, despite the fact that they only partially display the characteristics of maximality modifiers, ACs set the degree of the property denoted by the noun to its maximum value in the scale.

Evaluative nouns such as *idiot* have been treated as having two dimensions of meaning. On the descriptive level, they have been analyzed as gradable predicates involving extremeness. On the expressive dimension, they manifest an emotional attitude from the speaker towards the referent of the expression.

ACs received an analysis as maximizers. In particular, they set the value of the degree of the property denoted by the evaluative noun to a maximum. Since the degrees used by evaluative nouns are above the contextually salient scale, the maximum is not identifiable, accounting for the particular behavior ACs have in combination with nouns denoting extreme degrees of a property.

4.6   Concluding remarks

In this chapter, an analysis in terms of maximality modifiers has been proposed to account for three degree uses of ACs. In particular, it has been argued that these modifiers are maximizers when they combine with PC nouns, eventive nominalizations, and evaluative nouns.

Drawing a parallelism between the adjectival, the verbal, and the nominal domain, I have demonstrated that maximality can be found in the latter, in three cases: nouns denoting property concepts whose related (gradable) adjectives use an upper- or a totally-closed scale; argument-structure nominalizations of incremental theme verbs and degree achievements whose base denotes a telic event and whose aspect they inherit; and evaluative nouns, which are gradable

themselves and involve extremeness in their meaning. All these boundaries are appropriate maximums for ACs to target.

Degree uses of ACs are only possible in attributive position, due to the fact that the Degree head they occupy is situated inside the DP. The facts are, however, complicated by the fact that degrees are not always part of the predicate itself but are sometimes introduced externally, like in the case of PC nouns and eventive nominalizations (see discussion around (262), (330), (419a)).

As for the position of ACs with respect to the nouns, it has been shown that, in their degree uses, ACs have a preference for prenominal position, but are possible both pre- and postnominally. Only non-degree uses are affected by the correlation between position and restrictive readings in Romance.

The semantic core of ACs has to do with completeness, and, as such, with universal quantification. Depending on the set of parts available for modification, these adjectives acquire one reading of another. If no scale is available, they quantify over the unstructured parts of the object.[92] As observed above, not every AC has the same uses. *Completo* 'complete', and *total* 'total' to a much lesser extent, can have non-degree uses; *absoluto* 'absolute' cannot (429) (see also (337)). Only in this latter use, position of the adjective correlates with restrictiveness. For instance, the collection (429a) is said to include all the etchings by Picasso, whilst the one in (429b) just includes the relevant ones, it is comprehensive but does not necessarily include all the pieces.[93]

---

[92]For other cross-categorial modifiers that vary their meaning depending on the scale available, see, e.g., Anderson (2013); Bochnak and Csipak (2014).

[93]This latter reading can also be obtained by the relative version of *completo*, which can be modified by *muy* 'very' (i).

   (i) El   museo   tiene una colección muy completa.
        the museum has   a   collection very complete

        'The museum has a very complete collection.'

(429) a. El   museo   tiene una colección {completa / ??total / *absoluta} de
           the museum has a   collection complete   total   absolute of
           grabados de Picasso.
           etchings of Picasso

           'The museum has a {complete / total / absolute} collection of Picasso's

           etchings.'   RESTRICTIVE

       b. El   museo   tiene una {completa / *total / *absoluta} colección de
           the museum has a   complete   total   absolute collection of
           grabados de Picasso.
           etchings of Picasso

           'The museum has a {complete /total / absolute} collection of Picasso's

           etchings.'   NON-RESTRICTIVE

In sum, this chapter has explored three sources of gradability in the nominal do-
main through an instance of cross-categorial modifiers, adjectives and adverbs of
completeness. In doing so, it has established a parallelism between boundedness
in the semantics of measurement, aspect, and evaluativity. Before concluding, I
briefly present a couple of open questions related to ACs.

4.6.1   Further issues

This section introduces two issues related to the ideas discussed in this chapter.
In particular, it addresses some related modifiers, in two ways: other modifiers
that include a notion of maximality and minimality modifiers.

Some related modifiers

This chapter has offered an analysis of adjectives of completeness as maximizers.
Other maximality-related modifiers that display an intensifier meaning can be
found in Romance languages, as illustrated by (430). Universal quantifiers are
one such example. Spanish *todo* 'all' can modify DPs headed by the indefinite
article to indicate that the referent completely qualifies as N (430a). French

tout 'all' can modify open-scale adjectives with an intensifying reading (430b) (Burnett, 2014). Catalan *de cap a peus* lit. 'from head to feet' also conveys that the property is well ascribed to the individual.

(430) a. Volver   a casa   fue toda una aventura.
           come.back.INF to house was all   a   adventure
           'Coming back home was quite an adventure.'

       b. Jean est tout content.   French
           Jean is all   happy
           'Jean is really happy.'   (Burnett, 2014)

       c. Lucía és una artista de   cap a peus.   Catalan
           Lucía is a   artist from head to feet
           'Lucía is an artist to her fingertips.'

A related modifier that can be added to ACs is *perfecto* 'perfect'. *Perfecto* appears with evaluative nouns and other non-gradable nouns with the relevant reading only in prenominal position (431a) (cf. (431b–c)) (see Bolinger, 1972, §8; Paradis, 2001; Demonte, 2008; Constantinescu, 2011, §4.5.1). *Perfecto* does not seem sensitive to the scale structure of PC nouns (432a) or eventive nominalizations (432b–c), and receives its literal reading in prenominal position.

(431) a. un perfecto {idiota / desastre / caballero   / desconocido}
           a perfect   idiot   mess   gentleman   stranger

       b. # un {idiota / desastre / caballero   / desconocido} perfecto
           a   idiot   mess   gentleman   stranger   perfect

       c. # Este {idiota / desastre / caballero   / desconocido} es perfecto.
           this   idiot   mess   gentleman   stranger   is perfect

(432) a. ? perfecta {libertad / oscuridad / felicidad   / paciencia / sabiduría}
           perfect   freedom   darkness   happiness   patience   wisdom

       b. # la   perfecta destrucción de {la   ciudad / ciudades}
           the perfect destruction of   the city   cities
           'the perfect destruction of {the city / cities}'

    c. # el   perfecto {oscurecimiento del   cielo / ensachamiento de la
        the perfect   darken.NMLZ   of.the sky   widen.NMLZ   of the
        grieta}
        crack

        'the perfect {darkening of the sky / widening of the crack}'

Its adverbial counterpart, *perfectly*, is sometimes cited as a maximizer (e.g., Toledo and Sassoon, 2011) because it has a meaning and a distribution similar to that of adverbs of completeness (433) (see section 4.2). However, it seems to have an intensional component that makes reference not to the maximum itself but to a desired point (for an analysis of *perfectly* along these lines, see Sauerland and Stateva, 2011). For instance, in (434), *perfectamente* can combine with an open-scale adjective such as *largo* 'long' to refer to the perfect length of the hair for braiding it. *Completamente* is not acceptable in that reading.

(433) a. perfectamente {lleno / ?abierto / limpio}
        perfectly   full   open   clean

    b. ?? perfectamente {alto / mojado / sucio}
        perfectly   tall   wet   dirty

(434) Tienes   un pelo muy bonito,   {perfectamente / ??completamente}
    have.2SG a   hair very beautiful perfectly   completely
    largo para hacerle   una trenza.[94]
    long for   make.DAT a   braid

    'You have a very nice hair, {perfectly / ??completely} long for braiding it.'

This intensional component linked to perfection may explain the degree readings of the adjective *perfecto* 'perfect' (431). However, in many of those cases, the notion of perfection does not really apply and the adjective is just an intensifier. A perfect idiot is someone with a high or maximal degree of idiocy, but certainly is not perfect. So a desired level of a property involves some sort of maximum, but as the data above show, some other features factor in and more work on this is needed.

---

[94]https://www.wattpad.com/85869569-feel-free-2-encuentros

Adnominal minimizers

The reader might have been wondering whether the analysis argued for in this chapter may be extended to adjectival counterparts of minimizers (*slightly*, *a little*), that is, to degree modifiers that are sensitive to minimal standards instead of maximal ones. I show here that it can be adapted, but it might not be as straightforward as expected.

To begin with, the definition of minimizers in terms of a minimum function does not capture all the data (Sassoon, 2012; Sassoon and Zevakhina, 2013). In addition to this, the distribution of minimizers themselves is not as clear cut as initially reported. For instance, they may be felicitous with open-scale adjectives (*slightly tall for her age*) (see Kagan and Alexeyenko, 2011; Sawada, 2011; Solt, 2012; Gumiel-Molina and Pérez-Jiménez, 2016 for details).

The not well-defined distribution of minimizers can also be observed in the nominal domain. For PC nouns, *ligero* 'slight' may appear with nouns derived from lower-closed scale adjectives (435a), but also from open-scale adjectives and some upper-closed scale adjectives (435c).[95]

(435) a. ligera {impureza / inseguridad / suciedad}
           slight impurity   insecurity   dirtiness
       b. ligera {?altura / ?belleza / ?sabiduría / estrechez}
           slight   height   beauty   wisdom
       c. ligera {?aridez / oscuridad / ??rectitud   / ??lealtad}
           slight aridity   darkness   straightness   loyalty

Technically, all eventive nominalizations have a minimum (the starting point of the event), and would be predicted to be able to occur with minimizers. That is however not the case. Nominalizations of incremental theme verbs do not allow a minimizer reading according to which a small part of the city or of a

---

[95]In a quick Google search, the examples marked as acceptable return around a thousand results: *ligera altura*: 2760 (many not relevant); *ligera belleza*: 901; *ligera sabiduría*: 64; *ligera aridez*: 54; *ligera oscuridad*: 1290; *ligera rectitud*: 4; *ligera lealtad*: 14.

poem was affected by the destruction or the translation event, respectively (436). Nominalizations of degree achivements, by constrast, do accept minimizers in the relevant reading, independently of their telicity (437).

(436)   a. ?? la   ligera destrucción de la   ciudad
                the slight destruction of the city

        b. ?? la   ligera traducción de poemas
                the slight translation of poems

(437)   a. el   ligero ensanchamiento de la   grieta
                the slight widen.NMLZ   of the crack

                'the slight widening of the crack'

        b. el   ligero oscurecimiento del   cielo
                the slight darken.NMLZ   of.the sky

                'the slight darkening of the sky'

Finally, evaluative nouns, because of their extreme semantics, are not expected to occur with minimizers. Since these nouns involve a very high degree of the property, it is contradictory to minimize it (see Paradis, 1997). That is borne out (438).

(438)   Juan es un ligero {*idiota / *genio   / *cielo / ??desastre}.
        Juan is a   slight   idiot   genius   angel   mess

Adnominal minimizers show a somewhat unexpected behavior with PC nouns and eventive nominalizations that a degree analysis of these modifiers in the fashion of the one put forward here for maximizers would have to explain. Unfortunately, a development of this thread has to be left for future research.

Appendix A

AC + evaluative noun questionnaire

The data in section 4.5.1 was collected through a small questionnaire study, which constitutes a first approximation for a future experiment to test the hypothesis presented in that section.

Method

The study was carried out with 31 native speakers of Spanish (of different ages and levels of education, recruited through my Facebook friends).

The questionnaire consisted of 27 items and had 2 versions (A (N=23) and B (N=8)). 24 of the items represented the diagnostics for maximality modifiers presented in section 4.2.1: 1) entailment that if *x is N*, *x* has a maximal amount of *N*-ness (in two ways: comparing the property within the same individual and with a different one), tested for the noun modified and unmodified; 2) compatibility

of *AC N* with *almost*; 3) compatibility of the noun modified and unmodified with exceptive phrases; and 4) compatibility of N with another proportional modifier (*half*). Items with unmodified nouns in 1) and 3) served as a control. Informants were asked to rate the acceptability of each sentence on a 1-5 scale from completely strange to perfectly normal. The assignment of grammaticality judgments to the number values has been done as follows: 1 = *; 2 = ??; 3 = ?; 4 = OK; 5 = OK.

The remaining 3 items consisted on the negation of the noun N modified by the AC. The participants were asked to decide whether the individual would still qualify as N or not. Only two answers were possible: yes and no. Items were presented in a random order.

Six evaluative nouns were tested: the Spanish equivalents of *idiot*, *genius*, *sweetheart*, *disaster*, *artist*, and *tragedy*. Three adjectives of completeness were used: the Spanish versions of *complete*, *total*, and *absolute*. They were placed in prenominal position, except for *total*, which is also acceptable postnominally with an intensifying reading.

Test items

Questionnaire A	
End of scale entailment	
no modifier (within same individual)	1.Paloma es un cielo, pero podría serlo más. 'Paloma is a sweetheart, but she could be more so.' 2. La clase de Paz es un desastre, pero podría serlo más. 'Paz's class is a disaster, but it could be more so.'
no modifier (between different individuals)	3. Juan es un idiota, pero Pedro lo es más. 'John is an idiot, but Pedro is more so.' 4. Carlos es un genio, pero Juan Luis lo es más. 'Carlos is a genius, but Juan Luis is more so.' 5. Lucía es una artista, pero Cristina lo es más. 'Lucía is an artist, but Cristina is more so.' 6. Su vida es una tragedia, pero la de Carmen lo es más.

	'Her life is a tragedy, but Carmen's is more so.'

modifier (within same individual)	7. Juan es un idiota total, pero podría serlo más.
	   'John is a total idiot, but he could be more so.'
	 8. Carlos es un genio total, pero podría serlo más.
	   'Carlos is a total genius, but he could be more so.'
	 9. Lucía es una total artista, pero podría serlo más.
	   'Lucía is a total artist, but she could be more so.'
	 10. Su vida es una total tragedia, pero podría serlo más.
	   'Her life is a tragedy, but she could be more so.'

modifier (between different individuals)	11. La clase de Paz es un completo desastre, pero la de Esther lo es más.
	   'Paz's class is a complete disaster, but Esther's is more so.'
	 12. Paloma es un absoluto cielo, pero Marina lo es más.
	   'Paloma is an absolute sweetheart, but Marina is more so.'

Almost

13. Lluís es un casi completo genio.
   'Lluís is an almost complete genius.'
 14. Inma es una casi absoluta artista.
   'Inma is an almost absolute artist.'
 15. Su vida es una casi completa tragedia.
   'Her life is an almost complete tragedy.'

Exceptive phrases	

no modifier	16. Lluís es un genio, excepto en el scrabble.
	   'Lluís is a genius, except at scrabble.'
	 17. Inma es una artista, excepto con la acuarela.
	   'Inma is an artist, except with watercolor.'
	 18. Su vida es una tragedia, salvo por el amor de su hermana.
	   'Her life is a tragedy, except for her sister's love.'

modifier	19. Pablo es un completo idiota, menos en su trabajo.
	   'Pablo is a complete idiot, except in his job.'
	 20. Vanessa es un absoluto cielo, excepto con el dinero.
	   'Vanessa is an absolute sweetheart, except with respect to money.'
	 21. La clase es un desastre total, excepto el día del examen.
	   'The class is a total disaster, except on the day of the exam.'

Half
22. Juan Luis es un medio genio.
'Juan Luis is half a genius.'
23. Elena es una media artista.
'Elena is half an artist.'
24. Su vida es una media tragedia.
'Her life is half a tragedy.'
Negation
25. Mariano no es un completo idiota. ¿Dirías que es un idiota?
'Mariano is not a complete idiot. Would you say that he is an idiot?'
26. Maria no es un absoluto cielo. ¿Dirías que es un cielo?
'Maria is not an absolute sweetheart. Would you say that she is a sweetheart?'
27. La clase no es un desastre total. ¿Dirías que es un desastre?
'The class is not a total disaster. Would you say that it is a disaster?'

Questionnaire B

End of scale entailment	
no modifier (within same individual)	1. Juan es un idiota, pero podría serlo más.
	'John is an idiot, but he could be more so.'
	2. Carlos es un genio, pero podría serlo más.
	'Carlos is a genius, but he could be more so.'
	3. Lucía es una artista, pero podría serlo más.
	'Lucía is an artist, but she could be more so.'
	4. Su vida es una tragedia, pero podría serlo más.
	'Her life is a tragedy, but she could be more so.'
no modifier (between different individuals)	5. Paloma es un cielo, pero Marina lo es más.
	'Paloma is a sweetheart, but Marina is more so.'
	6. La clase de Paz es un desastre, pero la de Esther lo es más.
	'Paz's class is a disaster, but Esther's is more so.'
modifier (within same individual)	7. Paloma es un completo cielo, pero podría serlo más.
	'Paloma is a complete sweetheart, but she could be more so.'
	8. La clase de Paz es un desastre total, pero podría serlo más.
	'Paz's class is a disaster, but it could be more so.'
modifier	9. Juan es un completo idiota, pero Pedro lo es más.

(between different individuals)	'Juan is a complete idiot, but Pedro is more so.' 10. Carlos es un absoluto genio, pero Juan Luis lo es más. 'Carlos is an absolute genius, but Juan Luis is more so.' 11. Lucía es una completa artista, pero Cristina lo es más. 'Lucía is a complete artist, but Cristina is more so.' 12. Su vida es una absoluta tragedia, pero la de Carmen lo es más. 'Her life is an absolute tragedy, but Carmen's is more so.'

Almost	
13. Juan es un casi absoluto idiota. 'Juan is an almost absolute idiot.' 14. Vanessa es un casi completo cielo. 'Vanessa is an almost complete sweetheart.' 15. La clase es un casi total desastre. 'The class is an almost total disaster.'	

