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Ioanna Spanou

# MAPPING ATMOSPHERE

Rehearsals on rural mediterranean landscapes

*Cover page:*

*A cartographical interpretation of atmosphere(s)*

*Inside cover page:*

*A cartographical interpretation of atmosphere(s)*

PhD – June 2014

*Universidad Polit cnica de Catalu a*

*Departamento de Urbanismo y Ordenaci3n del Territorio*

PhD Director: PhD Maria Goula

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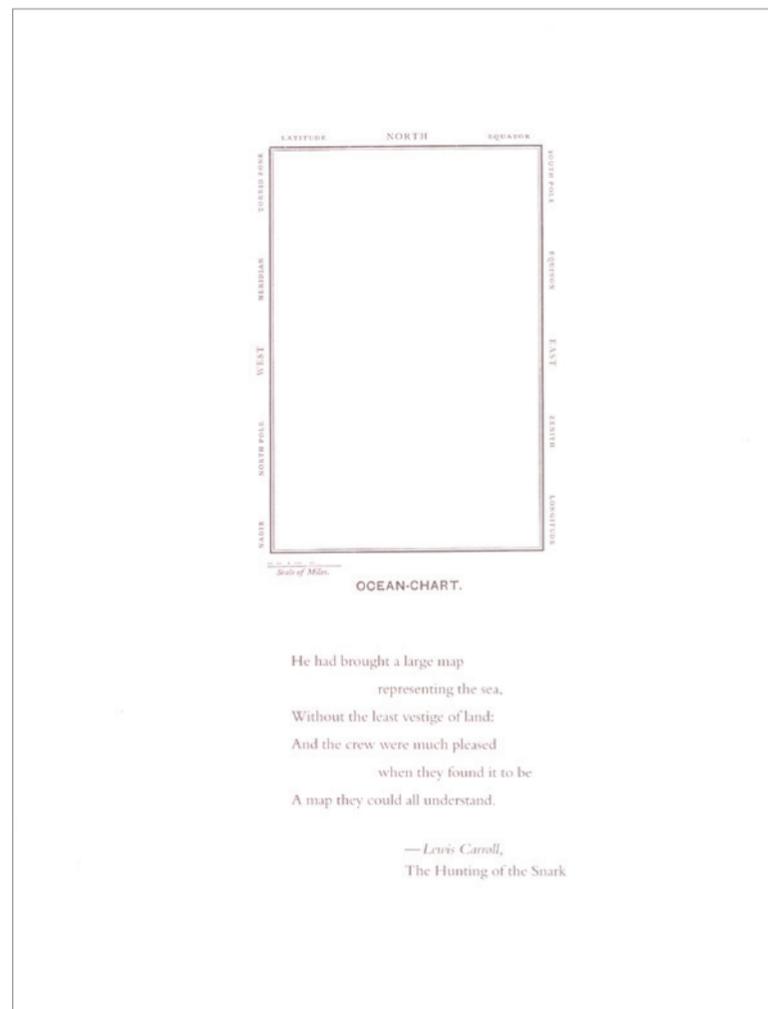
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The expanded family of CRPPb has been my constant point of reference during these last 10 years. In this context, the work and guidance of Maria Goula has been the filter that helped adjust, orient and justify my work into and towards the specificity of landscape.

I want to thank John Peponis, for his guidance during the initial stage of this process. And also Joaquim Sabaté, for trusting me in introducing such a "diffuse" concept as a theme of research in the Department (DUOT) and helping me to contextualize and structure my arguments.

But most of all, I am indebted to Pau, Kyros and Ekaitz.

Fig. 1:  
 Lewis Carroll, The Hunting of the Snark: *Ocean-Chart*.  
 S: Harmon K (ed), 2004, *You are here: Personal Geographies and other maps of the imagination*, New York: Princeton Architectural Press, p.5.



# 1. INTRODUCTION

This thesis explores embodied experience as a vehicle for the enrichment of the cartographic interpretation of the landscape. It is thus consciously situated in the shifting terrain of the relationship between body and environment and, consequently, "exposed" to both. The intrinsic duality of embodied experience as a phenomenon, oscillating constantly in the in-between the physical/biological dimensions of space and body and the effects of their interaction, activates enriching thoughts on the variety, the variability and the complexity of both agents that integrate the equation, being a subject of constant interest in the discipline of landscape architecture. Nonetheless, it has been a subject looked at and investigated in a specific scale and from a specific point of view: its descriptions are focusing in human scale environments while its interpretations opt for the point of view of the perceiving subject.

Its introduction in the processes of large scale landscape analysis still receives certain resistance, related with the limits imposed by its widely accepted consideration as an essentially perceptive and thus too vague or ambiguous value as the "official" contemporary landscape analysis methodologies, developed after the European Landscape Convention, reveal:

In the European Landscape Convention landscape has been recognized as "*an area as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*" (Council of Europe 2000). The analysis of landscape, at least in the implementation of the convention in the Catalonian territory through the Landscape Catalogues, has been centered in the identification of this landscape character as an **identifiable structure** rather to the **intangible** values of the landscape, acknowledged as significant but almost impossible to map. These values, referred to generally as the "sense of place", which enclose aspects related with the embodied experience and with feelings of attachment and belonging on behalf of the citizens among others, are considered as highly "subjective", and are accepted to depend more likely on personal (or collective) interpretations rather on the physical morphology of the landscape. While character on one hand, is thus considered able to be identified, these "other" values resist cartography. This does not mean that there is no interest for the existence and documentation of these "other", hard to "map" values. On the contrary, they are highly considered, and indirectly approached through differentiated mediums of identification: photography, art and literature. It might also be suggested that a partial approach to the "intangible" is also been pursued through the category of the "aesthetic" values of the landscape<sup>1</sup>, mainly focusing to a series of scenic attributes, directly linked with a visual, morphological analysis of the territory.

[1] I am referring especially to the approach to the "aesthetic" values of the landscape as developed in the Landscape Catalogues of Catalonia.

[2] This intuition has been cultivated through my experience both in the practice and in the teaching of landscape analysis: The "official" landscape analysis methodologies, at least as developed and implemented in the Catalanian territory through the Landscape Catalogues, have fortunately provided with a vast terrain for investigation for both: I had the chance of participating as part of the team of **CRPPb** (Centre of Landscape Research and Design of Barcelona integrated in the Department of Urbanism and Urban Planning, School of Architecture, Polytechnic University of Catalonia) in the elaboration of the Landscape Catalogue of Llerida, approved in 2008. This experience highlighted quite accurately some structural difficulties for the introduction of the embodied in the cartography, related with the abovementioned issues of scale and pursued "objectivity" (among others to which I will refer to further on: they form basic arguments for this thesis and their significance cannot be resumed in this short introduction).

Today the majority of the Landscape Catalogues, seven in total corresponding to the seven territorial units of Catalonia, is already developed and is accessible through the webpage of the Landscape Observatory. In the context of the Master in Landscape Architecture (ETSAB), during landscape analysis classes I have noted a peculiar phenomenon. Students, having access both to the methodology and the related cartography of the Landscape Catalogues, were highly tempted to copy the variables included into the various existing thematic values maps included in the Catalogues. Legends between maps of completely distant territories were quasi identical. It is true that there seem to exist a series of values that might logically repeated through the case studies, as they were all located in the Mediterranean context. Hydrographic axes and patrimonial points of interest are among them. Nonetheless, this "recipe" didn't seem to function in order to answer the following question: What makes this landscape different from another? Which are the aspects that define its specificity? An answer can be immediately provided: (from us "experts", even without looking at the maps): the distributional pattern between elements is distinct in each case. Nonetheless, when it came down to the characterization and evaluation of each one of the elements or their spatial configuration, then representations were lifted from two-dimensional to three-dimensional. The answer was accessed through collages, photos and video, representing indirectly the specific morphological properties of the elements or their combination, but more interestingly the manner in which the body is positioned in and among them.

My belief is that the change of medium (enriching and necessary indeed) was not only due to the intrinsic nature of the variable (s) to be interpreted, but to the fact that there is no culture, a shared one at least, of approaching the specificity defined by the embodied experience of the landscape through cartography.

This apparent resistance to incorporate the "intangible", at least in terms of cartography, might be due to the fact that most current cartographies of landscape analysis, at least in Spain, have an intrinsic propose, that is to guide planning decisions. And although the linkage between analysis and planning is more than necessary and has been a permanent claim of the discipline expressed in many theoretical essays as well as in mapping approaches internationally, we also detect the following two risks for the conceptualization of landscape analysis as a proper field of investigation and as a source for knowledge for the landscape:

The first one has to do with scale: landscape analysis serves for the assessment of value in order to reach conclusions for use suitability in planning, generally reducing the complexity of the landscape evaluation into a spectrum of high and low values, seen from a scale filter imposed by the proper scale of regional planning rather than from the scale regarded by the specificity of the landscape.

The second one has to do with the desired "objectivity" of its conclusions: The proper character of the values to be mapped are those that guarantee a certain "objectivity" for the landscape analysis, and as such are mostly limited into a series of elements of already acknowledged value, such as the cultural or the ecologic values. The common tools for the landscape analysis cartography, software linked with GIS technology, extremely useful for this scale of work and amount of information processed, also function as a veil of "objectivity": the intervention of the researcher is indirectly limited into the processing of mainly existing "official" cartographic databases. Nonetheless, as natural, the tool has its intrinsic limitations: It has been developed for processing geo-referenced information in a specific range of scales and can hardly be adjustable to incorporate variations of spatial meaning that possibly function in differentiated scales of perception.

A considerable gap exists thus, as far as the landscape analysis of the embodied is concerned, in the scale of the territory, one that does not certainly reflect the lack of interest for this "type" of variables but perhaps the lack of approaches to these variables from and within cartography, the tool by excellence of the discipline.