Exceptive phrases	
no modifier	16. Pablo es un idiota, menos en su trabajo. 'Pablo is an idiot, except in his job.' 17. Vanessa es un cielo, excepto con el dinero. 'Vanessa is a sweetheart, except with respect to money.' 18. La clase es un desastre, excepto el día del examen. 'The class is a disaster, except on the day of the exam.'
modifier	19. Lluís es un absoluto genio, excepto en el scrabble. 'Lluís is an absolute genius, except at scrabble.' 20. Inma es una completa artista, excepto con la acuarela. 'Inma is a complete artist, except with watercolor.' 21. Su vida es una completa tragedia, salvo por el amor de su hermana. 'Her life is a complete tragedy, except for her sister's love.'

Half	
22. Mariano es un medio idiota. 'Mariano is half an idiot.' 23. Nuria es un medio cielo. 'Nuria is half a sweetheart.' 24. La clase es un medio desastre. 'The class is half a disaster.'	

Negation
25. Víctor no es un absoluto genio. ¿Dirías que es un genio?   'Víctor is not an absolute genius. Would you say that he is a genius?'
26. Cristina no es una completa artista. ¿Dirías que es una artista?   'Cristina is not a complete artist. Would you say that she is an artist?'
27. Su vida no es una completa tragedia. ¿Dirías que es una tragedia?   'Her life is not a complete tragedy. Would you say that it is a tragedy?'

Results

End of scale entailments

If ACs were behaving as maximality modifiers, an end of the scale entailment would be expected. As a consequence, the sentences asserting that an individual is an AC N that add that the same or a different individual has a higher degree of the property should be considered contradictory, and thus show low acceptability. The results can be seen in figure A.1, where *within* stands for comparisons within the same individual and *between*, for comparison between different individuals. On average, they scored 2.84. The sentences without the AC scored 4.08 in a 1-5 acceptability scale, which serves to show that evaluative nouns are not upper-bounded. Regarding the comparison within and between individuals, the former scored 2.16 when contained an AC (3.95 without) and the latter scored 3.78 (4.17 without). Therefore, sentences comparing different individuals in which one of them already is an AC N were judged less contradictory that comparing an individual's N-ness with the possible amount of the property she could have. That is, if an individual is a AC N, it is felt as contradictory to think that it can have a higher degree of the property. However, another individual can be thought as having even more of the property without incurring contradiction.
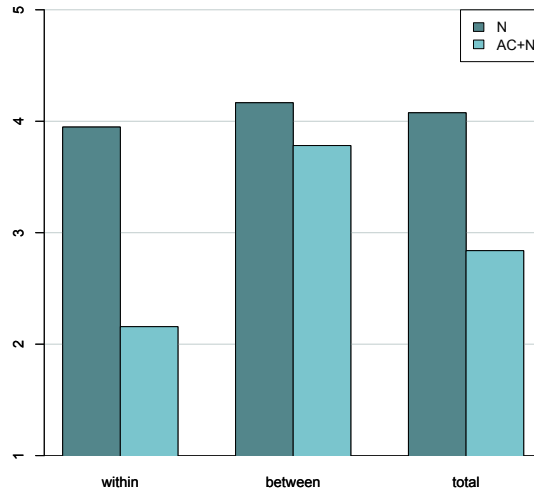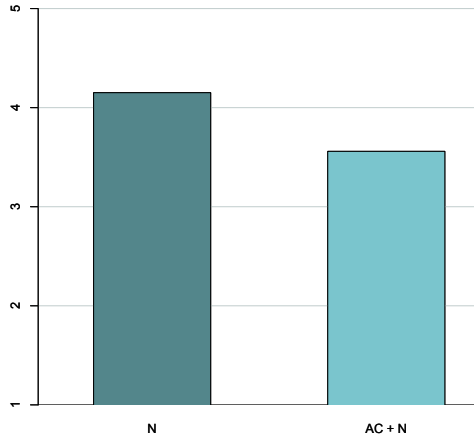
FIGURE A.1: Mean acceptability judgments for end of scale entailments. The Y-axis indicates the value on the acceptability scale. The X-axis groups the comparatives based on the individual in the comparative clause

Almost

On average, the sentences with *almost + AC* modifying an evaluative noun scored 1.75 in a 1-5 scale. This low acceptability is unexpected if ACs were maximality modifiers.

Exceptive phrases

Sentences including a predicate with an upper bound are expected to accept exceptive phrases. The results can be seen in figure A.2. The sentences with ACs received an average score of 3.56, and those without them, a score of 4.15. This is a bit lower than the behavior observed for exceptive phrases with maximality

modifiers of adjectives. That is, the sentences are acceptable with the bare
adjective, and slightly degraded with the adjective modified by the maximizer.

FIGURE A.2: Mean acceptability judgments for exceptive phrases. The Y-axis
indicates the value on the acceptability scale. The X-axis groups the examples
based on the presence of the modifier

Other proportional modifiers

On average, sentences including *half* + evaluative noun scored 2.05. This is in
line with the absence of degree uses of the Spanish version of *half*, *medio*, with
property concept nouns or eventive nominalizations. By contrast, totally closed
scale adjectives do accept this type of proportional modifiers. [1]

---

[1]One participant reported that in his/her variety, Chilean Spanish, *medio* can be used with nouns
with an intensifying reading, but only with the definite article: *la media casa* '(lit.) the half house'
means 'a very big house'.

Negation

In the final part of the questionnaire, participants were forced to decide whether someone or something that is not an AC N still qualifies as an N. On average, 54% of the times the informants responded *yes*. If the contribution is truth conditional, it would be expected that *a N* and *a AC N* do not have equivalent semantics, and thus the negation of the latter does not imply the negation of the former. Our results do not contribute to clarify this question. The results differed from noun to noun (figure A.3). In the case of *mess*, 78% of the participants gave a positive answer. By contrast, for *genius*, only 25% considered that someone who is not a complete genius can still be a genius.
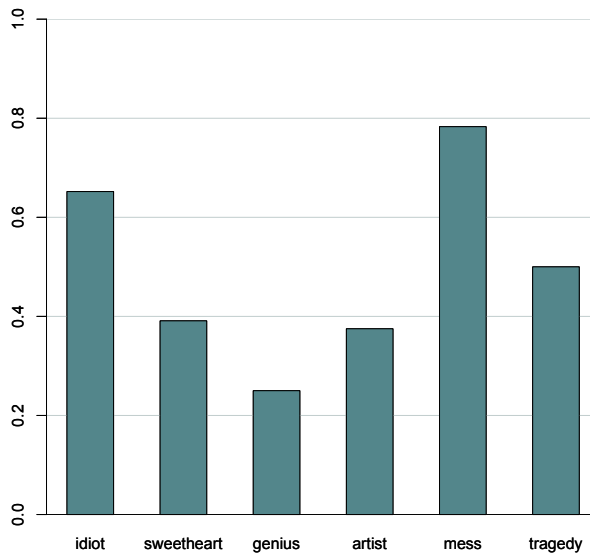
FIGURE A.3: Percentage of positive answers per individual item in the question "X is not an AC N, is it still an N?". The Y-axis represents the percentage of positive answers. The X-axis shows the individual nouns

Chapter 5

Conclusion

5.1   Summary of results

Through the analysis of Spanish adjectives of veracity (*verdadero* 'true', *auténtico* 'authentic') and completeness (*completo* 'complete', *total* 'total', *absoluto* 'absolute'), this dissertation has shown that only some manifestations of scalarity in the nominal domain are lexically represented. The starting point was to establish a strong correspondence between adverbial and adjectival modification and test the intensifying readings of these prenominal adjectives in order to determine whether they were due to degree modification or other phenomena that yielded similar effects. In the picture that emerges, only evaluative nouns (*idiota* 'idiot') are truly gradable. Nouns related to adjectives (property concept nouns such as *libertad* 'freedom') and verbs (eventive nominalizations such as *destrucción* 'destruction' or *oscurecimiento* 'darkening') accept degree modification and obtain degree arguments indirectly, and the rest of nouns do not lexicalize degrees. The degree readings of the latter are a consequence of the interaction of vagueness, typicality, and subjectivity.

By means of the study of the adjectives just mentioned, this dissertation contributes to the characterization of the values associated with prenominal position in Romance, the correlation between adverbial and adjectival modification, and unveils ways in which gradability is manifested in the nominal domain. It also advances the understanding of the nature of modification and finds connections between vagueness, typicality and subjectivity. This section offers a discussion of the results in each of the three topics research questions were divided into. Section 5.2 introduces some issues for further research.

5.1.1   Prenominal position in Romance

Theories of adjective placement in Romance (Alexiadou, 2001a; Cinque, 2010; a.o.) usually agree in generating adnominal adjectives from two different sources, a predicative and an attributive one. The non-restrictive interpretation of qualitative prenominal adjectives is explained by placing them in the extended projection of the noun, while the restrictive interpretation of postnominal adjectives is derived from their generation in a predicative structure. Adverbial adjectives are problematic for these theories because they do not usually alternate position and their readings in prenominal position cannot be characterized as non-restrictive. In other words, they cannot be treated analogously to other prenominal adjectives. The main empirical contribution of this dissertation consists in the description of the intensifying, prenominal, readings of adjectives of veracity and completeness in Spanish, two classes that had often been disregarded in the literature. The study showed that the interpretation of the adjectives under consideration is not non-restrictive, as would be expected from their position, but rather, restrictive. Specifically, the main observation regarding restrictiveness is that not all classes of adjectives are subject to the correlation between position and restrictivity. In fact, this correlation only applies to intersective and some subsective adjectives. Non-intersective adjectives (adjectives of veracity, adjectives of completeness, but also modal adjectives) are actually restrictive in attributive position and other alternations apply.

The analysis of adjectives of veracity showed that the intensifying and metal-ingüistic readings of these adjectives in prenominal position is a consequence of their vagueness regulation semantics. Although a common core with their literal interpretation ('non false or fake'), only possible in postnominal and predicative position, can be presumed, their connection cannot be accounted for only in structural terms. In the case of adjectives of completeness, their study demonstrated that, although it is limited to attributive position, their degree reading can be obtained both prenominally and postnominally. In addition to this, the availability of the intensifying reading of both classes of adjectives is highly dependent on the semantics of the noun. In the first case, adjectives of veracity only combine with vague nouns; in the second one, the nominal needs to provide a scale, either lexicalized by the noun itself, as in the case of evaluative nouns, or related to measurement or aspect and represented as a degree argument introduced by a specialized head.

The results are in agreement with having two different sources for attributive and predicative adjectives. However, they show that the two-source approach by itself is not enough to account for the different modification performed by qualitative (e.g., *divertido* 'amusing') and adverbial (e.g., *verdadero* 'true') prenominal adjectives in Romance. The former are interpreted non-restrictively and can be analyzed as predicates; the latter are restrictive, interact with notions such as vagueness and gradability, and, at least for the classes under consideration, are modifiers. Put differently, the correspondence between syntactic position and semantic interpretation needs to take the notional class the adjective belongs to into account. In addition to this, the results indicate that the semantics of the noun is equally important. Accepting that the extended NP is the right placement in order to access the lexical structure of the noun and the parameters that determine its interpretation, a richer representation of nominals is necessary to account for the variety of readings of adjectives in prenominal position in Romance.

5.1.2   Parallelism between adjectival and adverbial modification

The relation between adjectives and adverbs is usually taken to be that adjectives are predicated of individuals and adverbs, of events. This dissertation established a robust parallelism between the modification conveyed by adjectives of veracity and completeness in the nominal domain and their corresponding adverbs in the adjectival and the verbal domain. The adjectives under consideration were argued to have the same semantics as their corresponding adverbs. In particular, adverbs of veracity (*verdaderamente* 'truly') were shown to also regulate the vagueness of adjectives and VPs, and the analysis of adverbs of completeness (*completamente* 'completely') as maximizers was adopted for their modification of adjectives and event descriptions. Both were thus proven to be modifiers (either second-order properties or degree modifiers). This constituted evidence that their morphological expression is a consequence of the syntactic environment they occur in. The unified analysis applied to modification of properties of individuals and events. In other words, it was restricted to intra-propositional modification. The results proved that super-propositional modification, that is, modification that involves aspects of the utterance rather than the meaning of linguistic expressions requires different semantics.

The integrated analysis of the adjectives under discussion and their correlate adverbs entangled a richer representation of the internal structure of nouns, in line with the research on adverbial adjectives that considers that nouns include, among other, event and kind variables (e.g., Larson, 1998; McNally and Boleda, 2004). This dissertation took the enterprise of finding evidence in favor of degree arguments also being present in the structure of nouns. The investigation of adjectives of completeness revealed the presence of degree arguments in the structure of evaluative nouns, property concept nouns and eventive nominalizations, with some nuances that will be discussed in the next section. The comparison between the readings of adjectives of completeness in eventive nominalizations and simple event nominals demonstrated that both event arguments and degree arguments

are present in the lexical semantics of (some) nominals and are relevant for the adverbial readings of event-related adjectives, including adjectives of completeness and frequency adjectives. However, the analysis of adjectives of veracity showed that the ordering they interact with, which produces effects similar to degree intensification, is not lexically represented in the nominal domain. In fact, the data demonstrated that the distribution of adjectives of veracity is wider than the class of gradable nouns. I suggested instead that the contextual parameter in the interpretation function regulates the interpretation of predicates, nouns in particular, and it is linked to vagueness, but not to imprecision. I based this claim on the fact that adjectives of veracity are specialized in vagueness regulation and are different from other modifiers that adjust the level of precision the predicate must be interpreted with. This parameter is also different from the world parameter, targeted by modal adjectives, from which adjectives of veracity differ in their properties and distribution.

From a wider perspective, this dissertation presents interesting data regarding the debate on what modification is. Syntactically, modifiers belong to different categories, from PPs and relative clauses to adjectives and adverbs. As just mentioned, the unified analysis of adjectives and adverbs of veracity and completeness contributed to show that *modifier* is not a syntactic category, but rather that the same type of modification can have different morphological realizations, for instance, as adjectives and adverbs. From a semantic point of view, modification is understood as a phenomenon that combines one expression with another without the modifier saturating the modified expression. On the one hand, adjectives and adverbs of veracity fit in this picture, since they were analyzed as second order properties. But on the other, degree modifiers are saturating expressions and the degree analysis of adjectives of completeness continued this view of degree modification.

In addition to this, the approach to adverbial adjectives adopted in this dissertation goes hand in hand with the effort to reduce the different types of modification to intersection. However, I proposed non-intersective analyses for the adjectives under consideration. In particular, adjectives of veracity are vagueness regulators

and the discussion pointed out that neither vagueness nor typicality are lexically represented. For this reason and for the fact that the intensifying reading of these adjectives is not possible in predicative position, an intersective analysis could not be argued for. This brings adjectives of veracity close to other intensional modifiers such as modal adjectives, for which an intersective analysis is not suitable either. As for adjectives of completeness, although the variables they modify are part of the semantics of the noun, the degree readings were argued to be restricted to adnominal position, and degree modification is not intersective. In fact, as mentioned, it is not type preserving, which is a consequence the analysis of adjectives as (including) measure functions.

The analysis thus contributes to the parallelism between modification at the CP, AP and DP levels and the understanding of the class of adverbial adjectives. Specifically, as discussed in the next section, it has established connections between vagueness, typicality and subjectivity, on the one hand, and between degree and amount, event development, and evaluativity, on the other, in the adjectival, verbal, and nominal domains.

5.1.3   Scalarity in the nominal domain

The investigation of adjectives of veracity and completeness served to explore two types of scalarity phenomena in nominals. First, conceptual gradability, understood as the ordering in the denotation of a predicate with respect to how good an example of the category an individual is (which roughly corresponds with typicality effects) is present in the nominal domain and has consequences for the semantics and distribution of nouns. Specifically, it was shown that typicality interacts with vagueness and subjectivity, and that it is possible to use the ordering for intensification purposes by some modifiers, such as adjectives of veracity.

Although typicality interacts with vagueness, it cannot be equated to it. Based on the distribution of adjectives of veracity and their readings (intensifying or metalinguistic), nouns were classified according to their vagueness and whether

they have a prototype. Sharp nouns such as natural category nouns (*bird*) have a prototypical member of the category, but it is harder to find one for concepts compounded by boolean operators (*not a cat*). In the class of vague nouns, unidimensional nouns such as *heap*, cannot be associated with a prototype. In contrast to them, nouns such as *artist* are vague and have a prototype. Gradable nouns such as *idiot* are a subgroup of the class of vague nouns, but the existence of a prototypical member is not relevant for their intensification.

The analysis of adjectives of veracity pointed out that conceptual gradability does not correspond with grammatical gradability. That is, although the ordering in the denotation with respect to exemplariness of the category has linguistic effects, it was argued not to explicitly manipulate degrees. Vagueness in the nominal domain has thus to do with orderings, but not with grammatical gradability, in contrast to what happens in the adjectival domain. In this sense, a degree theory of gradability seems more appropriate altogether. In a vagueness approach, vague predicates, such as gradable adjectives, are defined by having an ordered domain that can be manipulated by degree expressions. Gradability thus depends on the presence of a salient ordering. However it was shown that most nouns do not accept degree modification and still an ordering in their domain can be identified and accessed by some modifiers (cf., e.g, Constantinescu, 2011; Doetjes et al., 2011).

Second, grammatical gradability (the presence of a degree argument in the lexical or syntactic representation of a nominal) is manifested in the nominal domain, in some specific cases. Evidence in favor of gradable nouns was found. In particular, evaluative nouns, the closest to adjectives, were argued to be lexically gradable. Degree arguments in the other cases are related to measurement or to aspect. This creates a continuum of nominals, from the most adjective-like to non-gradable, with property concept nouns and eventive nominalizations placed halfway between them.

Evaluative nouns (*idiota* 'idiot', *maravilla* 'wonder') were shown to be gradable based on their distribution and readings in combination with some modifiers.

Their study revealed that they denote extreme degrees of properties, and constituted support for the presence of elatives in the nominal domain. I suggested that their adjective-like behavior is partly derived from using adjectival measure functions in their semantics. Since I adopted a degree approach to gradability, a Degree phrase was introduced in the NP, parallel to the one in the AP, in order to host the degree morphology, either overt, such as adjectives of completeness, or covert.