Why should we anyhow submit embodied experience to the laws of two-dimensional representation or to a morphological interpretation?

The arguments developed in this thesis have been initially activated from the intuition<sup>2</sup> that the interpretation of the embodied through cartography provides access to the specificity of the landscape by exploring the capacity of maps in interpreting the relational terrain of subject and environment, without focusing only either on the objective properties of the environment, seen as the "other", the "exterior" objective world, or on its effects to the emotional sensibility of the perceiving subject.

Fig. 2:

Flyer from the Atmosphere Symposium: "Action", February 6th-8th 2014, University of Manitoba.



[3] *Cada visión de un paisaje es en realidad un descubrimiento y una revisión, o un paisaje nunca está completo y nos llega precedido de muchas lecturas para encabezar otra serie también incompleta.* Rosa Barba, 1995, "Argumentos en el proyecto de paisaje". En *Revista Geometría 20. Monografías de Arquitectura y Urbanismo*, p.8

[4] *Since 2009 the Faculty of Architecture at the University of Manitoba has hosted an annual interdisciplinary symposium entitled Atmosphere. This symposium explores the less tangible aspects of design and experience: the ephemeral, social, situational, emotional, elemental, phenomenal and epiphenomenal conditions of our shared world. Difficult to pin-down, capture and express, "atmosphere" insinuates pervading qualities, which we—as designers and interpreters of our built and natural environment—strive to discover, generate and understand.*

Each year the Atmosphere Symposium poses a specific yet open-ended theme to draw researchers from multiple disciplines into a topically oriented exploration and exchange. The themes of previous symposia have included: "Ecology and Design" (2013); "Experiencing the Everyday" (2012); and "Mediated Cities" (2011). The theme for Atmosphere 2014 is "Action".

[5] "Understanding Atmospheres: Culture, Materiality and the Texture of the In-between", March 16th -17th 2012, University of Aarhus, The Department of Anthropology, Archaeology and Linguistics, Moesgård Museum, <http://www.sensorystudies.org/events-of-note/understanding-atmospheres-culture-materiality-and-the-texture-of-the-in-between/>

*The concept "atmosphere" and equivalents such as ambience and aura, have increasingly become objects of study in a range of disciplines from architecture and aesthetics to anthropology and archaeology. This turn is largely inspired by the work of German philosopher Gernot Böhme coupled with reference to the material and phenomenological focus in many fields of social science and humanities over the past two decades.*

*Located at the intersection of things and people, atmospheres may be defined as a potential, which has to emerge or to be made effective at the conceptual as well as the sensuous level. Someone has to experience an atmosphere for it to exist. An atmosphere is neither an object, nor a subject; neither passive nor neutral, but rather may act as silent interventions into behavioural and experiential practices and interpretations. It is a total phenomenon, largely non-representational and hence difficult to put into words. Nevertheless, atmospheres are manifested in human bodies and may be experienced as emotions, flushes, heartbeats, tears and smiles, which are all formal evidence of a relationship between subjects and their environment. The question, in turn, is thus how we can study atmospheres, both as experience and analytical tool?*

[6] "Creating an atmosphere", September 10th-11th-12th 2008, Réseau Ambiances Network, Canadian Centre for Architecture, Grenoble, <http://www.cresson.archi.fr/PUBLI/pubCOLLOQUE/AMBIANCE2008-communications.htm>

*The international symposium, Faire une ambiance/Creating an Atmosphere, to be held in Grenoble on 10, 11 and 12 September 2008, will be the first step towards launching an interdisciplinary network on architectural and urban atmospheres. Today, after the age of "engineering atmospheres", to progress with such questions will take more than just juxtaposing the relevant scientific disciplines and collating of technical and regulatory measures. New interdisciplinary studies and experiments have been carried out since 1990 and substantial blocks of knowledge have already been brought together. In the other hand, a huge stock of know-how is exercised every day in the field of architectural and planning production, as it is in contemporary art, including street art, the media and advertising design. Correspondents in more than 60 countries all over the world have already expressed a keen interest in this forward-looking topic, which responds to demands for an architecture of quality and sustainable development.*

[7] "Atmospheres, Architecture, and Urban Space: New Conceptions of Management and the Social", May 7th 2011, Conference, Department of Management, Politics and Philosophy, Copenhagen Business School, <http://www.cbs.dk/en/research/departments-and-centres/departments-of-management-politics-and-philosophy/events/atmospheres-architecture-and-urban-space-new-conceptions-of-management-and-the-social>

Keynote speakers: Gernot Böhme, Olafur Eliasson, and Juhani Pallasmaa  
*The three speakers will discuss the atmospheric dimensions of social life and suggest a variety of ways of investigating atmospheres, as well as their relations to urban space and architecture. Key topics to be explored include: How to think and analyze the atmospheric aspects of the social? How are spatial and architectural features pertinent to an atmospheric notion of the social? How to study cities and organizations with respect to their atmospheric fabric? What role do atmospheres play in contemporary capitalism? What are the implications of the atmospheric thinking for politics and management? To what extent are atmospheres open for manipulation? How can experiments and installations be used in social theory to affect atmospheres?*

[8] Meyrowitz (1985), Giddens (1991)

[9] Relph (1976)

[10] Robertson (1995)/ Robertson & Khondker, (1998)

*"Atmosphere escapes the discourse about it.  
By definition, it lacks definition.  
It is precisely that which escapes analysis..."*  
Wigley 1998.

## "Atmosphere" as a filter

The subject is certainly of an immense complexity; nonetheless, this thesis pretends to provide some eclectic and surely partial<sup>9</sup> insights towards a particular dimension of the embodied experience of the landscape: This dimension is filtered through the concept of atmosphere. I refer to atmosphere, commonly referred to also as "first impression", through one of its more mediated meanings, one that points to a resonance between the properties of environment and patterns of feeling or emotion: Its interpretations are generally related with the description of the enveloping space, its effects to our psychological conditions and consequently have defined atmosphere traditionally, mainly in the field of the architectural discourse, as a concept relevant for the interpretation or design of "human" scale environments, although the recent emergence of congresses, symposiums, workshops and university courses dedicated specifically in "Atmosphere" <sup>4, 5, 6, 7</sup> point towards an increasing tendency of an extended use of the concept as reflecting at least the contemporary questioning of the established meanings of our relation with space.

## Why atmosphere?

This thesis is interested in atmosphere because it exemplifies a shared interest among the disciplines that try to define or re-define the established meanings of our relations with space enhanced by the contemporary processes of globalization, in relation to virtual experience and the haptical dimension of the world. The contemporary theoretical discourse searches for new concepts, or turns to the re-interpretation of existing ones, in order to affront the sequences of effects that these dynamics provoke to our understanding of space. While some authors<sup>8</sup> argue that this relation will become eventually less attached to a specific local physical context and a kind of "no-place"<sup>9</sup> will be finally produced, others<sup>10</sup> defend just the opposite stand: a kind of renewed "localization" seems to be activated, promoting concepts as "sense of place", character, atmosphere, mood, genius loci, among others. These concepts are generally used in a diffuse way, intermixed, overlapped, with no clear distinctions among them, when in my opinion there is a lot to win if we deepen down to the structural hues of each. This insight perhaps might bridge the gap between the two abovementioned contrasted tendencies. More concretely:

This thesis is also interested in atmosphere, from a disciplinary point of view, because of its long and close relation with the concept of character, both forming expressions of the "sense" of the place (Schulz 1980:8). Character nevertheless has gained a far more acknowledged position in the literature and the practice of Landscape Architecture, directly linked with the structure of the landscape, as it apparently offers a more "stable" ground upon which theories and mappings have developed. Atmosphere is linked with the variability and the multiplicity of the landscape, making it, in my opinion, a suggestive concept, complementary to character, for landscape analysis.

The concept of atmosphere results suggestive also because it reflects specific levels of intelligibility of the environment: Atmosphere functions in the in-between body and environment but also in the in-between a stage of pre-reflective and more-reflective or mediated perception. Its precise situation in this threshold of perception, as well as the influence of this moment to the following, as it will be argued, makes it a concept that can provide the introduction of processes of perception in landscape analysis with some interesting insights: Through atmosphere the body is positioned within a field of sense and experience prior to the retrieval of intellectually sustained descriptions, which traditionally form the most common approaches to the embodied experience in landscape analysis .

Fig. 3:  
 Julie Mehretu, *Looking Back to a Bright New Future*, 2003. Ink and acrylic on canvas, 95x119 inches.  
 S: Harmon K (ed), 2004, *You are here: Personal Geographies and other maps of the imagination*, New York: Princeton Architectural Press, p.163



*Julie Mehretu makes large-scale, gestural paintings that are built up through layers of acrylic paint on canvas overlaid with mark-making using pencil, pen, ink and thick streams of paint. Mehretu's work conveys a layering and compression of time, space and place and a collapse of art historical references, from the dynamism of the Italian Futurists and the geometric abstraction of Malevich to the enveloping scale of Abstract Expressionist colour field painting. In her highly worked canvases, Mehretu creates new narratives using abstracted images of cities, histories, wars and geographies with a frenetic mark making that for the artist becomes a way of signifying social agency as well suggesting an unravelling of a personal biography.*

*Mehretu's points of departure are architecture and the city, particularly the accelerated, compressed and densely populated urban environments of the 21st Century. Her canvases overlay different architectural features such as columns, façades and porticoes with geographical schema such as charts, building plans and city maps and architectural renderings, seen from multiple perspectives, at once aerial, cross-section and isometric. Her paintings present a tornado of visual incident where gridded cities become fluid and flattened, like many layers of urban graffiti. Mehretu has described her rich canvases as "story maps of no location", seeing them as pictures into an imagined, rather than actual reality. Through its cacophony of marks, her work seems to represent the speed of the modern city depicted, conversely, with the time-aged materials of pencil and paint.*