However, not all nouns expressing a value judgment are gradable. The discussion showed that some nouns (e.g., *matasanos* 'quack') that appear in evaluative structures such as the *N of an N* construction include an expressive component, but no degree argument. It was also pointed out that these nouns may differ with respect to the target of the expressive element of their meaning. In particular, in evaluative nouns the attitude of the speaker is directed to the referent of the noun. By contrast, in a noun such as *matasanos*, it is directed towards the whole class of individuals the referent belongs to.

In the other two case studies for nominal gradability, the presence of degree arguments is related to other phenomena. The examination of property concept nouns such as *libertad* 'freedom' or *sabiduría* 'wisdom' showed that they are mass nouns but receive degree readings when modified by maximizers. In order to account for these two facts, it was argued that the degree argument was introduced by the same head that enables nouns to be measured or counted and that hosts, for instance, quantifier adjectives. I suggested that the degree readings displayed by property concept nouns are linked to the fact that size and intensity collapse in the semantics of property concept nouns, because of a mapping between the degree of the property denoted by the adjectives and the size of the portion of a substance denoted by the cognate noun.

The analysis of eventive nominalizations of verbs of variable telicity illustrated how scalar approaches to aspect composition are especially useful to account for the similarities between the domain of degrees and events. In the case of eventive nominalizations of degree achievements (*oscurecimiento* 'darkening',

ensanchamiento 'widening'), the degree argument was part of the scalar properties of the source adjective, whose scale structure determined telicity of the verb and its nominalizations. As for argument-structure nominalizations of incremental theme verbs (*destrucción* 'destruction', *traducción* 'translation'), the degree was provided by the incremental theme argument and tracked its affectedness during the course of the event. The study served to show the similarities between event terminal points and scale bounds, especially for the distribution of modifiers. Based on the comparison of eventive nominalizations of those verbs and simple event nominals, it can be affirmed that degrees in event descriptions are related to the presence of lexical aspect, and not to event semantics itself.

This dissertation also explored the relevance of scale structure in non-adjectival categories. The study of adjectives of completeness showed that boundedness of a scale has consequences for the distribution of modifiers in the verbal and the nominal domain. Specifically, I showed that property concept nouns share the same scale structure as their related adjectives. Since these nouns are not inherently gradable, this boundedness can be traced back to the common root between them. The analysis of property concept nouns as not derived from adjectives has the advantage of accounting for cases of nouns of this type that, despite not having correlate adjectives, behave like upper-closed scale predicates when modified by adjectives of completeness. Scale structure was also relevant for eventive nominalizations, where boundedness corresponds with the telos of the event. Adopting a scalar approach to aspect allowed us to unify the uses of maximizers across the adjectival, the verbal and the nominal domain. In particular, it was shown that telicity is inherited in the nominalizations of incremental theme verbs and degree achievements and both the nominal and the verb are compatible with maximizer if they describe telic events. Finally, the study of evaluative nouns revealed the relation between boundedness and extremeness. Maximizers combine both with expressions that use a scale closed in its upper end and extreme predicates. This confirms that the degrees above the relevant scale behave like a unique degree and form a maximum.

Another interesting aspect of this thesis is the study of subjectivity in the nominal domain. Judge dependence has been mainly studied with respect to adjectives, concretely regarding predicates of personal taste such as *fun*. Empirical data from Spanish pointed at subjectivity being present in the nominal domain as well. Based on their patterns of distribution in structures that select subjective complements, such as the verb *parecer* 'seem' with a dative argument, it was shown that the subjectivity of most nouns is associated with their vagueness, that is, with uncertainty about where their threshold for application is. In fact, adjectives of veracity license subjective attitude verbs with nouns that include subjective dimensions, which they target. Additionally, I showed that the class of evaluative nouns is also subjective with respect to the ordering in their domain. That is, their judge dependence is related to quality assessment, making them closer to evaluative adjectives such as *beautiful*. This was attributed to the fact that they are gradable and use adjectival measure functions in their semantics.

All this leads us to conclude that scalarity in the nominal domain is a much less well-defined phenomenon than it is in the adjectival domain. Many factors interact to produce scalar effects and, as was shown in the analysis of adjectives of veracity and completeness, only a few of them constitute real manifestations of lexical gradability. In order to achieve a more complete understanding of gradability and the best way to represent it, further investigation across categories is required.

5.2   Issues for further research

The analysis of adjectives of veracity and completeness contributes to the understanding of prenominal (adverbial) adjectives in Romance and scalarity in the nominal domain. The findings in this dissertation open up several directions for further work, some of which I detail in this section.

Both adjectives of veracity and adjectives of completeness belong to the class of adjectives that have an adverbial and a qualitative version. The former mostly

appears in prenominal position, while the latter occurs in postnominal and predicative position. The relation between the two readings is intuitively close. Adjectives of veracity's original lexical meaning is related to veracity and truthfulness and adjectives of completeness' entails universal quantification, and the analyses proposed for the adverbial uses are to some extent connected to them. However, the specific reason for the extension of the readings of these adjectives, beyond merely predicative ones and into intensifying ones has not been addressed. Looking at the semantics of these modifiers from a diachronic perspective, in particular from the point of view of processes of grammaticalization and subjectification (Traugott, 1989, 1995; Eckardt, 2002; a.o.; for *literally*, a modifier that is going through a similar process, see Israel, 2002), would help attain a deeper understanding of the phenomena of intensification and the correlation between position and interpretation in the DP in Romance languages.

In this sense, I showed in chapter 2 that the correlation between position and restrictiveness does not apply in the case of adverbial adjectives. In order to make progress on the demarcation of the values associated with prenominal position, more work needs to be done. A possible route would be to examine occurrences of several prenominal adjectives. While some combinations seem possible (*previsible futura alcaldesa* 'foreseeable new mayor', *dudoso buen gusto* 'dubious good taste'), others appear to be out (??*los verdaderos pretenciosos amigos de Laura* 'Laura's true pretentious friends', ??*un excelente dulce bizcocho* 'an excellent sweet cake'). In order to determine the adjectives and readings that may appear in prenominal position, a systematic study needs to be done. For instance, by combining a corpus study to determine the possible cooccurrences and an eye-tracking experiment to see if there are reading delays in some combinations when the restrictive or non-restrictive readings are favored.

Pursuing parallelisms between modifiers that can combine both with adjectives and nouns is a fruitful strategy to uncover differences between those two categories, by, for instance, detecting cross categorial-phenomena. This dissertation contributed to show that, although gradability is an important feature of adjectives, the distinction between adjectives and nouns cannot be based on the

presence of a degree argument, because there are non-gradable adjectives, such as adjectives of veracity and completeness, and gradable nouns. In order to fully understand their difference, it would be worthwhile to investigate structures where both categories may appear. For instance, Sassoon (2017a) looks at the differences between the types of comparatives nouns and adjectives may occur in, and Umbach and Gust (2014) analyze adnominal and adjectival occurrences of German *so*. Other constructions that may be worthwhile to analyze could be minimizers (*ligera(mente) 'slight(ly)'*), in order to explore sensitivity to scale structure outside the adjectival domain, or other modifiers that interact with typicality, such as *claro* 'clear' ore *perfecto* 'perfect', as a way to gain new insights in how nouns and adjectives integrate dimensions in their meaning.

Another related aspect that requires more study is the presence of subjectivity in non-adjectival categories and its link to gradability. This dissertation showed that two types of judge dependence can be found in the nominal domain. More systematic data regarding, for instance, the occurrence of nominal comparatives in the complement of *find* or the classes of verbs that license subjective attitude verbs, taking into account the type of scalarity at play, is needed in order to pin down the ways in which nouns and verbs can be grammatically subjective.

While in this work I focused on conceptual and grammatical scalarity, pragmatic orderings are also relevant in the nominal domain and can be detected in the modification by some adverbial adjectives. A small set of adjectives that are often grouped together with adjectives of veracity and completeness are exclusives such as *mero* 'mere', *simple* 'simple', or *puro* 'pure' (Quirk et al., 1985; Demonte, 1999a). These adjectives are also attributive and mostly restricted to prenominal position (439), are subsective (440), and have adverbial counterparts (*meramente* 'merely', *simplemente* 'simply', *puramente* 'purely') (441).

(439) a. un mero espectador   c. * El espectador es mero.
           a   mere spectator   the spectator   is mere

       b. * un espectador mero   d. pura cortesía
            a spectator   mere   pure courtesy

    e. ?? cortesía pura   f. * la   cortesía es pura
       courtesy pure   the courtesy is pure

(440) Pierre fue un mero espectador de la   batalla de Borodinó.
     Pierre was a   mere spectator   of the battle of Borodino
        ⊨ Pierre was a spectator of the battle of Borodino.

        ⊭ Pierre was mere.

(441) a. Pierre fue meramente un espectador de la   batalla de Borodinó.
       Pierre was merely   a spectator   of the battle of Borodino

     b. Lo   saludó puramente por cortesía.
       ACC greeted purely   by courtesy
       'She greeted him purely as a courtesy.'

The contribution of exclusive adjectives is to assert that the predicate applies to the individual, and no other stronger predicate applies to it. That is, exclusive adjectives use sets of alternatives ordered by strength, and using them comes with the implication that the individual is nothing else than N. For instance, by asserting (440), we are implying that Pierre was neither an agent nor a leader at the battle. The types of scales can be Horn scales (442a), that is scales in which each member entails the weaker ones, but are usually Hirschberg scales (442b) (see Levinson, 2000), that is, scales that do not stand in a linear entailment relation (442b). For instance, being an agent in a battle does not entail being a spectator. Nevertheless, these scales also trigger scalar implicatures (Grice, 1975). That is, if someone is an agent at the battle (e.g, a soldier), it is implied that he is not a leader (e.g, a commander) (for a unified analysis of exclusives, see Coppock and Beaver, 2014; for analyses of other exclusives, see Horn, 1969; Rooth, 1992; Klinedinst, 2005, and references therein). Incorporating pragmatic scalarity would help complete the picture of manifestations of scalarity in the nominal domain.

(442) a. <friendship, sympathy, courtesy>

     b. <leader, agent, spectator>

Finally, the results of this dissertation can be applied to other linguistic fields, such as computational linguistics. In particular, the area of sentiment analysis could benefit from detailed semantic analyses of subjective combinations of elements. In the last few years, compositionality in semantic vector spaces has received more attention as a way to improve sentiment detection systems (e.g., Mitchell and Lapata, 2010; Grefenstette and Sadrzadeh, 2013; Socher et al., 2013). Although adjectives such as *true* or *complete* are categorized as objective or, sometimes, positive, their presence in prenominal position in Spanish and other Romance languages almost certainly guarantees that the nominal expression is being intensified and thus some opinion is present. However, the polarity of the expression depends on the noun (*a true problem* is negative, *a true success* is positive), which by itself might not be subjective (e.g., *an Italian* vs. *a true Italian*). Incorporating this sort of fine-grained analyses into computational systems would improve sentiment classifications of texts.

References

Abney, Steven (1987). *The English Noun Phrase in Its Sentential Aspect*. PhD thesis, MIT.

Abusch, Dorit (1986). Verbs of change, causation, and time. Technical Report 86-50, CSLI, Stanford University.

Acedo Matellán, Víctor and Jaume Mateu (2009). L'expressió dels esdeveniments de canvi: del llatí al català. In J. Rafel Cufí (Ed.), *Diachronic Linguistics*, pp. 473–496. Girona: Documenta Universitaria.

Acquaviva, Paolo (2004). Plural mass nouns and the compositionality of number. *Verbum 26*(4), 387–401.

Acquaviva, Paolo (2009). Roots and lexicality in Distributed Morphology. In A. Galani, D. Redinger, and N. Yeo (Eds.), *Papers from the 5th York-Essex Morphology Meeting*, York, pp. 1–21. York Papers in Linguistics.

Adger, David (2013). *A Syntax of Substance*. Cambridge, MA: MIT Press.

Aguilar Guevara, Ana (2014). *Weak Definites: Semantics, Lexicon and Pragmatics*. PhD thesis, Universiteit Utrecht.

Alarcos Llorach, Emilio (1994). *Gramática de la lengua española*. Madrid: Espasa Calpe.

Alcina, Juan and José Manuel Blecua (1975). *Gramática española*. Barcelona: Ariel.

Alexiadou, Artemis (1997). *Adverb Placement: A Case Study in Antisymmetric Syntax*. Amsterdam: John Benjamins.

Alexiadou, Artemis (2001a). Adjective syntax and noun raising: Word order asymmetries in the DP as the result of adjective distribution. *Studia Linguistica 55*, 217–248.

Alexiadou, Artemis (2001b). *Functional Structure in Nominals: Nominalization and Ergativity*. Amsterdam: John Benjamins.

Alexiadou, Artemis (2009). On the role of syntactic locality in morphological processes: The case of (Greek) derived nominals. In A. Giannakidou and M. Rathert (Eds.), *Quantification, Definiteness and Nominalization*, pp. 253–280. Oxford: Oxford University Press.

Alexiadou, Artemis (2011). The aspectual properties of nominalization structures. In A. Galani, G. Hicks, and G. Tsoulas (Eds.), *Morphology and Its Interfaces*, pp. 195–278. Amsterdam: John Benjamins.

Alexiadou, Artemis (2014). Roots don't take complements. *Theoretical Linguistics 40*(3-4), 287–297.

Alexiadou, Artemis, Elena Anagnostopoulou, and Florian Schäfer (2006). The properties of anticausatives crosslinguistically. In M. Frascarelli (Ed.), *Phases of Interpretation*, pp. 187–212. Berlin: Mouton de Gruyter.

Alexiadou, Artemis, Elena Anagnostopoulou, and Florian Schäfer (2009). PP licensing in nominalizations. In A. Schardl, M. Walkow, and M. Abdurrahman (Eds.), *Proceedings of the 38th Annual Meeting of the North East Linguistic Society*, Amherst, pp. 39–52. GLSA.

Alexiadou, Artemis, Liliane Haegeman, and Melita Stavrou (2007). *Noun Phrase in the Generative Perspective*. Berlin: Mouton de Gruyter.

Alexiadou, Artemis, Gianina Iordăchioaia, and Florian Schäfer (2011). Scaling the variation in Romance and Germanic nominalizations. In P. Sleeman and H. Perridon (Eds.), *The Noun Phrase in Romance and Germanic*, pp. 25–40. Amsterdam: John Benjamins.

Alexiadou, Artemis, Gianina Iordăchioaia, and Elena Soare (2010). Number/aspect interactions in the syntax of nominalizations: A Distributed Morphology approach. *Journal of Linguistics 46*(3), 537–574.

Alexiadou, Artemis and Fabienne Martin (2012). Competing affixes as aspectual morphemes: The case of deadjectival nominalizations. In A. Rallis, G. Booij,

S. Scalise, and A. thanasios Karasimos (Eds.), *Online Proceedings of the 8th Mediterranean Morphology Meeting*, pp. 8–21.

Alexiadou, Artemis and Florian Schäfer (2010). There-insertion: An unaccusativity mismatch at the syntax-semantics interface. In M. B. Washburn, S. Ouwayda, C. Ouyang, B. Yin, C. Ipek, L. Marston, and A. Walker (Eds.), *Online Proceedings of the 28th West Coast Conference on Formal Linguistics*.

Amaral, Patricia, Craige Roberts, and E. Allyn Smith (2007). Review of *The Logic of Conventional Implicatures* by Chris Potts. *Linguistics and Philosophy 30*(6), 707–749.

Anand, Pranav (2007). Re-expressing judgment. *Theoretical Linguistics 33*(2), 199–208.

Anand, Pranav and Valentine Hacquard (2013). Epistemics and attitudes. *Semantics and Pragmatics 6*, 1–59.

Anand, Pranav and Andrew Nevins (2004). Shifty operators in changing contexts. In *Proceedings of Semantics and Linguistic Theory 14*, pp. 20–37.

Anderson, Curt (2013). Inherent and coerced gradability across categories: Manipulating pragmatic halos with *sorta*. In T. Snider (Ed.), *Proceedings of Semantics and Linguistic Theory 23*, pp. 81–96.

Anderson, Curt and Marcin Morzycki (2015). Degrees as kinds. *Natural Language & Linguistic Theory 33*(3), 791–828.

Anscombre, Jean-Claude and Oswald Ducrot (1977). Deux *mais* en français? *Lingua 43*(1), 23–40.

Arche, María J. (2006). *Individuals in Time: Tense, Aspect and the Individual/Stage Distinction*. Amsterdam: John Benjamins.

Arche, María J. (2014). The construction of viewpoint aspect: The imperfective revisited. *Natural Language & Linguistic Theory 32*(3), 791–831.

Arche, María J. and Rafael Marín (2015). On the edge: Nominalizations from evaluative adjectives. In J. Smith and T. Ihsane (Eds.), *Romance Linguistics 2012: Selected Papers from the 42nd Linguistic Symposium of Romance Languages*, pp. 261–274. Amsterdam: John Benjamins.

Armstrong, Sharon L., Lila Gleitman, and Henry Gleitman (1983). What some concepts might not be. *Cognition 13*, 263–308.

Aronoff, Mark (1976). *Word Formation in Generative Grammar*. Cambridge, MA: MIT Press.

Arsenijević, Boban (2006). *Inner Aspect and Telicity: The Decompositional and the Quantificational Nature of Eventualities at the Syntax-Semantics Interface*. PhD thesis, Universiteit Leiden.

Bach, Emmon (1986). The algebra of events. *Linguistics and Philosophy 9*(1), 5–16.

Baker, Mark C. (1988). *Incorporation: A Theory of Grammatical Function Changing*. Chicago: University of Chicago Press.