[http://whitecube.com/artists/julie\\_mehretu/](http://whitecube.com/artists/julie_mehretu/)

[11] For a synthesis of my initial approach to atmosphere see: Spanou I, Peponis J, 2003, "Architectural atmosphere and the spatially situated body", Fourth International Space Syntax Symposium, University College London (ed Julianne Hanson), London UK, 60.1-60.14

The theoretical arguments developed in this thesis draw highly from this approach, especially those referring to the levels of intelligibility of the environment related with atmosphere and the definition of atmosphere as proposed in this thesis (Chap 2), as also these referring to the relation of "local atmospheric situations" with a potential "global" pattern of atmosphere pointing towards a specific conceptualization of the sense of narrative constructed through the embodied experience of atmosphere. Some parallel conclusions could also be detected with the importance given in this thesis to the relation between the sense of the bodily experienced atmosphere with the metaphorical references that this experience activates, an argument developed in the second case study.

Atmosphere orients and delimits thus my personal approach to the embodied experience of the landscape, an approach also limited by the intrinsic nature of my personal profile. This investigation on atmosphere as a vehicle for the spatial interpretation of the embodied experience started approximately 10 years ago, during my studies in the Master of Theory of Architecture of the NTUA (National Technical University of Athens). Being initially an architect, my personal interest on a methodological approach to atmosphere has been initially activated by the will to find a possible method to approach the imagined, conceived through the process of design atmospheres with the finally represented and designed atmospheres. My point of departure then, was not placed on the conscious interpretation of constructed space, but on a personal need linked with the process of design itself: the dense spatial constructs of my imagination, related logically with a specific use and task imposed by a specific "architectural" program, included sensations, feelings, metaphors and references activated by the "imagined" embodied interaction with the morphological configuration of these imagined spaces. The word assigned to these dense mental images was atmosphere and the process of their "translation" into discreet properties of a "geometrical" space often resulted to frustration. This inner process was externalized through dealing with spatial syntax in the context of this Master that led towards a more systematic approach to atmosphere as an instrument for spatial analysis of architectural design, developed in my Master thesis and in a publication<sup>[11]</sup> that followed.

Although my personal trajectory drove me relatively away from the specificity of architecture (at least as far as the scale of "the building" is concerned), many of the arguments proposed in this early stage of the investigation of atmosphere and mainly those related with its theoretical conceptualization, have remained active in my discourse, that has been enriched through the continuation of my studies in the Master of Landscape Architecture (MLA) and Master in Research on Urbanism (MRU), (both in ETSAB, UPC). Atmosphere has been the subject of both Master theses contextualized accordingly: In the MLA the thesis proposed a short introduction to the "reproduction" of atmospheres of archetypal landscape models in virtual reality, while in the MRU the attention was paid to the relation of atmosphere with parallel concepts, proposing a classification among them as also an overview on how these concepts were treated in design in a series of realized projects. This Master thesis also included an initial approach on the possible cartography of atmosphere in large scale environments.

The turning point in this trajectory in the investigation of atmosphere was provoked during my incorporation in the team of CRPPb. Its context, through the research studies developed in the centre following the legacy of the specific point of view to landscape analysis established by Rosa Barba, permitted me to ground the discourse of atmosphere in the specificity of landscape architecture through its definite crossing with a series of concepts, of a transversal interest for the discipline and especially treated in CRPPb, that have acquired a distinctive importance in the development of my arguments on atmosphere.

This research is consequently oriented to trace the potential of this influence in this series of aspects of landscape analysis, highlighted among others for their special resonance with atmosphere as a construal for the interpretation of landscape. These are concepts and issues, that were constantly activated when treating the possibilities activated from atmosphere for landscape analysis and consequently form the specific frames of interest of this thesis:

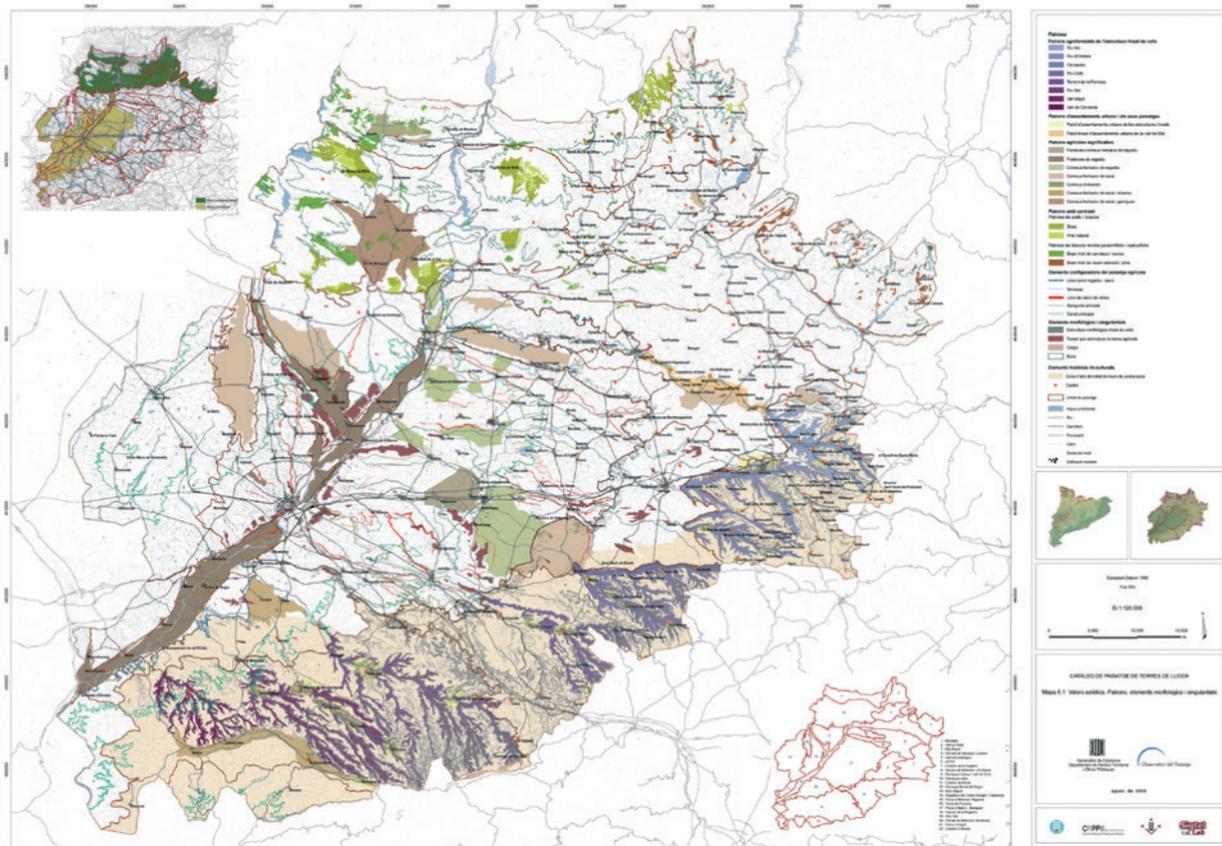


Fig. 4:  
Map 6.1.: Aesthetic Values: Patterns, Morphological elements and singularities  
Landscape Catalogue of Lerida region, CRPPb, 2008