Baker, Mark C. (2003). *Lexical Categories: Verbs, Nouns and Adjectives*. Cambridge: Cambridge University Press.

Bale, Alan (2008). A universal scale of comparison. *Linguistics and Philosophy 31*(1), 1–55.

Bally, Charles (1932). *Linguistique générale et linguistique française*. Berne: Francke.

Barker, Chris (1995). *Possessive Descriptions*. Stanford: CSLI Publications.

Barker, Chris (2002). The dynamics of vagueness. *Linguistics and Philosophy 25*(1), 1–36.

Barker, Chris (2013). Negotiating taste. *Inquiry 56*(2-3), 240–257.

Barker, Chris and Gina Taranto (2003). The paradox of asserting clarity. In P. Koskinen (Ed.), *Proceedings of the Western Conference on Linguistics 14*. Department of Linguistics, California State University.

Barsalou, Lawrence W. (1985). Ideals, central tendency, and frequency of instantiation as determinants of graded structure in categories. *Journal of Experimental Psychology: Learning, Memory, and Cognition 11*(4), 629–654.

Bartsch, Renate and Theo Vennemann (1973). *Semantic Structures: A Study in the Relation Between Semantics and Syntax*. Frankfurt: Athenäum.

Barwise, Jon and Robin Cooper (1981). Generalized quantifiers and natural language. *Linguistics and Philosophy 4*(2), 159–219.

Beauseroy, Delphine (2009). *Syntaxe et sémantique des noms abstraits statifs : des propriétés verbales ou adjectivales aux propriétés nominales*. PhD thesis,

Nancy-Université.

Beauseroy, Delphine and Marie-Laurence Knittel (2007). Nombre et détermination: le cas des noms abstraits de qualité. *Rivista di linguistica 19*(2), 231–262.

Beavers, John (2008). Scalar complexity and the structure of events. In J. Dölling, T. Heyde-Zybatow, and M. Schäfer (Eds.), *Event Structures in Linguistic Form and Interpretation*, pp. 245–265. Berlin: Mouton de Gruyter.

Beavers, John and Andrew Koontz-Garboden (2012). Manner and result in the roots of verbal meaning. *Linguistic Inquiry 43*(3), 331–369.

Beebee, Helen and Nigel Sabbarton-Leary (2010). Introduction. In H. Beebee and N. Sabbarton-Leary (Eds.), *The Semantics and Metaphysics of Natural Kinds*, pp. 1–24. New York: Routledge.

Bello, Andrés (1847). *Gramática de la lengua castellana destinada al uso de los americanos*. Santiago de Chile: Imprenta del Progreso.

Beltrama, Andrea (2015). From *totally dark* to *totally old*. The formal semantics of subjectification. In E. Csipak and H. Zeijlstra (Eds.), *Proceedings of Sinn und Bedeutung 19*, pp. 125–142.

Beltrama, Andrea and M. Ryan Bochnak (2015). Intensification without degrees cross-linguistically. *Natural Language & Lingusitic Theory 33*(3), 843–879.

Bernstein, Judy B. (1993). *Topics in the Syntax of Nominal Structure across Romance*. PhD thesis, City University of New York.

Bhatt, Rajesh and Roumyana Pancheva (2004). Late merger of degree clauses. *Linguistic Inquiry 35*(1), 1–45.

Bierwisch, Manfred (1989). The semantics of gradation. In M. Bierwisch and E. Lang (Eds.), *Dimensional Adjectives*, pp. 71–261. Berlin: Springer-Verlag.

Bochnak, M. Ryan (2013a). *Cross-Linguistic Variation in the Semantics of Comparatives*. PhD thesis, University of Chicago.

Bochnak, M. Ryan (2013b). Two sources of scalarity within the verb phrase. In B. Arsenijević, B. Gehrke, and R. Marín (Eds.), *Studies in the Composition and Decompostion of Event Predicates*, pp. 99–123. Dordrecht: Springer.

Bochnak, Ryan and Eva Csipak (2014). A new metalinguistic degree morpheme. In T. Snider, S. D'Antonio, and M. Weigand (Eds.), *Proceedings of Semantics and*

Linguistic Theory 24, pp. 432–452.

Bolinger, Dwight (1967). Adjectives in English: Attribution and predication. *Lingua 18*, 1–34.

Bolinger, Dwight (1972). *Degree Words*. The Hague: Mouton.

Borer, Hagit (2003). Exo-skeletal vs. endo-skeletal explanations: Syntactic projections and the lexicon. In J. Moore and M. Polinsky (Eds.), *The Nature of Explanation in Linguistic Theory*, pp. 31–67. Stanford: CSLI Publications.

Borer, Hagit (2005a). *Structuring Sense*, Volume II. The Normal Course of Events. Oxford: Oxford University Press.

Borer, Hagit (2005b). *Structuring Sense*, Volume I. In Name Only. Oxford: Oxford University Press.

Borer, Hagit (2013). *Structuring Sense*, Volume III. Taking Form. Oxford: Oxford University Press.

Borer, Hagit and Isabelle Roy (2010). The name of the adjective. In P. C. Hofherr and O. Matushansky (Eds.), *Adjectives: Formal Analyses in Syntax and Semantics*, pp. 85–114. Amsterdam: John Benjamins.

Bosque, Ignacio (1980). *Sobre la negación*. Madrid: Cátedra.

Bosque, Ignacio (1989). *Las categorías gramaticales: relaciones y diferencias*. Madrid: Síntesis.

Bosque, Ignacio (1990). Sobre el aspecto en los adjetivos y en los participios. In I. Bosque (Ed.), *Tiempo y aspecto en español*, pp. 177–211. Madrid: Cátedra.

Bosque, Ignacio (1993). Degree quantification and modal operators in Spanish. Paper presented at *Going Romance 7*, Universiteit Utrecht.

Bosque, Ignacio (1996). Por qué determinados sustantivos no son sustantivos determinados. Repaso y balance. In I. Bosque (Ed.), *El sustantivo sin determinación. Presencia y ausencia de determinante en la lengua española*, pp. 13–119. Madrid: Visor.

Bosque, Ignacio (1999). El nombre común. In I. Bosque and V. Demonte (Eds.), *Gramática descriptiva de la lengua española*, Volume I, pp. 3–76. Madrid: Espasa Calpe.

Bosque, Ignacio (2001). Adjective position and the interpretation of indefinites.

In J. Gutiérrez-Rexach and L. Silva-Villar (Eds.), *Current Issues in Spanish Syntax and Semantics*, pp. 17–38. Berlin: Mouton de Gruyter.

Bosque, Ignacio and Pascual José Masullo (1998). On verbal quantification in Spanish. In O. Fullana and F. Roca (Eds.), *Studies on the Syntax of Central Romance Languages*, pp. 9–63. Girona: Universitat de Girona.

Bosque, Ignacio and M. Carme Picallo (1996). Postnominal adjectives in Spanish DPs. *Journal of Linguistics 32*(2), 349–385.

Bouchard, David-Étienne (2012). *Long-Distance Degree Quantification and The Grammar of Subjectivity*. PhD thesis, McGill University.

Bouchard, Denis (2002). *Adjectives, Number and Interfaces: Why Languages Vary*. Amsterdam: Elsevier.

Bowers, John S. (1975). Adjectives and Adverbs in English. *Foundations of Language 13*(4), 529–562.

Bresnan, Joan (1973). Syntax of the comparative clause construction in English. *Linguistic Inquiry 4*(3), 275–343.

Brucart, Josep Maria and Gemma Rigau (2002). La quantificació. In J. Solà, M. R. Lloret, J. Mascaró, and M. Pérez Saldanya (Eds.), *Gramàtica del català contemporani*, Volume III, pp. 1517–1589. Barcelona: Empúries.

Burnett, Heather (2012). *The Grammar of Tolerance: On Vagueness, Context-Sensitivity, and the Origin of Scale Structure*. PhD thesis, University of California, Los Angeles.

Burnett, Heather (2014). From quantification and intensification to slack regulation: Adjectival ALL. In A. Beltrama, T. Chatzikonstantinou, J. L. Lee, M. Pham, and D. Rak (Eds.), *Proceedings of the 48th Meeting of the Chicago Linguistics Society*, Chicago, pp. 109–123. CLS Publications.

Burton-Roberts, Noel (1977). Generic sentences and analyticity. *Studies in Language 1*(2), 155–196.

Bylinina, Lisa (2014). *The Grammar of Standards: Judge-Dependence, Purpose-Relativity, and Comparison Classes in Degree Constructions*. PhD thesis, Universiteit Utrecht.

Cardinaletti, Anna and Giuliana Giusti (1992). Partitive *ne* and the QP-hypothesis. A case study. In E. Fava (Ed.), *Proceedings of the XVII Meeting of Generative*

Grammar, Torino, pp. 121–141. Rosenberg & Sellier.

Carlson, Greg (1977). *Reference to Kinds in English*. PhD thesis, University of Massachussetts Amherst.

Carlson, Greg (1984). Thematic roles and their role in semantic interpretation. *Linguistics 22*(3), 259–280.

Casillas Martínez, Luis D. (2003). Gender mismatches in Spanish and French *N1/A de N2* affective constructions: Index agreement vs. morphosyntactic concord. In J.-B. Kim and S. Wechsler (Eds.), *Proceedings of the 9th International Conference on Head-Driven Phrase Structure Grammar*, Stanford, pp. 1–17. CSLI Publications.

Castroviejo, Elena and Berit Gehrke (2014). Modification at the interfaces: An introduction. *Lingua 149*(A), 1–16.

Castroviejo, Elena and Berit Gehrke (2015). On extreme degree and positive polarity. Paper presented at the *Workshop on Varieties of Positive Polarity items*, *37. Jahrestagung der DGfS*, Universität Leipzig.

Castroviejo, Elena, Laia Mayol, and E. Allyn Smith (2013). Putting secondary propositional meanings back on the table. Poster presented at the *Workshop on the Semantics and Pragmatics of Dialogue (SemDial 2013)*, Universiteit van Amsterdam.

Castroviejo Miró, Elena (2006). *Wh-Exclamatives in Catalan*. PhD thesis, Universitat de Barcelona.

Caudal, Patrick and David Nicolas (2005). Types of degrees and types of event structures. In C. Maienborn and A. Wöllstein (Eds.), *Event Arguments: Foundations and Applications*, pp. 277–300. Berlin: De Gruyter.

Chierchia, Gennaro (1995). Individual-level predicates as inherent generics. In G. N. Carlson and J. Pelletier (Eds.), *The Generic Book*, pp. 176–223. Chicago: University of Chicago Press.

Chomsky, Noam (1965). *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press.

Chomsky, Noam (1970). Remarks on nominalization. In R. Jacobs and P. Rosenbaum (Eds.), *Readings in English Transformational Grammar*, pp. 184–221. Waltham: Ginn.

Chomsky, Noam (1995). *The Minimalist Program*. Cambridge, MA: MIT Press.

Chung, Sandra and William A. Ladusaw (2006). Chamorro evidence for compositional asymmetry. *Natural Language Semantics 14*(4), 325–357.

Cinque, Guglielmo (1980). On extraction from NP in Italian. *Journal of Italian Linguistics 1*(2), 47–99.

Cinque, Guglielmo (1994). On the evidence for partial N-movement in the Romance DP. In G. Cinque, J. Koster, J.-Y. Pollock, L. Rizzi, and R. Zanuttini (Eds.), *Paths Towards Universal Grammar. Studies in Honor of Richard S. Kayne*, pp. 85–110. Washington: Georgetown University Press.

Cinque, Guglielmo (1999). *Adverbs and Functional Heads: A Cross-Linguistic Perspective*. Oxford: Oxford University Press.

Cinque, Guglielmo (2010). *The Syntax of Adjectives: A Comparative Study*. Cambridge, MA: MIT Press.

Cinque, Guglielmo (2014). The semantic classification of adjectives. A view from syntax. *Studies in Chinese Linguistics 35*(1), 1–30.

Cohen, Ariel (2001). On the generic use of indefinite singulars. *Journal of Semantics 18*(3), 183–209.

Constantinescu, Camelia (2011). *Gradability in the Nominal Domain*. PhD thesis, Universiteit Leiden.

Constantinescu, Camelia (2013). Big eaters and real idiots: Evidence for adnominal degree modification? In E. Chemla, V. Homer, and G. Winterstein (Eds.), *Proceedings of Sinn und Bedeutung 17*, pp. 183–200.

Coppock, Elizabeth and David Beaver (2014). Principles of the exclusive muddle. *Journal of Semantics 31*(3), 371–432.

Corver, Norbert (1990). *The Syntax of Left Branch Extractions*. PhD thesis, Tilburg Universiteit.

Corver, Norbert (2008). Uniformity and diversity in the syntax of evaluative vocatives. *Journal of Comparative Germanic Linguistics 11*(1), 43–93.

Cresswell, Max J. (1977). The semantics of degree. In B. H. Partee (Ed.), *Montague Grammar*, pp. 261–292. New York: Academic Press.

Crisma, Paola (1993). On adjective placement in Romance and Germanic event nominals. *Rivista di grammatica generativa 18*, 61–100.

Cruse, D. A. (1986). *Lexical Semantics*. Cambridge: Cambridge University Press.

Dahl, Östen (1975). On generics. In *Formal Semantics of Natural Language*, pp. 99–111. Cambridge: Cambridge University Press.

Davidson, Donald (1967). The logical form of action sentences. In N. Rescher (Ed.), *The Logic of Decision and Action*, pp. 81–120. Pittsburgh: University of Pittsburgh Press.

Dayal, Veneeta (2003). A semantics for pseudo-incorporation. Ms. Rutgers University.

De Belder, Marijke and Jeroen van Craenenbroeck (2015). How to merge a root. *Linguistic Inquiry 46*(4), 625–655.

DeGraff, Michel and Deborah Mandelbaum (1993). Why is my old friend not old? In K. Beals, G. Cooke, D. Kathman, S. Kita, K.-E. McCullough, and D. Testen (Eds.), *Papers from the 29th Regional Meeting of the Chicago Linguistic Society*, Chicago, pp. 121–136. CLS Publications.

DeLancey, Scott (1997). Mirativity: The grammatical marking of unexpected information. *Linguistic Typology 1*(1), 33–52.

Demonte, Violeta (1982). El falso problema de la posición del adjetivo: dos análisis semánticos. *Boletín de la Real Academia Española 62*(227), 453–486.

Demonte, Violeta (1999a). El adjetivo: clases y usos. La posición del adjetivo en el sintagma nominal. In V. Demonte and I. Bosque (Eds.), *Gramática descriptiva de la lengua española*, Volume I, pp. 129–215. Madrid: Espasa Calpe.

Demonte, Violeta (1999b). A minimal account of Spanish adjective position and interpretation. In J. Franco, A. Landa, J. Martiń, and M. Saltarelli (Eds.), *Grammatical Analyses in Basque and Romance Linguistics. Papers in Honor of Mario Saltarelli*, pp. 45–75. Amsterdam: John Benjamins.

Demonte, Violeta (2000). Configuración e interpretación de los adjetivos del español: un enfoque minimalista. In G. Wotjak (Ed.), *En torno al sustantivo y adjetivo en el español actual: aspectos cognitivos, semánticos, (morfo)sintácticos y lexicogenéticos*, pp. 261–274. Frankfurt: Vervuert.

Demonte, Violeta (2008). Meaning-form correlations and adjective position in Spanish. In L. McNally and C. Kennedy (Eds.), *Adjectives and Adverbs: Syntax, Semantics, and Discourse*, pp. 71–100. Oxford: Oxford University Press.

Demonte, Violeta (2011). Adjectives. In K. von Heusinger, C. Maienborn, and P. Portner (Eds.), *Semantics: An International Handbook of Natural Language Meaning*, Volume 2, pp. 1314–1340. Berlin: De Gruyter.

Déprez, Viviane (2005). Morphological number, semantic number and bare nouns. *Lingua 115*(6), 857–883.

den Dikken, Marcel (2006). *Relators and Linkers: The Syntax of Predication, Predicate Inversion, and Copulas*. Cambridge, MA: MIT Press.

Dixon, R. M. W. (1977). Where have all the adjectives gone? *Studies in Language 1*(1), 19–80.

Dixon, R. M. W. and Alexandra Y. Aikhenvald (2004). *Adjective Classes: A Cross-Linguistic Typology*. Oxford: Oxford University Press.

Dobrovie-Sorin, Carmen and Claire Beyssade (2012). *Redefining Indefinites*. Dordrecht: Springer.

Doetjes, Jenny (1997). *Quantifiers and Selection. On the Distribution of Quantifying Expressions in French, Dutch and English*. PhD thesis, Universiteit Leiden.

Doetjes, Jenny (2008). Adjectives and degree modification. In L. McNally and C. Kennedy (Eds.), *Adjectives and Adverbs: Syntax, Semantics, and Discourse*, pp. 123–155. Oxford: Oxford University Press.

Doetjes, Jenny, Camelia Constantinescu, and Kateřina Součková (2011). A neo-Kleinian approach to comparatives. In E. Cormany, S. Ito, and D. Lutz (Eds.), *Proceedings of Semantics and Linguistic Theory 19*, pp. 124–141.

Doetjes, Jenny and Johan Rooryck (2003). Generalizing over qualitative and quantitative constructions. In M. Coene and Y. D'hulst (Eds.), *From NP to DP*, Volume 1, pp. 277–296. Amsterdam: John Benjamins.

Dowden, Bradley (2010). Fallacies. The Internet Encyclopedia of Philosophy.

Dowty, David (1979). *Word Meaning and Montague Grammar*. Dordrecht: Springer.

Dowty, David (1991). Thematic proto-roles and argument selection. *Language 67*(3), 547–619.

Dubrig, Hans Bernhard (2001). On the syntactic form of epistemic modality. Ms. Universität Tübingen.