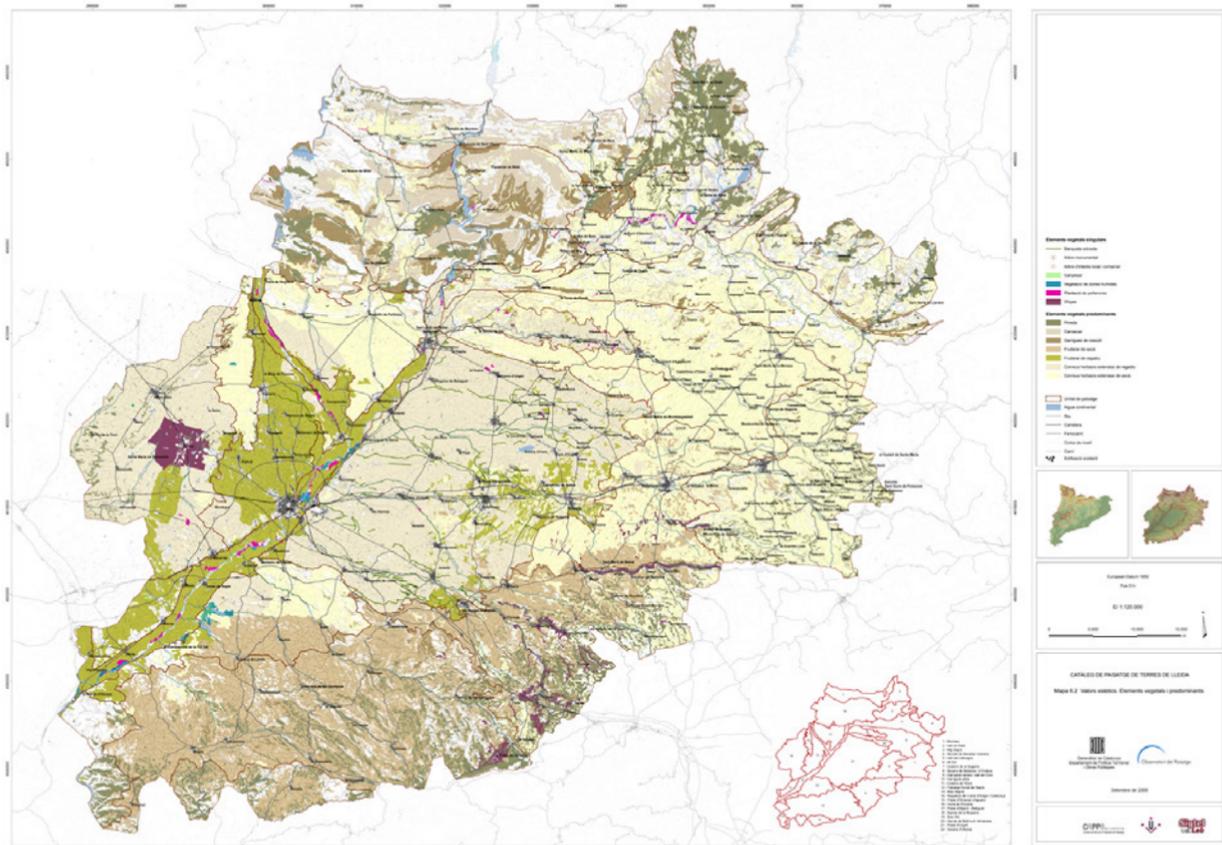


Fig. 5:  
Map 6.2.: Aesthetic Values: Singular and predominant vegetal elements  
Landscape Catalogue of Lerida region, CRPPb, 2008

### Cartography as interpretation

As aforementioned, the cartography of landscape analysis is mainly focusing in the mapping of thematic layers of values. Either acknowledged, as the cultural, historical, religious or the ecological values might be, or less formally acknowledged as the aesthetic might result, values are, or should be described in a clearly identifiable, discreet and legible form having a direct correspondence with defined morphological properties of the environment. Cartography then functions essentially through direct analogies with the geographic space.

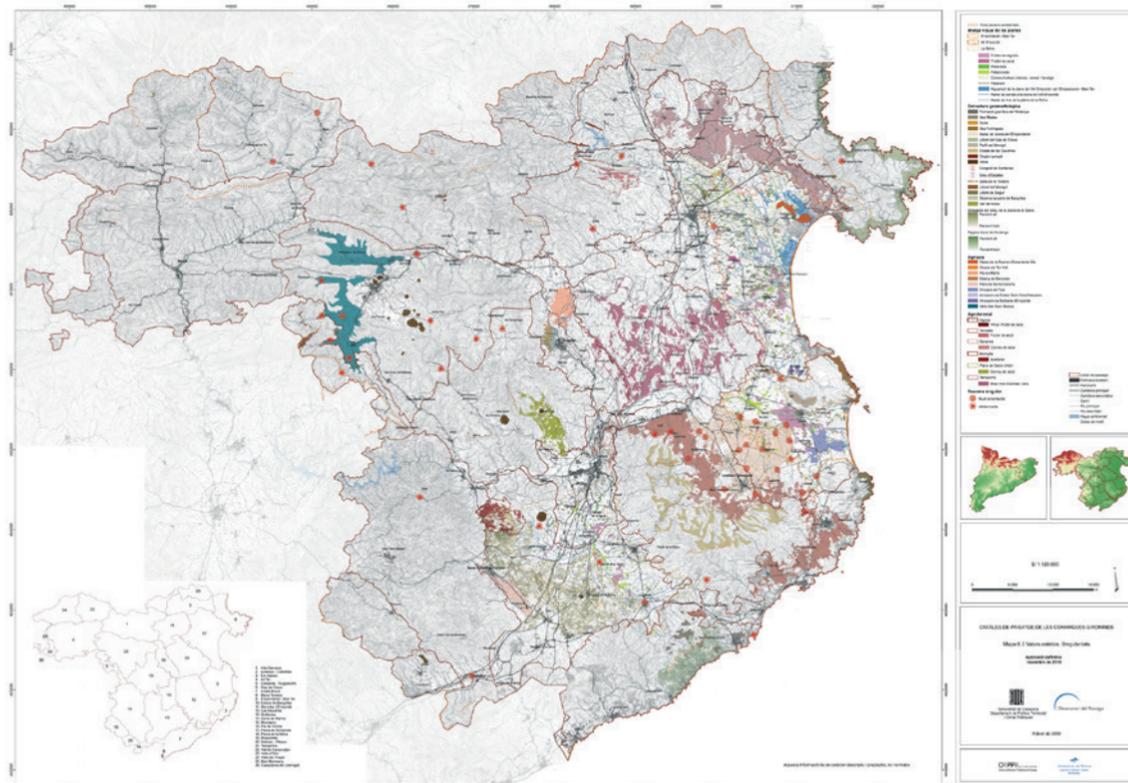
This procedure becomes highly complex especially for that range of values whose location cannot be accurately identified and for those values that don't depend on the presence of a single element but on the spatial configuration of a pattern formed by a group of elements, the presence of which is difficult to enclose in an accurately delimited area. The process might become even more complicated when cartography is understood as interpreting rather than describing values, when cartography is conceptualized as the tool by excellence for representing (and thus constructing) the arguments that configure the specificity of a landscape.