Eckardt, Regine (1998). *Adverbs, Events, and Other Things: Issues in the Semantics of Manner Adverbs*. Tübingen: Max Niemeyer Verlag.

Eckardt, Regine (2002). Semantic change in grammaticalization. In G. Katz, S. Reinhart, and P. Reuter (Eds.), *Proceedings of Sinn und Bedeutung 6*, pp. 53–67. University of Osnabrück.

Eguren, Luis and Cristina Sánchez (2007). Imprecisión extensional e imprecisión intensional: La gramática de *cierto*. *Verba: Anuario galego de filoloxia* (34), 99–124.

Embick, David (2010). *Localism versus Globalism in Morphology and Phonology*. Cambridge, MA: MIT Press.

Emonds, Joseph E. (1976). *A Transformational Approach to English Syntax: Root, Structure-Preserving, and Local Transformations*. New York: Academic Press.

Escandell Vidal, M.Victoria (1991). Sobre las reduplicaciones léxicas. *Lingüística Española Actual 13*, 71–86.

Español-Echevarría, Manuel (1998). *N/A of a N* DP's. Predicate raising and subject licensing. In A. Schwegler, B. Tranel, and M. Uribe-Etxebarria (Eds.), *Romance Linguistics: Theoretical Perspectives*, pp. 67–80. Amsterdam: John Benjamins.

Espinal, M. Teresa (2013). Bare nominals, bare predicates. Properties and related types. In J. Kabatek and A. Wall (Eds.), *New Perspectives on Bare Noun Phrases in Romance and Beyond*, pp. 63–94. Amsterdam: John Benjamins.

Espinal, M. Teresa and Louise McNally (2011). Bare nominals and incorporating verbs in Spanish and Catalan. *Journal of Linguistics 47*(1), 87–128.

Fábregas, Antonio (2007). The internal syntactic structure of relational adjectives. *Probus 19*(1), 136.

Fábregas, Antonio (2010). A syntactic account of affix rivalry in Spanish nominalizations. In A. Alexiadou and M. Rathert (Eds.), *The Syntax of Nominalizations across Languages and Frameworks*, pp. 67–92. Berlin: De Gruyter Mouton.

Fábregas, Antonio (2015). Una nota sobre las lecturas de los adverbios de grado. *Lenguaje 43*(2), 247–269.

Fábregas, Antonio (2016). *Las nominalizaciones*. Madrid: Visor.

Fábregas, Antonio and Rafael Marín (2012). State nouns are Kimian states. In I. Franco, S. Lusini, and A. Saab (Eds.), *Romance Languages and Linguistic Theory 2010*, pp. 41–64. Amsterdam: John Benjamins.

Fábregas, Antonio, Rafael Marín, and Louise McNally (2012). From psych verbs to nouns. In V. Demonte and L. McNally (Eds.), *Telicity, Change, and State*, pp. 162–185. Oxford: Oxford University Press.

Fara, Delia Graff (2000). Shifting sands: An interest-relative theory of vagueness. *Philosophical Topics 28*, 45–81.

Fernández Lagunilla, Marina (1983). El comportamiento de *un* con sustantivos y adjetivos en función de predicado nominal: sobre el llamado *un enfático*. In *Serta Philologica: F. Lázaro Carreter: Natalem Diem Sexagesimum Celebranti Dicata*, Volume 1, pp. 195–208. Madrid: Cátedra.

Fernández Leborans, María Jesús (1999). La predicación: las oraciones copulativas. In I. Bosque and V. Demonte (Eds.), *Gramática descriptiva de la lengua española*, Volume II, pp. 2357–2460. Madrid: Espasa Calpe.

Fernández Ramírez, Salvador (1951). *Gramática española*. Madrid: Revista de Occidente.

Filip, Hana (1999). *Aspect, Eventuality Types and Noun Phrase Semantics*. New York: Routledge.

Fine, Kit (1975). Vagueness, truth and logic. *Synthese 30*(3-4), 265–300.

von Fintel, Kai (1994). *Restrictions on Quantifier Domains*. PhD thesis, University of Massachusetts.

von Fintel, Kai and Anthony S. Gillies (2007). An opinionated guide to epistemic modality. In T. Gendler and J. Hawthorne (Eds.), *Oxford Studies in Epistemology*, Volume 2, pp. 32–62. Oxford: Oxford University Press.

Fleisher, Nicholas (2013). The dynamics of subjectivity. In *Proceedings of Semantics and Linguistic Theory 23*, pp. 276–294.

Flew, Antony (1975). *Thinking about Thinking: Or, Do I Sincerely Want to Be Right?* Glasgow: Fontana.

Fodor, Jerry (1981). The present status of the innateness controversy. In *Representations: Philosophical Essays on the Foundations of Cognitive Science*, pp. 257–316. Cambridge, MA: MIT Press.

Fodor, Jerry (1998). *Concepts: Where Cognitive Science Went Wrong*. Oxford: Oxford University Press.

Fodor, Jerry and Ernest Lepore (1996). The red herring and the pet fish: Why concepts still can't be prototypes. *Cognition 58*, 253–270.

Foppolo, Francesca and Francesca Panzeri (2013). Do children know when their room counts as *clean*? In S. Kan, C. Moore-Cantwell, and R. Staubs (Eds.), *Proceedings of 40th Meeting of the North East Linguistics Society*, Volume I, Amherst, pp. 205–218. GLSA.

Francez, Itamar and Andrew Koontz-Garboden (2015). Semantic variation and the grammar of property concepts. *Language 91*(3), 533–563.

Frege, Gottlob (1897/1979). Logic. In H. Hermes, F. Kambartel, and F. Kaulbach (Eds.), *Posthumous Writings*, pp. 126–151. Oxford: Blackwell.

Fu, Jingqi, Thomas Roeper, and Hagit Borer (2001). The VP within process nominals: Evidence from adverbs and the VP anaphor *do-so*. *Natural Language & Linguistic Theory 19*(3), 549–582.

Gawron, Jean Mark (2007). Differentiating mereological and degree-based approaches to aspect. Paper presented at the *Workshop on the Syntax and Semantics of Measurability*, University of Tromsø.

van Geenhoven, Veerle (2004). For-adverbials, Frequentative Aspect, and Pluractionality. *Natural Language Semantics 12*(2), 135–190.

Geeraerts, Dirk (2008). Prototypes, stereotypes and semantic norms. In G. Kristiansen and R. Dirven (Eds.), *Cognitive Sociolinguistics: Language Variation, Cultural Models, Social Systems*, pp. 21–44. Berlin: Mouton de Gruyter.

Gehrke, Berit and Louise McNally (2015). Distributional modification: The case of frequency adjectives. *Language 91*(4), 837–870.

Geuder, Wilhelm (2000). *Oriented Adverbs. Issues in the Lexical Semantics of Event Adverbs*. PhD thesis, Universität Tübingen.

Geurts, Bart (2007). Really fucking brilliant. *Theoretical Linguistics 33*(2), 209–214.

Ghomeshi, Jila, Ray Jackendoff, Nicole Rosen, and Kevin Russell (2004). Contrastive focus reduplication in English (the salad-salad paper). *Natural Language & Linguistic Theory 22*(2), 307–357.

Giannakidou, Anastasia and Jason Merchant (1999). Why Giannis can't scrub his plate clean: On the absence of resultative secondary predication in Greek. In A. Mozer (Ed.), *Greek Linguistics '97: Proceedings of the 3rd International Conference on Greek Linguistics*, Athens, pp. 93–103. Ellinika Grammata.

Giannakidou, Anastasia and Melita Stavrou (2009). On metalinguistic comparatives and negation in Greek. *MIT Working Papers in Linguistics 57*, 57–74.

Gili Gaya, Samuel (1943). *Curso superior de sintaxis española*. Mexico: Minerva.

Giorgi, Alessandra and Giuseppe Longobardi (1991). *The Syntax of Noun Phrases: Configuration, Parameters, and Empty Categories*. Cambridge: Cambridge University Press.

Glanzberg, Michael (2007). Context, content, and relativism. *Philosophical Studies 136*(1), 1–29.

González Rodríguez, Raquel (2006). Negación y cuantificación de grado. In M. Villayandre Llamazares (Ed.), *Actas del XXXV Simposio Internacional de la Sociedad Española de Lingüística*, León, pp. 853–871. Universidad de León.

Green, Georgia (1973). A syntactic syncretism in English and French. In B. Kachru (Ed.), *Issues in Linguistics: Papers in Honor of Henry and Reneé Kahane,* pp. 257–278. Urbana: University of Illinois Press.

Greenberg, Yael (2003). *Manifestations of Genericity*. London: Routledge.

Grefenstette, Edward and Mehrnoosh Sadrzadeh (2013). Experimental support for a categorical compositional distributional model of meaning. In *Proceedings of the 2011 Conference on Empirical Methods in Natural Language Processing*, pp. 1394–1404.

Grice, H. Paul (1975). Logic and conversation. In P. Cole and J. Morgan (Eds.), *Syntax and Semantics,* Volume 3. Speech Acts, pp. 41–58. New York: Academic Press.

Grimm, Scott (2014). Individuating the abstract. In U. Etxeberria, A. Fălăuș, A. Irurtzun, and B. Leferman (Eds.), *Proceedings of Sinn und Bedeutung 18*, pp. 182–200.

Grimm, Scott and Louise McNally (2013). No ordered arguments needed for nouns. In M. Aloni, M. Franke, and F. Roelofsen (Eds.), *Proceedings of the 19th Amsterdam Colloquium*, pp. 123–130.

Grimshaw, Jane (1990). *Argument Structure*. Cambridge, MA: MIT Press.

Gross, Gaston and Ferenc Kiefer (1995). La structure événementielle des substantifs. *Folia Linguistica 29*(1-2), 43–66.

Gumiel Molina, Silvia, Isabel Nieto Herranz, and Isabel Pérez Jiménez (1999). Some remarks on de-adjectival verbs and resultative secondary predicates. *Catalan Working Papers in Linguistics 7*, 107–124.

Gumiel-Molina, Silvia and Isabel Pérez-Jiménez (2016). Adjetivos *ligeramente* coaccionados. Paper presented at the *XLV Simposio de la Sociedad Española de Lingüística*, Universidad de Jaén.

Gutzmann, Daniel (2008). *On the Interaction between Modal Particles and Sentence Mood in German*. Master's thesis, Johannes Gutenberg-Universität, Mainz.

Gutzmann, Daniel (2011). Expressive modifiers and mixed expressives. *Empirical issues in syntax and semantics 8*, 123–141.

Gutzmann, Daniel (2013a). Compositional multidimensionality and the lexicon-semantics interface. In *Proceedings of the Tenth International Workshop of Logic and Engineering of Natural Language Semantics*, pp. 206–219.

Gutzmann, Daniel (2013b). Expressives and beyond: An introduction to varieties of conventional non-truth-conditional meaning. In D. Gutzmann and H.-M. Gärtner (Eds.), *Expressives and Beyond. Explorations of Conventional Non-Truth-Conditional Meaning*, pp. 1–58. Leiden: Brill.

Gutzmann, Daniel (2016). If expressivism is fun, go for it! In C. Meier and J. van Wijnbergen-Huitink (Eds.), *Subjective Meaning: Alternatives to Relativism*, pp. 21–46. Berlin: De Gruyter.

Gutzmann, Daniel and Katharina Turgay (2015). Expressive intensifiers and external degree modification. *The Journal of Comparative Germanic Linguistics 17*(3), 185–228.

Haas, Pauline, Richard Huyghe, and Rafael Marín (2008). Du verbe au nom : calques et décalages aspectuels. In J. Durand, B. Habert, and B. Laks (Eds.), *Actes du Congrès Mondial de Linguistique Française*, Paris, pp. 2051–2065. Institut de Linguistique Française.

Hacquard, Valentine and Alexis Wellwood (2012). Embedding epistemic modals in English: A corpus-based study. *Semantics and Pragmatics 5*, 1–29.

Hale, Ken and Samuel Jay Keyser (1998). The basic elements of argument structure. In H. Harley (Ed.), *Papers from the UPenn/MIT Round Table on Argument Structure and Aspect*, Cambridge, MA, pp. 73–118. MIT Working Papers in Linguistics.

Hale, Kenneth and Samuel Jay Keyser (1993). On argument structure and the lexical expression of syntactic relations. In K. Hale and S. J. Keyser (Eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, pp. 53–109. Cambridge, MA: MIT Press.

Halle, Morris (1973). Prolegomena to a theory of word formation. *Linguistic Inquiry 4*(1), 3–16.

Halle, Morris and Alec Marantz (1993). Distributed morphology and the pieces of inflection. In K. Hale and S. J. Keyser (Eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger,* pp. 111–176. Cambridge, MA: MIT Press.

Hamilton, David L. (1981). *Cognitive Processes in Stereotyping and Intergroup Behavior*. Hillsdale: L. Erlbaum Associates.

Hampton, James A. (2007). Typicality, graded membership, and vagueness. *Cognitive Science 31*(3), 355–384.

Hampton, James A. and Martin Jönsson (2012). Typicality and compositionality: The logic of combining vague concepts. In *The Handbook of Compositionality*, pp. 385–402. Oxford: Oxford University Press.

Hanssen, Federico (1910). *Spanische Grammatik: Auf Historischer Grundlage*. Halle: Niemeyer.

Harley, Heidi (2005). How do verbs get their names? Denominal verbs, manner incorporation and the ontology of verb roots in English. In N. Erteschik-Shir and T. Rapoport (Eds.), *The Syntax of Aspect*, pp. 42–64. Oxford: Oxford University

Press.

Harley, Heidi (2014). On the identity of roots. *Theoretical Linguistics 40*(3-4), 225–276.

Harley, Heidi and Rolf Noyer (1998). Mixed nominalizations, short verb movement and object shift in English. In P. N. Tamanji and K. Kusumoto (Eds.), *Proceedings of the 28th Annual Meeting of the North East Linguistic Society*, University of Massachusetts Amherst, pp. 143–157. GLSA.

Harley, Heidi and Rolf Noyer (2000). Formal versus encyclopedic properties of vocabulary: Evidence from nominalizations. In B. Peeters (Ed.), *The Lexicon-Encyclopedia Interface*, pp. 349–374. Amsterdam: Elsevier.

Hay, Jennifer, Christopher Kennedy, and Beth Levin (1999). Scalar structure underlies telicity in degree achievements. In *Proceedings of Semantics and Linguistic Theory 9*, pp. 127–144.

Hazout, Ilan (1991). *Verbal Nouns: Theta Theoretic Studies in Hebrew and Arabic*. PhD thesis, University of Massachussetts Amherst.

Hazout, Ilan (1995). Action nominalizations and the lexicalist hypothesis. *Natural Language & Linguistic Theory 13*(3), 355–404.

Heim, Irene (1985). Notes on comparatives and related matters. Ms. University of Texas.

Heim, Irene (2000). Degree operators and scope. In *Proceedings of Semantics and Linguistic Theory 10*, pp. 40–64.

Heim, Irene and Angelika Kratzer (1998). *Semantics in Generative Grammar*. Oxford: Blackwell.

Hernández Alonso, César (1984). *Gramática funcional del español*. Madrid: Gredos.

Hernanz, M. Lluïsa (2001). ¡En bonito lío me he metido! Notas sobre la afectividad en español. *Moenia. Revista Lucense de Lingüística y Literatura 7*, 93–109.

Hernanz, M. Lluïsa (2006). Emphatic polarity and C in Spanish. In L. Brugè (Ed.), *Studies in Spanish Syntax*, pp. 105–150. Venice: Libreria Editrice Cafoscarina.

Hernanz, M. Lluïsa and Avel·lina Suñer Gratacós (1999). La predicación: La predicación no copulativa. Las construcciones absolutas. In I. Bosque and

V. Demonte (Eds.), *Gramática descriptiva de la lengua española*, Volume II, pp. 2525–2560. Madrid: Espasa Calpe.

Heyd, Sophie (2003). *L'interprétation des syntagmes nominaux en* des *et* de *en position sujet et objet. Généricité, habitualité et incorporation sémantique*. PhD thesis, Université Strasbourg II.

Higginbotham, James (1985). On semantics. *Linguistic Inquiry 16*(4), 547–593.

Higgins, Francis Roger (1979). *The Pseudo-Cleft Construction in English*. New York: Garland.

Hoekstra, Teun (1986). Deverbalization and inheritance. *Linguistics 24*(3), 549–584.

Hom, Christopher (2008). The semantics of racial epithets. *The Journal of Philosophy 105*(8), 416–440.

Horn, Laurence R. (1969). A presuppositional analysis of *only* and *even*. In R. I. Binnick, A. Davison, G. Green, and J. Morgan (Eds.), *Papers from the 5th Regional Meeting of the Chicago Linguistic Society*, Chicago, pp. 98–107. CLS Publications.

Horn, Laurence R. (1993). Economy and redundancy in a dualistic model of natural language. In S. Shore and M. Vilkuna (Eds.), *SKY 1993: Yearbook of the Linguistic Association of Finland*, pp. 33–72. Helsinki: Linguistic Association of Finland.

Huddleston, Rodney and Geoffrey K Pullum (2002). *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.

Hulk, Aafke and Christine Tellier (2000). Mismatches: Agreement in qualitative constructions. *Probus 12*(1), 33–66.

Israel, Michael (2002). *Literally* speaking. *Journal of Pragmatics 34*(4), 423–432.

Jackendoff, Ray (1972). *Semantic Interpretation in Generative Grammar*. Cambridge, MA: MIT Press.

Jackendoff, Ray (1991). Parts and boundaries. *Cognition 41*(1-3), 9–45.

Jackendoff, Ray (1996). The proper treatment of measuring out, telicity, and perhaps even quantification in English. *Natural Language & Linguistic Theory 14*(2), 305–354.

Jakobson, Roman (1960). Poetik und Linguistik. In R. Jakobson (Ed.), *Poetik*, pp. 83–121. Frankfurt: Suhrkamp.

Jayez, Jacques and Corinne Rossari (2004). Parentheticals as conventional implicatures. In F. Corblin and H. de Swart (Eds.), *Handbook of French Semantics*, pp. 211–229. Stanford: CSLI Publications.

Kadmon, Nirit and Fred Landman (1993). *Any*. *Linguistics and Philosophy 16*(4), 353–422.

Kagan, Olga and Sascha Alexeyenko (2011). Degree modification in Russian morphology: The case of the suffix *-ovat*. In I. Reich, E. Horch, and D. Pauly (Eds.), *Proceedings of Sinn und Bedeutung 15*, Saarbrücken, pp. 321–335. Saarland University Press.

Kamp, Hans (1975). Two theories about adjectives. In E. L. Keenan (Ed.), *Formal Semantics of Natural Languages*, pp. 123–155. Cambridge: Cambridge University Press.

Kamp, Hans (1981a). The paradox of the heap. In U. Mönnich (Ed.), *Aspects of Philosophical Logic*, pp. 225–277. Dordrecht: Riedel.

Kamp, Hans (1981b). A theory of truth and semantic representation. In J. Groenendijk, T. Janssen, and M. Stokhof (Eds.), *Formal Methods in the Study of Language*, pp. 277–322. Amsterdam: Mathematical Centre.

Kamp, Hans and Barbara H. Partee (1995). Prototype theory and compositionality. *Cognition 57*(2), 129–191.

Kaplan, David (1979). The meaning of *ouch* and *oops*. Explorations in the theory of meaning as use. Ms. University of California, Los Angeles.

Karttunen, Lauri and Stanley Peters (1979). Conventional implicature. In C.-K. Oh and D. A. Dinneen (Eds.), *Syntax and Semantics*, Volume 11. Presupposition, pp. 1–56. New York: Academic Press.

Katz, Jonah (2008). Romance and restriction. Ms. MIT.

Kayne, Richard S. (1994). *The Antisymmetry of Syntax*. Cambridge, MA: MIT Press.

Kayne, Richard S. (2007). On the syntax of quantity in English. In J. Bayer, T. Bhattacharya, and M. H. Babu (Eds.), *Linguistic Theory and South Asian*

Languages: Essays in Honour of K. A. Jayaseelan, pp. 73–105. Amsterdam: John Benjamins.

Kearns, Kate (2007). Telic senses of deadjectival verbs. *Lingua 117*(1), 26–66.

Kennedy, Christopher (1997). *Projecting the Adjective: The Syntax and Semantics of Gradability and Comparison*. PhD thesis, University of California, Santa Cruz.

Kennedy, Christopher (2007). Vagueness and grammar: The semantics of relative and absolute gradable adjectives. *Linguistics and Philosophy 30*(1), 1–45.

Kennedy, Christopher (2012a). Ambiguity and vagueness: An overview. In C. Maienborn, K. von Heusinger, and P. Portner (Eds.), *Semantics: An International Handbook of Natural Language Meaning*, Volume 1, pp. 507–535. Berlin, Boston: De Gruyter Mouton.

Kennedy, Christopher (2012b). The composition of incremental change. In V. Demonte and L. McNally (Eds.), *Telicity, Change, and State*, pp. 103–137. Oxford: Oxford University Press.

Kennedy, Christopher (2013). Two sources of subjectivity: Qualitative assessment and dimensional uncertainty. *Inquiry 56*(2-3), 258–277.

Kennedy, Christopher (2016). Two kinds of subjectivity. In C. Meier and J. van Wijnbergen-Huitink (Eds.), *Subjective Meaning: Alternatives to Relativism*, pp. 105–126. Berlin: De Gruyter.

Kennedy, Christopher and Beth Levin (2008). Measure of change: The adjectival core of degree achievements. In L. McNally and C. Kennedy (Eds.), *Adjectives and Adverbs: Syntax, Semantics, and Discourse*, pp. 156–182. Oxford: Oxford University Press.

Kennedy, Christopher and Louise McNally (2005). Scale structure and the semantic typology of gradable predicates. *Language 81*(2), 345–381.

Klecha, Peter (2014). *Bridging the Divide: Scalarity & Modality*. PhD thesis, University of Chicago.

Klein, Ewan (1980). A semantics for positive and comparative adjectives. *Linguistics and Philosophy 4*(1), 1–45.

Klinedinst, Nathan (2005). Bargains, scales and *only*. Paper presented at the 36th meeting of the North Eastern Linguistic Society, University of Massachusetts Amherst.

Knittel, Marie Laurence (2005). Some remarks on adjective placement in the French NP. *Probus 17*(2), 185–226.

Kölbel, Max (2002). *Truth Without Objectivity*. London: Routledge.

Koontz-Garboden, Andrew (2009). Anticausativization. *Natural Language & Linguistic Theory 27*(1), 77–138.

Kratzer, Angelika (1996). Severing the external argument from its verb. In J. Rooryck and L. Zaring (Eds.), *Phrase Structure and the Lexicon*, pp. 109–137. Dordrecht: Kluwer.

Kratzer, Angelika (1999). Beyond *ouch* and *oops*: How descriptive and expressive meaning interact. Paper presented at the *Cornell Conference on Theories of Context Dependency*, Cornell University, Ithaca, NY.

Krifka, Manfred (1989). Nominal reference, temporal constitution and quantification in event semantics. In R. Bartsch, J. van Benthem, and P. von Emde Boas (Eds.), *Semantics and Contextual Expression*, pp. 75–115. Dordrecht: Foris.

Krifka, Manfred (1992). Thematic relations as links between nominal reference and temporal constitution. In I. Sag and A. Szabolcsi (Eds.), *Lexical Matters*, pp. 29–53. Stanford: CSLI Publications.

Krifka, Manfred (1998). The origins of telicity. In S. Rothstein (Ed.), *Events and Grammar*, pp. 197–233. Dordrecht: Kluwer.

Krifka, Manfred (2002). Be brief and vague! And how bidirectional optimality theory allows for verbosity and precision. In D. Restle and D. Zaefferer (Eds.), *Sounds and Systems. Studies in Structure and Change. A Festschrift for Theo Vennemann*, pp. 439–458. Berlin: Mouton de Gruyter.

Krifka, Manfred (2007). Approximate interpretation of number words. In G. Bouma, I. Krämer, and J. Zwarts (Eds.), *Cognitive Foundations of Interpretation*, pp. 111–126. Amsterdam: Koninklijke Nederlandse Akademie van Wetenschapen.

Krifka, Manfred (2009). Approximate interpretation of number words. In E. Hinrichs and J. Nerbonne (Eds.), *Theory and Evidence in Semantics*, pp. 109–132. Stanford: CSLI Publications.

Krifka, Manfred (2012). Definitional generics. In A. Mari, C. Beyssade, and F. del Prete (Eds.), *Genericity*, pp. 223–336. Oxford: Oxford University Press.

Krifka, Manfred, Francis Jeffry Pelletier, Greg N. Carlson, Alice ter Meulen, Gennaro Chierchia, and Godehard Link (1995). Genericity: An introduction. In G. N. Carlson and F. J. Pelletier (Eds.), *The Generic Book*, pp. 1–124. Chicago: The University of Chicago Press.

Kripke, Saul (1972). Naming and necessity. In D. Davidson and G. Harman (Eds.), *Semantics of Natural Language*, pp. 253–355. Dordrecht: Riedel.

Laenzlinger, Christopher (2005). French adjective ordering: Perspectives on DP-internal movement types. *Lingua 115*(5), 645–689.

Lakoff, George (1971). On generative semantics. In D. D. Steinberg and L. A. Jakobovits (Eds.), *Semantics - An Interdisciplinary Reader in Philosophy, Linguistics, Anthropology and Psychology*, pp. 305–359. Cambridge, MA: Cambridge University Press.

Lakoff, George (1973). Hedges: A study in meaning criteria and the logic of fuzzy concepts. *Journal of Philosophical Logic 2*(4), 458–508.

Lamarche, Jacques (1991). Problems for N°-movement to NumP. *Probus 3*(2), 215–236.

Landman, Fred (2000). *Events and Plurality: The Jerusalem Lectures*. Dordrecht: Kluwer.

Landman, Meredith (2001). Adjectival modification restricted.

Lapesa, Rafael (1975). La colocación del calificativo atributivo en español. In *Homenaje a la memoria de Don Antonio Rodríguez Moñino*, pp. 329–345. Madrid: Castalia.

Larson, Richard K. (1988). Scope and comparatives. *Linguistics and Philosophy 11*(1), 1–26.

Larson, Richard K. (1998). Events and modification in nominals. In D. Strolovitch and A. Lawson (Eds.), *Proceedings of Semantics and Linguistic Theory 8*, Ithaca, NY, pp. 145–168. Cornell University.

Larson, Richard K. (1999). Semantics of Adjectival Modification. Lecture notes, LOT Winter School, Amsterdam.

Larson, Richard K. (2000). ACP in AP? Paper presented at the *19th West Coast Conference in Formal Linguistics*, Los Angeles.

Larson, Richard K. and Sungeun Cho (2003). Temporal adjectives and the structure of possessive DPs. *Natural Language Semantics 11*(3), 217–247.

Larson, Richard K. and Franc Marušič (2004). On indefinite pronoun structures with APs: Reply to Kishimoto. *Linguistic Inquiry 35*(2), 268–287.

Lasersohn, Peter (1999). Pragmatic halos. *Language 75*(3), 522–551.

Lasersohn, Peter (2005). Context dependence, disagreement, and predicates of personal taste. *Linguistics and Philosophy 28*(6), 643–686.

Lasersohn, Peter (2009). Relative truth, speaker commitment, and control of implicit arguments. *Synthese 166*(2), 359–374.

Lassiter, Daniel (2011). *Measurement and Modality: The Scalar Basis of Modal Semantics*. PhD thesis, New York University.

Lauer, Sven (2012). On the pragmatics of pragmatic slack. In A. Aguilar Guevara, A. Chernilovskaya, and R. Nouwen (Eds.), *Proceedings of Sinn und Bedeutung 16*, Volume 2, pp. 389–402. MIT Working Papers in Linguistics.

Lawler, John Michael (1973). *Studies in English Generics*. PhD thesis, University of Michigan.

Lebeaux, David (1986). The interpretation of derived nominals. In A. Farley, P. Farley, and K.-E. McCullough (Eds.), *Papers from the 22nd Regional Meeting of the Chicago Linguistic Society*, Chicago, pp. 231–247. CLS Publications.

Lees, Robert B. (1960). *The Grammar of English Nominalizations*. The Hague: Mouton.

Leffel, Timothy James (2014). *The Semantics of Modification: Adjectives, Nouns, and Order*. PhD thesis, New York University.

Lenepveu, Véronique (2013). De la complétude à l'intensité : *Totalement, entièrement* et *complètement*. *Langue française 177*(3), 95–109.

Lenz, Rodolfo (1920). *La oración y sus partes. Estudios de gramática general y castellana*. Madrid: Publicaciones de la Revista de Filología Española.

Levin, Beth (1999). Objecthood: An event structure perspective. In S. Billings, J. Boyle, and A. Griffith (Eds.), *Proceedings of the 35th Meeting of the Chicago Linguistic Society*, Volume 1, pp. 223–247.

Levinson, Jerrold (1978). Properties and related entities. *Philosophy and Phenomenological Research 39*(1), 1–22.

Levinson, Stephen C. (2000). *Presumptive Meanings: The Theory of Generalized Conversational Implicature*. Cambridge, MA: MIT Press.

Lewis, David (1970). General semantics. *Synthese 22*(1-2), 18–67.

Lewis, David (1979). Scorekeeping in a language game. *Journal of Philosophical Logic 8*(3), 339–359.

Lieber, Rochelle (1980). *On the Organization of the Lexicon*. PhD thesis, MIT.

Lin, Tzong-Hong (2001). *Light Verb Syntax and the Theory of Phrase Structure*. PhD thesis, University of California, Irvine.

Link, Godehard (1983). The logical analysis of plurals and mass terms: A lattice-theoretical approach. In R. Bäuerle, C. Schwarze, and A. von Stechow (Eds.), *Meaning, Use and Interpretation of Language*, pp. 303–323. Berlin: De Gruyter.

Liu, Mingya (2011). How evaluative adverbs project and why. In *Proceedings of the ESSLLI 2011 Workshop on Projective Content*, Ljubljana.

Lohndal, Terje (2014). *Phrase Structure and Argument Structure: A Case Study of the Syntax-Semantics Interface*. Oxford: Oxford University Press.

López, Luis (2015). Parallel computation in word formation. *Linguistic Inquiry 46*(4), 657–701.

Luján, Marta (1980). *Sintaxis y semántica del adjetivo*. Madrid: Cátedra.

Lynch, Elizabeth B., John D. Coley, and Douglas L. Medin (2000). Tall is typical: Central tendency, ideal dimensions, and graded category structure among tree experts and novices. *Memory & Cognition 28*(1), 41–50.

Lyons, John (1966). Towards a *notional* theory of the parts of speech. *Journal of Linguistics 2*(2), 209–236.

Lyons, John (1977). *Semantics*. Cambridge: Cambridge University Press.

Macrae, C. Neil, Charles Stangor, and Miles Hewstone (Eds.) (1996). *Stereotypes and Stereotyping*. New York: The Guilford Press.

Maienborn, Claudia (2007). On Davidsonian and Kimian states. In I. Comorovski and K. von Heusinger (Eds.), *Existence: Semantics and Syntax*, pp. 107–130. Dordrecht: Springer.

Marantz, Alec (1997). No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. *University of Pennsylvania Working Papers in Linguistics 4*(2), 201–225.

Marantz, Alec (2001). Words. Paper presented at the *20th West Coast Conference on Formal Linguistics*, University of Southern California, Los Angeles.

Marantz, Alec (2005). Objects out of the lexicon: Objects as events. Paper presented at the *Workshop on The Role of Morphology in Argument Expression and Interpretation*, Universität Wien.

Mari, Alda (2008). Analyticity under perspective: Indefinite generics in French. In A. Grønn (Ed.), *Proceedings of Sinn und Bedeutung 12*, Oslo, pp. 414–429. ILOS.

Martin, Fabienne (2006). *Prédicats statifs, causatifs et résultatifs en discours. Sémantique des adjectifs évaluatifs et des verbes psychologiques*. PhD thesis, Université libre de Bruxelles.

Martin, Fabienne (2007). Prédicats superlatifs à l'impératif. *Travaux de linguistique 55*(2), 119–130.

Martin, Fabienne (2013). Stage level and individual level readings of dispositional nouns. In N. Hathout, F. Montermini, and J. Tseng (Eds.), *Morphology in Toulouse. Selected Proceedings of the 7th Décembrettes*, Munich, pp. 155–183. Lincom.

Martin, Fabienne (2014). Restrictive vs. nonrestrictive modification and evaluative predicates. *Lingua 149*(A), 34–54.

Masià, Melania S. (2014). True precision required. Adjectives of veracity in Spanish as imprecision regulators. In M. Colinet, S. Katrenko, and R. K. Rendsvig (Eds.), *Pristine Perspectives on Logic, Language, and Computation*, pp. 174–193. Berlin, Heidelberg: Springer.

Masià, Melania S. (2015). Adjectives of veracity as vagueness regulators. In E. Csipak and H. Zeijlstra (Eds.), *Proceedings of Sinn und Bedeutung 19*, pp. 393–410.

Matushansky, Ora (2002). Tipping the scales: The syntax of scalarity in the complement of *seem*. *Syntax 5*(3), 219–276.

Matushansky, Ora and Benjamin Spector (2005). Tinker, tailor, soldier, spy. In

E. Maier, C. Bary, and J. Huitink (Eds.), *Proceedings of Sinn und Bedeutung 9*, Nijmegen, pp. 241–255. Nijmegen Centre for Semantics.

McCawley, James D. (1988). *The Syntactic Phenomena of English*. Chicago: University of Chicago Press.

McConnell-Ginet, Sally (1982). Adverbs and logical form: A linguistically realistic theory. *Language 58*(1), 144–184.

McCready, Eric (2010). Varieties of conventional implicature. *Semantics and Pragmatics 3*(8), 1–57.

McCready, Eric and Magdalena Kaufmann (2013). Maximum intensity. Paper presented at the *Semantics Group*, Keio University, Tokyo.

McCready, Eric and Norry Ogata (2007). Adjectives, stereotypicality, and comparison. *Natural Language Semantics 15*(1), 35–63.

McNabb, Yaron (2013). Cross-categorial modification of properties in Hebrew and English. In A. Chereches (Ed.), *Proceedings of Semantics and Linguistic Theory 22*, pp. 365–382.

McNally, Louise (2006). Lexical representation and modification within the noun phrase. *Recherches linguistiques de Vincennes 34*, 191–206.

McNally, Louise (2011). The relative role of property type and scale structure in explaining the behavior of gradable adjectives. In R. Nouwen, R. van Rooij, U. Sauerland, and H.-C. Schmitz (Eds.), *Vagueness in Communication*, pp. 151–168. Berlin, Heidelberg: Springer.

McNally, Louise (2016). Modification. In M. Aloni and P. Dekker (Eds.), *Cambridge Handbook of Formal Semantics*, pp. 442–465. Cambridge: Cambridge University Press.

McNally, Louise and Gemma Boleda (2004). Relational adjectives as properties of kinds. *Empirical Issues in Syntax and Semantics 5*, 179–196.

McNally, Louise and Isidora Stojanovic (2017). Aesthetic adjectives. In J. Young (Ed.), *Semantics of Aesthetic Judgment*, pp. 17–37. Oxford: Oxford University Press.

McNally, Louise and Henriëtte de Swart (2015). Reference to and via properties: The view from Dutch. *Linguistics and Philosophy 38*(4), 315–362.

Meinschäfer, Judith (2005). Event-oriented adjectives and the semantics of deverbal nouns in Germanic and Romance. The role of boundedness and the mass/count distinction. In M. Grossmann and A. Thornton (Eds.), *La Formazione Delle Parole*, pp. 355–368. Roma: Bulzoni.

Merin, Arthur and Irina Nikolaeva (2008). Exclamative as a universal speech act category: A case study in decision-theoretic semantics and typological implications. Ms. Konstanz Universität and SOAS London University.

Michaelis, Laura (2001). Exclamative constructions. In M. Haspelmath (Ed.), *Language Typology and Language Universals: An International Handbook*, Volume 2, pp. 1038–1050. Berlin: De Gruyter.

Milner, Jean-Claude (1978). *De la syntaxe a l'interprétation : quantités, insultes, exclamations*. Paris: Éditions du Seuil.

Mitchell, Jeff and Mirella Lapata (2010). Composition in distributional models of semantics. *Cognitive Science 34*, 1388–1429.

Moignet, Gérard (1963). L'incidence de l'adverbe et l'adverbialisation des adjectifs. *Travaux de Linguistique et de Littérature 1*, 175–194.

Moltmann, Friederike (1997). *Parts and Wholes in Semantics*. New York: Oxford University Press.

Moltmann, Friederike (2004). Properties and kinds of tropes: New linguistic facts and old philosophical insights. *Mind 113*, 1–41.

Moltmann, Friederike (2009). Degree structure as trope structure: A trope-based analysis of positive and comparative adjectives. *Linguistics and Philosophy 32*(1), 51–94.

Moltmann, Friederike (2012). On the distinction between abstract states, concrete states, and tropes. In C. Beyssade, A. Mari, and F. del Prete (Eds.), *Genericity*, pp. 293–311. Oxford: Oxford University Press.

Moltmann, Friederike (2015). States versus tropes. Comments on Curt Anderson and Marcin Morzycki: 'Degrees as kinds'. *Natural Language & Linguistic Theory 33*(3), 829–841.

Montague, Richard (1970). English as a formal language. In B. Visentini (Ed.), *Linguaggi Nella Società E Nella Tecnica*, pp. 189–224. Milan: Edizioni di Communitá.

Morzycki, Marcin (2008a). Adverbial modification in AP: Evaluatives and a little beyond. In J. Dölling, T. Heyde-Zybatow, and M. Schäfer (Eds.), *Event Structures in Linguistic Form and Interpretation*, pp. 103–126. Berlin: Walter de Gruyter.

Morzycki, Marcin (2008b). Nonrestrictive modifiers in nonparenthetical positions. In L. McNally and C. Kennedy (Eds.), *Adjectives and Adverbs: Syntax, Semantics, and Discourse*, pp. 101–122. Oxford: Oxford University Press.

Morzycki, Marcin (2009). Degree modification of gradable nouns: Size adjectives and adnominal degree morphemes. *Natural Language Semantics 17*(2), 175–203.

Morzycki, Marcin (2011). Metalinguistic comparison in an alternative semantics for imprecision. *Natural Language Semantics 19*(1), 39–86.

Morzycki, Marcin (2012a). Adjectival extremeness: Degree modification and contextually restricted scales. *Natural Language & Linguistic Theory 30*(2), 567–609.

Morzycki, Marcin (2012b). The several faces of adnominal degree modification. In J. Choi, E. A. Hogue, J. Punske, D. Tat, J. Schertz, and A. Trueman (Eds.), *Proceedings of the 29th West Coast Conference on Formal Linguistics*, Somerville, MA, pp. 187–195. Cascadilla Press.

Morzycki, Marcin (2014). Where does nominal gradability come from? Misgivings, second thoughts, regrets, and the hope of redemption. Paper presented at the University of Massachusetts.

Morzycki, Marcin (2015). *Modification*. Cambridge: Cambridge University Press.

Mourelatos, Alexander P. D. (1978). Events, processes, and states. *Linguistics and Philosophy 2*(3), 415–434.

Munaro, Nicola (2006). Verbless exclamatives across Romance: Standard expectations and tentative evaluations. *University of Venice Working Papers in Linguistics 16*, 185–209.

Munn, Alan and Cristina Schmitt (2005). Number and indefinites. *Lingua 115*(6), 821–855.

Murphy, Gregory L. (2002). *The Big Book of Concepts*. Cambridge, MA: MIT Press.

Napoli, Donna Jo (1989). *Predication Theory: A Case Study for Indexing Theory*. Cambridge: Cambridge University Press.

Navas Ruiz, Ricardo (1962). En torno a la clasificación del adjetivo. *Acta Salmanticensia XVI. Strenae. Estudios de Filología e Historia dedicados al Prof. Manuel García Blanco*, 369–374.

Neeleman, Ad, Hans van de Koot, and Jenny Doetjes (2004). Degree expressions. *The Linguistic Review 21*(1), 1–66.

Newmeyer, Frederick J. (2009). Current challenges to the lexicalist hypothesis: An overview and a critique. In W. Lewis, S. Karimi, H. Harley, and S. Farrar (Eds.), *Time and Again: Theoretical Perspectives on Formal Linguistics*, pp. 91–117. Amsterdam: John Benjamins.

Nicolas, David (2004). The semantics of nouns derived from gradable adjectives. In C. Meier and M. Weisgerber (Eds.), *Proceedings of Sinn und Bedeutung 8*, Universität Konstanz, pp. 197–208.

Nicolas, David (2010). Towards a semantics for mass expressions derived from gradable expressions. *Recherches linguistiques de Vincennes* (1), 163–198.

Nouwen, Rick (2011). Degree modifiers and monotonicity. In P. Égré and Nathan Klinedinst (Eds.), *Vagueness and Language Use*, pp. 146–164. Basingstoke: Palgrave Macmillan.

Oliver, Michael A. (2014). Interpretation as optimization: Constitutive material adjectives. *Lingua 149*(A), 55–73.

Oltra-Massuet, Isabel (1999). *On the Notion of Theme Vowel: A New Approach to Catalan Verbal Morphology*. Master's thesis, MIT.

Oltra-Massuet, Isabel and Karlos Arregi (2005). Stress-by-structure in Spanish. *Linguistic Inquiry 36*(1), 43–84.

Osherson, Daniel and Edward E. Smith (1981). On the adequacy of prototype theory as a theory of concepts. *Cognition 9*(1), 35–58.

Palmer, Frank Robert (2001). *Mood and Modality*. Cambridge: Cambridge University Press.

Papafragou, Anna (2006). Epistemic modality and truth conditions. *Lingua 116*(10), 1688–1702.

Paradis, Carita (1997). *Degree Modifiers of Adjectives in Spoken British English*. Lund: Lund University Press.

Paradis, Carita (2001). Adjectives and boundedness. *Cognitive Linguistics 12*, 47–64.

Paradis, Carita (2003). Between epistemic modality and degree: The case of *really*. In R. Facchinetti, M. Krug, and F. Palmer (Eds.), *Modality in Contemporary English*, pp. 191–220. Berlin: Mouton de Gruyter.

Parsons, Terence (1972). Some problems concerning the logic of grammatical modifiers. In D. Davidson and G. Harman (Eds.), *Semantics of Natural Language*, pp. 127–141. Dordrecht: Reidel.

Parsons, Terence (1990). *Events in the Semantics of English: A Study in Subatomic Semantics*. Cambridge, MA: MIT Press.

Partee, Barbara H. (1983/1997). Genitives - A case study. In J. van Benthem and A. ter Meulen (Eds.), *Handbook of Logic and Language*, Number Appendix to T. Janssen, 'Compositionality', pp. 464–470. Cambridge, MA: Elsevier and MIT Press.

Partee, Barbara H. (1989). Many quantifiers. In J. Powers and K. de Jong (Eds.), *Proceedings of the 5th Eastern States Conference on Linguistics*, Columbus, pp. 383–402. Ohio State University.

Partee, Barbara H. (2010). Privative adjectives: Subsective plus coercion. In R. Bäuerle, U. Reyle, and T. E. Zimmermann (Eds.), *Presuppositions and Discourse: Essays Offered to Hans Kamp*, pp. 273–285. Bingley: Emerald Group Publishing.

Partee, Barbara H. and Vladimir Borschev (2003). Genitives, relational nouns, and argument-modifier ambiguity. In E. Lang, C. Maienborn, and C. Fabricius-Hansen (Eds.), *Modifying Adjuncts*, pp. 67–112. Berlin: Mouton de Gruyter.

Payne, John, Rodney Huddleston, and Geoffrey K Pullum (2010). The distribution and category status of adjectives and adverbs. *Word Structure 3*(1), 31–81.

Peterson, Philip L. (1997). *Fact, Proposition, Event*. Dordrecht: Kluwer.

Picallo, M. Carme (1991). Nominals and nominalizations in Catalan. *Probus 3*(3), 279–316.

Picallo, M. Carme (1994). A mark of specificity in indefinite nominals. *Catalan Working Papers in Linguistics 4*(1), 143–168.

Picallo, M. Carme (1999). La estructura del sintagma nominal: las nominalizaciones y otros sustantivos con complementos argumentales. In I. Bosque and V. Demonte (Eds.), *Gramática descriptiva de la lengua española*, Volume I, pp. 363–394. Madrid: Espasa Calpe.

Picallo, M. Carme (2002). L'adjectiu i el sintagma adjectival. In J. Solà, M. R. Lloret, J. Mascaró, and M. Pérez Saldanya (Eds.), *Gramàtica del català contemporani*, Volume II, pp. 1643–1688. Barcelona: Empúries.

Picallo, M. Carme (2006). Some notes on grammatical gender and l-pronouns. In K. von Heusinger, G. A. Kaiser, and E. Stark (Eds.), *Proceedings of the Workshop on Specificity and the Evolution/Emergence of Nominal Determination Systems in Romance*, Konstanz, pp. 107–121. Fachbereich Sprachwissenschaft der Universität Konstanz.

Picallo, M. Carme (2012). Structure of the noun phrase. In J. I. Hualde, A. Olarrea, and E. O'Rourke (Eds.), *The Handbook of Hispanic Linguistics*, pp. 263–283. Chichester: John Wiley & Sons.

Pinkal, Manfred (1995). *Logic and Lexicon. The Semantics of the Indefinite*. Dordrecht: Kluwer.

Piñón, Christopher (1993). Paths and their names. In K. Beals, G. Cooke, D. Kathman, S. Kita, K.-E. McCullough, and D. Testen (Eds.), *Papers from the 29th Regional Meeting of the Chicago Linguistic Society*, Volume 2, Chicago, pp. 287–303. CLS Publications.

Piñón, Christopher (2001). A finer look at the causative-inchoative alternation. In *Proceedings of Semantics and Linguistic Theory 11*, pp. 346–364.

Piñón, Christopher (2005a). Adverbs of completion in an event semantics. In H. J. Verkuyl, H. de Swart, and A. van Hout (Eds.), *Perspectives on Aspect*, pp. 149–166. Dordrecht: Springer.

Piñón, Christopher (2005b). Comments on Morzycki and Katz. Paper presented at the *Workshop on the Semantics of Adjectives and Adverbs*, Barcelona.

Piñón, Christopher (2008). Aspectual composition with degrees. In L. McNally and C. Kennedy (Eds.), *Adjectives and Adverbs: Syntax, Semantics, and Discourse*, pp. 183–219. Oxford: Oxford University Press.

Portner, Paul (2009). *Modality*. Oxford: Oxford University Press.

Portolés, José (1993). Atributos con *un* enfático. *Revue Romane 28*(2), 218–236.

Portolés, José (1994). La metáfora y la lingüística: los atributos metafóricos con *un* enfático. In V. Demonte (Ed.), *Gramática del español*, pp. 531–556. México: Colegio de México.

Potts, Christopher (2005). *The Logic of Conventional Implicatures*. Oxford: Oxford University Press.

Potts, Christopher (2007). The expressive dimension. *Theoretical Linguistics 33*(2), 165–197.

Pustejovsky, James (1995). *The Generative Lexicon*. Cambridge, MA: MIT Press.

Putnam, Hilary (1975). The meaning of meaning. In K. Gunderson (Ed.), *Language, Mind and Knowledge. Minnesota Studies in the Philosophy of Science*, Volume 7, pp. 131–193. Minneapolis: University of Minnesota Press.

Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik (1985). *A Comprehensive Grammar of the English Language*. Harlow: Longman.

Rainer, Franz (1989). *I nomi di qualitá nell'italiano contemporaneo*. Vienna: Braumüller.

Ramchand, Gillian (2008). *Verb Meaning and the Lexicon: A First Phase Syntax*. Cambridge: Cambridge University Press.

Rappaport Hovav, Malka (2008). Lexicalized meaning and the internal temporal structure of events. In S. Rothstein (Ed.), *Theoretical and Crosslinguistic Approaches to the Semantics of Aspect*, pp. 13–42. Amsterdam: John Benjamins.

Rappaport Hovav, Malka and Beth Levin (2010). Reflections on manner/result complementarity. In E. Doron, M. Rappaport Hovav, and I. Sichel (Eds.), *Syntax, Lexical Semantics, and Event Structure*, pp. 21–38. Oxford: Oxford University Press.

Real Academia Española (1973). *Esbozo de una nueva gramática de la lengua española*. Madrid: Espasa Calpe.

Real Academia Española and Asociación de Academias de la Lengua Española (2009). *Nueva gramática de la lengua española*. Madrid: Espasa Calpe.

Reinhart, Tanya (2003). The theta system: An overview. *Theoretical Linguistics 28*(3), 229–290.

Resnik, Gabriela (2011). *Los nombres eventivos no deverbales en español*. PhD thesis, Universitat Pompeu Fabra.

Rett, Jessica (2008). *Degree Modification in Natural Language*. PhD thesis, Rutgers University.

Rett, Jessica and Sarah Murray (2013). A semantic account of mirative evidentials. In T. Snider (Ed.), *Proceedings of Semantics and Linguistic Theory 23*, pp. 453–472.

Richard, Mark (2004). Contextualism and relativism. *Philosophical Studies 119*(1-2), 215–242.

Rips, Lance, Edward Shoben, and Edward Smith (1973). Semantic distance and the verification of semantic relations. *Journal of Verbal Learning and Verbal Behavior 12*, 1–20.

Roca, Francesc and Avel·lina Suñer (1998). Reduplicación y tipos de cuantificación en español. *Estudi general: Revista de la Facultat de Lletres de la Universitat de Girona* (17), 37–66.

Rojo, Guillermo (1975). Sobre la coordinación de adjetivos en la frase nominal y cuestiones conexas. *Verba: Anuario galego de filoloxia 2*, 193–224.

Romero, Maribel and Chung-Hye Han (2004). On negative yes/no questions. *Linguistics and Philosophy 27*(5), 609–658.

Roodenburg, Jasper (2010). Plurality from a cross-linguistic perspective: The existence of plural argument supporting nominalizations in French. *Lingue e linguaggio 9*(1), 41–64.

van Rooij, Robert (2008). Comparatives and quantifiers. In O. Bonami and P. Cabredo Hofherr (Eds.), *Empirical Issues in Syntax and Semantics*, Volume 7, pp. 423–444.

van Rooij, Robert (2011). Vagueness and linguistics. In G. Ronzitti (Ed.), *Vagueness: A Guide*, pp. 123–170. Dordrecht: Springer.

Rooth, Mats (1992). A theory of focus interpretation. *Natural Language Semantics 1*, 75–116.

Rosch, Eleanor (1973). Natural categories. *Cognitive Psychology 4*(3), 328–350.

Rosch, Eleanor (1975). Cognitive representations of semantic categories. *Journal of Experimental Psychology: General 104*(3), 192–233.

Rosch, Eleanor and Carolyn B. Mervis (1975). Family resemblances: Studies in the internal structure of categories. *Cognitive Psychology 7*(4), 573–605.

Rosch, Eleanor, Carol Simpson, and Scott R. Miller (1976). Structural bases of typicality effects. *Journal of Experimental Psychology: Human Perception and Performance 2*(4), 491–502.

Ross, Jeff (1997). *The Semantics of Media*. Dordrecht: Kluwer.

Rothmayr, Antonia (2009). *The Structure of Stative Verbs*. Amsterdam: John Benjamins.

Rothstein, Susan (2004). *Structuring Events: A Study in the Semantics of Lexical Aspect*. Malden: Blackwell.

Rotstein, Carmen and Yoad Winter (2004). Total adjectives vs. partial adjectives: Scale structure and higher-order modifiers. *Natural Language Semantics 12*(3), 259–288.

Roy, Isabelle (2004). Predicate nominals in eventive predication. *USC Working Papers in Linguistics 2*, 30–56.

Roy, Isabelle (2010). Deadjectival nominalizations and the structure of the adjective. In A. Alexiadou and M. Rathert (Eds.), *The Syntax of Nominalizations across Languages and Frameworks*, pp. 129–158. Berlin: De Gruyter Mouton.

Roy, Isabelle and Elena Soare (2013). Event-related nominals. In G. Iordăchioaia, I. Roy, and K. Takamine (Eds.), *Categorization and Category Change*, pp. 123–152. Cambridge: Cambridge Scholar Publishing.

Ruwet, Nicolas (1982). *Grammaire des insultes et autres études*. Paris: Éditions du Seuil.

Sadler, Louisa and Douglas J. Arnold (1994). Prenominal adjectives and the phrasal/lexical distinction. *Journal of Linguistics 30*(1), 187–236.

Sæbø, Kjell Johan (2009). Judgment ascriptions. *Linguistics and Philosophy 32*(4), 327–352.

Santiago Lacuesta, Ramón and Eugenio Bustos Gisbert (1999). La derivación nominal. In I. Bosque and V. Demonte (Eds.), *Gramática descriptiva de la lengua*

española, Volume III, pp. 4505–4594. Madrid: Espasa Calpe.

Sapir, Edward (1944). Grading, a study in semantics. *Philosophy of Science 11*(2), 93–116.

Sassoon, Galit W. (2010). Restricted quantification over tastes. In M. Aloni, H. Bastiaanse, T. de Jager, and K. Schulz (Eds.), *Logic, Language and Meaning*, pp. 163–172. Springer.

Sassoon, Galit W. (2011). Adjectival vs. nominal categorization processes. *Belgium Journal of Linguistics 25*, 104–147.

Sassoon, Galit W. (2012). A slightly modified economy principle: Stable properties have non-stable standards. In E. Cohen (Ed.), *Proceedings of the 27th Meeting of the Israel Association of Theoretical Linguistics*, pp. 163–182. MIT Working Papers in Linguistics.

Sassoon, Galit W. (2013a). Size adjectives as adjectives. Paper presented at the *Semantics & Philosophy of Language Workshop*, University of Chicago.

Sassoon, Galit W. (2013b). A typology of multidimensional adjectives. *Journal of Semantics 30*(3), 335–380.

Sassoon, Galit W. (2013c). *Vagueness, Gradability and Typicality. The Interpretation of Adjectives and Nouns*. Leiden: Brill.

Sassoon, Galit W. (2017a). Comparisons of nominal degrees. *Language 93*(1).

Sassoon, Galit W. (2017b). Dimension accessibility as a predictor of morphological gradability. In Y. Winter and J. A. Hampton (Eds.), *Concept Composition and Experimental Semantics & Pragmatics*. Amsterdam: Springer.

Sassoon, Galit W. and Assaf Toledo (2012). Absolute and relative adjectives and their comparison classes. Ms. ILLC, Universiteit van Amsterdam & Universiteit Utrecht.

Sassoon, Galit W. and Natalia Zevakhina (2013). Granularity shifting: Experimental evidence from degree modifiers. In A. Chereches (Ed.), *Proceedings of Semantics and Linguistic Theory 22*, pp. 226–246.

Sauerland, Uli and Penka Stateva (2011). Two types of vagueness. In P. Égré and N. Klinedinst (Eds.), *Vagueness and Language Use*, pp. 121–145. Basingstoke: Palgrave Macmillan.

Sawada, Osamu (2011). The meanings of positive polarity minimizers in Japanese: A unified approach. In N. Li and D. Lutz (Eds.), *Proceedings of Semantics and Linguistic Theory 20*, pp. 599–617.

Schäfer, Roland (2007). On frequency adjectives. In E. Puig-Waldmüller (Ed.), *Proceedings of Sinn und Bedeutung 11*, Barcelona, pp. 555–567. Universitat Pompeu Fabra.

Schein, Barry (1993). *Plurals and Events*. Cambridge, MA: MIT Press.

Schlenker, Philippe (2003). A plea for monsters. *Linguistics and Philosophy 26*(1), 29–120.

Schneiden, David J. (2004). *The Psychology of Stereotyping*. New York: The Guilford Press.

Schumacher, Petra B. (2015). Processing vagueness: The online comprehension of adjective-noun combinations. Paper presented at the *Workshop on Gradability, Scale Structure and Vagueness: Experimental Perspectives*, CCHS-CSIC, Madrid.

Schwarzchild, Roger and Karina Wilkinson (2002). Quantifiers in comparatives: A semantics of degree based on intervals. *Natural Language Semantics 10*(1), 1–41.

Schwarzschild, Roger (2002). The grammar of measurement. In *Proceedings of Semantics and Linguistic Theory 12*, pp. 225–245.

Schwarzschild, Roger (2006). The role of dimensions in the syntax of noun phrases. *Syntax 9*(1), 67–110.

Scott, Gary-John (2002). Stacked adjectival modification and the structure of nominal phrases. In G. Cinque (Ed.), *Fuctional Structure in DP and IP*, pp. 91–120. Oxford: Oxford University Press.

Seco, Rafael (1954). *Manual de gramática española*. Madrid: Aguilar.

Serrano Dolader, David (1999). La derivación verbal y la parasíntesis. In I. Bosque and V. Demonte (Eds.), *Gramática descriptiva de la lengua española*, Volume III, pp. 4683–4756. Madrid: Es.

Seuren, Pieter A. M. (1973). The comparative. In F. Kiefer and N. Ruwet (Eds.), *Generative Grammar in Europe*, pp. 528–564. Dordrecht: Springer.

Shaer, Benjamin (2000). Syntactic position and the readings of *manner* adverbs. *ZAS Papers in Linguistics 17*, 265–286.

Siegel, Muffy E. A. (1976). *Capturing the Adjective*. PhD thesis, University of Massachussetts Amherst.

Siloni, Tal (1997). *Noun Phrases and Nominalizations: The Syntax of DPs*. Dordrecht: Springer.

Simón, César (1979). El problema de la colocación del adjetivo en castellano. Revisión crítica del estado de la cuestión. *Cuadernos de Filología de la Universitat de València II*, 183–197.

Sleeman, Petra and Ana Maria Brito (2010). Aspect and argument structure of deverbal nominalizations: A split vP analysis. In A. Alexiadou and M. Rathert (Eds.), *The Syntax of Nominalizations across Languages and Frameworks*, pp. 199–217. Berlin: Mouton de Gruyter.

Smith, Carlota S. (1964). Determiners and relative clauses in a generative grammar of English. *Language 40*(1), 37–52.

Snyder, William (1998). On the aspectual properties of English derived nominals. In U. Sauerland and O. Percus (Eds.), *The Interpretative Tract*, pp. 125–139. Cambridge, MA: MIT Working Papers in Linguistics.

Sobejano, Gonzalo (1956). *El epíteto en la lírica española*. Madrid: Gredos.

Socher, Richard, Alex Perelygin, Jean Y. Wu, Jason Chuang, Christopher D. Manning, Andrew Y. Ng, and Christopher Potts (2013). Recursive deep models for semantic compositionality over a sentiment treebank. In *Proceedings of the 2013 Conference on Empirical Methods in Natural Language,* pp. 1631–1642.

Solt, Stephanie (2012). Comparison to arbitrary standards. In A. Aguilar Guevara, A. Chernilovskaya, and R. Nouwen (Eds.), *Proceedings of Sinn und Bedeutung 16*, Volume 2, pp. 557–570. MIT Working Papers in Linguistics.

Solt, Stephanie (2015a). Q-adjectives and the semantics of quantity. *Journal of Semantics 32*(2), 221–273.

Solt, Stephanie (2015b). Vagueness and imprecision: Empirical foundations. *Annual Review of Linguistics 1*(1), 107–127.

Song, Myounghyoun and Chungmin Lee (2011). CF-reduplication in English. In *Proceedings of Semantics and Linguistic Theory 21*, pp. 444–462.

Sproat, Richard and Chinlin Shin (1988). Prenominal adjectival ordering in English and Mandarin. In J. Blevins and J. Carter (Eds.), *Proceedings of the 18th Meeting of the North East Linguistics Society*, Amherst, pp. 465–489. GSLA.

von Stechow, Arnim (1984). Comparing semantic theories of comparison. *Journal of Semantics 3*(1-2), 1–77.

Stephenson, Tamina (2007). Judge dependence, epistemic modals, and predicates of personal taste. *Linguistics and Philosophy 30*(4), 487–525.

Stojanovic, Isidora (2007). Talking about taste: Disagreement, implicit arguments, and relative truth. *Linguistics and Philosophy 30*(6), 691–706.

Storto, Gianluca (2003). *Possessives in Context: Issues in the Semantics of Possessive Constructions*. PhD thesis, University of California, Los Angeles.

Storto, Gianluca (2005). Possessives in context. In J.-Y. Kim, Y. A. Lander, and B. H. Partee (Eds.), *Possessives and Beyond: Semantics and Syntax*, pp. 59–86. Amherst: GLSA.

Stump, Gregory T. (1981). The interpretation of frequency adjectives. *Linguistics and Philosophy 4*(2), 221–257.

Suñer Gratacós, Avel·lina (1990). *La predicación secundaria en español*. PhD thesis, Universitat Autònoma de Barcelona.

Suñer Gratacós, Avel·lina (1999). La aposición y otras relaciones de predicación en el sintagma nominal. In I. Bosque and V. Demonte (Eds.), *Gramática descriptiva de la lengua española*, Volume I, pp. 523–564. Madrid: Espasa Calpe.

Svenonius, Peter (2008). The position of adjectives and other phrasal modifiers in the decomposition of DP. In L. McNally and C. Kennedy (Eds.), *Adjectives and Adverbs: Syntax, Semantics, and Discourse*, pp. 16–42. Oxford: Oxford University Press.

de Swart, Henriëtte (1998). Aspect Shift and Coercion. *Natural Language & Linguistic Theory 16*(2), 347–385.

de Swart, Henriëtte, Yoad Winter, and Joost Zwarts (2007). Bare nominals and reference to capacities. *Natural Language & Linguistic Theory 25*(1), 195–222.

Syrett, Kristen and Jeffrey Lidz (2010). 30-month-olds use the distribution and meaning of adverbs to interpret novel adjectives. *Language Learning and Development 6*(4), 258–282.

Szabolcsi, Anna (1987). Functional categories in the noun phrase. In I. Kenesei (Ed.), *Approaches to Hungarian*, Volume 2: Theories and analyses, pp. 167–189. Szeged: Jate.

Talmy, Leonard (1985). Lexicalization patterns: Semantic structure in lexical forms. In T. Shopen (Ed.), *Language Typology and Syntactic Description 3: Grammatical Categories and the Lexicon*, pp. 57–149. Cambridge: Cambridge University Press.

Talmy, Leonard (2000). *Toward a Cognitive Semantics*, Volume II. Typology and Process in Concept Structuring. Cambridge, MA: MIT Press.

Tenny, Carol (1992). The aspectual interface hypothesis. In I. A. Sag and A. Szabolcsi (Eds.), *Lexical Matters*, pp. 1–27. Stanford: CSLI Publications.

Tenny, Carol (1994). *Aspectual Roles and the Syntax-Semantics Interface*. Dordrecht: Springer.

Thuilier, Juliette (2012). *Contraintes préférentielles et ordre des mots en français*. PhD thesis, Université Paris-Diderot-Paris VII.

Toledo, Assaf and Galit W. Sassoon (2011). Absolute vs. relative adjectives – Variance within vs. between individuals. In N. Ashton, A. Chereches, and D. Lutz (Eds.), *Proceedings of Semantics and Linguistic Theory 21*, pp. 135–154.

Torrego, Esther (1996). Experiencers and raising verbs. In R. Freidin (Ed.), *Current Issues in Comparative Grammar*, pp. 101–120. Dordrecht: Springer.

Tovena, Lucia (2001). Between mass and count. In K. Megerdoomian and L. A. Bar-el (Eds.), *Proceedings of the 20th West Coast Conference on Formal Linguistics*, Somerville, MA, pp. 565–578. Cascadilla Press.

Traugott, Elizabeth (1989). On the rise of epistemic meanings in English: An example of subjectification in semantic change. *Language 65*(1), 31–55.

Traugott, Elizabeth (1995). Subjectivisation in grammaticalisation. In D. Stein and S. Wright (Eds.), *Subjectivity and Subjectivisation. Linguistic Perspectives*, pp. 31–54. Cambridge: Cambridge University Press.

di Tullio, Angela and Avel·lina Suñer Gratacós (2008). La evolución de *un* como artículo enfático ante nombres de cualidad en función de atributo. In C. Company and J. G. Moreno de Alba (Eds.), *Actas del VII Congreso Internacional de Historia de la Lengua Española*, pp. 499–510.

Umbach, Carla (2006). Non-restrictive modification and backgrounding. In *Proceedings of the 9th Symposium on Logic and Language*, Hungarian Academy of Sciences, pp. 152–159.

Umbach, Carla (2012). Non-restrictive Modification and Evaluativity. Paper presented at the *Workshop on Semantic and Pragmatic Properties of (Non) Restrictivity*, Universität Stuttgart.

Umbach, Carla (2016). Evaluative propositions and subjective judgments. In C. Meier and J. van Wijnbergen-Huitink (Eds.), *Subjective Meaning: Alternatives to Relativism*, pp. 127–168. Berlin: De Gruyter.

Umbach, Carla and Helmar Gust (2014). Similarity demonstratives. *Lingua 149*(A), 74–93.

Valois, Daniel (1991). The internal syntax of DP and adjective placement in English and French. In *Proceedings of the 21st Meeting of the North East Linguistics Society*, pp. 367–381.

Van Hout, Angeliek and Thomas Roeper (1998). Events and aspectual structure in derivational morphology. In H. Harley (Ed.), *Papers from the UPenn/MIT Roundtable on Argument Structure and Aspect*, pp. 175–220. Cambridge, MA: MIT Working Papers in Linguistics.

Varela, Soledad (2012). La interacción de las nominalizaciones con la voz, el aspecto y la dimensión temporal. In E. Bernal, C. Sinner, and M. Emsel (Eds.), *Tiempo y espacio en la formación de palabras del español*, pp. 91–106. Munich: Peniope.

van de Velde, Danièle (1995). *Le spectre nominal. Des noms de matières aux noms d'abstractions*. Paris: Peeters.

Vendler, Zeno (1957). Verbs and times. *Philosophical Review 66*(2), 143–160.

Vendler, Zeno (1967). *Linguistics in Philosophy*. Ithaca, NY: Cornell University Press.

Vendler, Zeno (1968). *Adjectives and Nominalizations*. The Hague: Mouton.

Verkuyl, Henk J. (1972). *On the Compositional Nature of the Aspects*. Dordrecht: Reidel.

Verkuyl, Henk J. (2000). Stereotyping, prototyping, and figurative use: Towards a proper semantic analysis. In T. Shannon and J. Snapper (Eds.), *The Berkeley*

Conference on Dutch Linguistics 1997, Lanhan, pp. 21–43. University Press of America.

Villalba, Xavier (2008). The focus-background articulation in Spanish qualitative binominal NPs. *Journal of Portuguese Linguistics 7*(2), 131–149.

Villalba, Xavier and Anna Bartra-Kaufmann (2010). Predicate focus fronting in the Spanish determiner phrase. *Lingua 120*(4), 819–849.

Vinet, Marie-Thérèse (1991). French non-verbal exclamative constructions. *Probus 3*(1), 77–100.

de Vries, Hanna (2010). *Evaluative Degree Modification of Adjectives and Nouns*. Master's thesis, Universiteit Utrecht.

de Vries, Hanna (2015). Gradable nouns: Investigating the relation between linguistic and conceptual structure. Paper presented at the *Workshop on Gradability, Scale Structure and Vagueness: Experimental Perspectives*, CCHS-CSIC, Madrid.

Wellwood, Alexis (2014). *Measuring Predicates*. PhD thesis, University of Maryland, College Park.

Wheeler, Samuel C. (1972). Attributives and their Modifiers. *Noûs 6*(4), 310.

Williams, Edwin (1981). Argument structure and morphology. *Linguistic Review 1*, 81–114.

Williamson, Timothy (1994). *Vagueness*. Problems of philosophy. New York: Routledge.

Williamson, Timothy (1999). On the structure of higher-order vagueness. *Mind 108*(429), 127–143.

Williamson, Timothy (2009). Reference, inference and the semantics of pejoratives. In J. Almog and P. Leonardi (Eds.), *The Philosophy of David Kaplan*, pp. 137–158. Oxford: Oxford University Press.

Winter, Yoad (2006). Closure and telicity across categories. In M. Gibson and J. Howell (Eds.), *Proceedings of Semantics and Linguistic Theory 16*, pp. 329–346.

Winter, Yoad and Joost Zwarts (2012). On the event semantics of nominals and adjectives – the one-argument hypothesis. In A. Aguilar Guevara, A. Chernilovskaya, and R. Nouwen (Eds.), *Proceedings of Sinn und Bedeutung*

16, Volume 2, pp. 639–646. MIT Working Papers in Linguistics.

Winterstein, Grégoire (2012). What but-sentences argue for: An argumentative analysis of *but*. *Lingua 122*(15), 1864–1885.

Wittgenstein, Ludwig (1953). *Philosophical Investigations*. Oxford: Blackwell.

Wright, Crispin (1975). On the coherence of vague predicates. *Synthese 30*(3/4), 325–365.

Xie, Zhiguo (2010). The other pole of degree modification of gradable nouns by size adjectives: A Mandarin Chinese perspective. In *Proceedings of the 12th International Symposium on Chinese Languages and Linguistics*, pp. 245–256.

Yoon, Youngeun (1996). Total and partial predicates and the weak and strong interpretations. *Natural Language Semantics 4*(3), 217–236.

Zagona, Karen T. (1990). *Mente* adverbs, compound interpretation and the projection principle. *Probus 2*(1), 1–30.

Zamparelli, Roberto (1996). *Layers in the Determiner Phrase*. PhD thesis, University of Rochester.

Zamparelli, Roberto (2008). Bare predicate nominals in Romance languages. In H. Høeg Müller and A. Klinge (Eds.), *Essays on Nominal Determination. From Morphology to Discourse Management*, pp. 101–130. Amsterdam: John Benjamins.

Zanuttini, Raffaella and Paul Portner (2003). Exclamative clauses: At the syntax-semantics interface. *Language 79*(1), 39–81.

Zimmermann, Malte (2003). Pluractionality and complex quantifier formation. *Natural Language Semantics 11*(3), 249–287.

Zwarts, Joost (2005). Prepositional aspect and the algebra of paths. *Linguistics and Philosophy 28*(6), 739–779.

Zwicky, Arnold M. (1970). Usually and unusually. *Linguistic Inquiry 1*(1), 145.

Zwicky, Arnold M. (1995). Why English adverbial *-ly* is not inflectional. In *Papers from the 31st Regional Meeting of the Chicago Linguistic Society*, Volume 1, pp. 523–535.