A constant critique received for the maps of aesthetic values resulting during the process of development of the Landscape Catalogue of Lerida, was that they were not legible enough: they resulted too dense and difficult to interpret. As a result, the aesthetic values were finally classified in categories: This classification certainly enhanced their legibility; nonetheless, the question still remains: Which are the grades of discreetness able to cope with a possible interpretation of the landscape? And, up to what point values described in form of layers, presented in detached and separate thematic maps are really useful for assessing planning and design?

### Scale of representation- Scales of interpretation

Scale of representation has been traditionally understood as the scale of impression in paper. Nonetheless, contemporary technologies of information permit the conceptualization of cartography as the creation of databases intentionally exemplifying meaning beyond scale. Cartography is already treated as geo-referenced information, and as such its visualization is not only variable, multiple but simultaneously specific as it can be adjusted according to the meaning it exemplifies. Nonetheless, it seems that landscape analysis, as a tool for planning, has not yet coped with the abovementioned potential: The scale of work of landscape analysis generally seeks analogies with the scale to which regional planning refers to: The analysis of the values that have been considered for the Landscape Catalogue of Lerida has been elaborated and finally represented in a 50.000 scale, a typical scale of regional planning in Catalonia. Nonetheless, this task has resulted impossible for the mapping of the aesthetic values: zooming in a 5.000 scale has been imperative, and occasionally a wider than 50.000 scale of work has been necessary in order to contextualize the values.

Fig. 6: Frontiers are included in the Landscape Catalogue of Girona as singular elements of aesthetic value  
 Map 6.3.: Aesthetic Values: Singularities: Landscape Catalogue of Girona region, CRPPb, 2010



[12] I am not interested in form as a frozen image: Although neither the image of the form nor of the materiality is stable and unalterable, still in order to activate process we have to design the form of the environment in a specific spatio-temporal context. Through form, processes and their interaction and most importantly for atmosphere, their embodied perception is designed.

[13] Section of Tractatus Logico-Philosophicus of Ludwig Wittgenstein (1921) that inspired the definition of pattern in this thesis:  
 4.2211 Even if the world is infinitely complex, so that every fact consists of infinitely many states of affairs and every state of affairs is composed of infinitely many objects, there would still have to be objects and states of affairs.  
 2.0271 Objects are what is unalterable and subsistent; their configuration is what is changing and unstable.  
 2.0272 The configuration of objects produces states of affairs.  
 2.03 In a state of affairs objects fit into one another like the links of a chain.  
 2.031 In a state of affairs objects stand in a determinate relation to one another.  
 2.032 The determinate way in which objects are connected in a state of affairs is the structure of the state of affairs.  
 2.033 Form is the possibility of structure.

[14] Although processes might not always be present or visible, their effects on the land, its form and its materiality, remain legible.

[15] Maria Goula's insights on the revision of the concept of unit and that of frontiers reflect an increasing interest in the discipline towards the need for the revision of the idea of the unit:  
*La unidad, como su propio nombre indica, se ha asociado, por un lado, con lo unitario como condición base, a raíz de lo cual se vinculó con las nociones de identidad nacional, regional o local, y por otro lado, con la mirada desde un centro dominante. As estas dos cualidades de la unidad deberíamos atribuir su repentina desacreditación durante los últimos decenios de influencia del pensamiento crítico postmoderno.*  
 (Goula, 2007: 32-33)....*La revisión de la unidad recoge de manera tangencial una posición crítica hacia el contexto....Los argumentos propios del paisaje pueden ampliar y dar nuevos significados al termino, sobre todo desde una nueva noción de los límites tanto fenomenológica como ecológica. Sea como fuere, parece útil y, al mismo tiempo, actual, investigar esta coyuntura y volver a mirar la unidad desde el convencimiento de la oportunidad metodológica que ofrece la frontera.* (Goula, 2007: 34)

*Las fronteras interesan en esta tesis debido a que consideran unos paisajes intermedios, es decir, unas entidades espaciales con ciertas características morfológicas que se podrían calificar de mixtas y funcionalmente interdependientes. Las fronteras interesan porque son áreas con identidad dinámica y a veces compleja, resultado de la superposición y alteración de la densidad, por ejemplo, o de la intensidad de las características que definen los sistemas y las unidades que se producen en su entorno próximo. Son lugares de transición, y a la vez, de intercambio, que últimamente están altamente considerados por sus valores ecológicos, sobre todo en términos de biodiversidad. Además parece que las fronteras formarán cada vez mas el punto crítico de interacciones entre hábitats humanizados y naturales. Por ejemplo, la palabra ecotono, que en los últimos años ha irrumpido con fuerza en el vocabulario proyectual, es, desde el punto de vista ecológico, una de las versiones que podría referirse a frontera.* (Goula, 2007: 255)....*Las fronteras, en definitiva, son expresiones de paisaje ordinario a gran escala, áreas de espacios de complejidad de valor paisajístico.* (Goula, 2007: 281)

[16] The concept of complexity makes reference to a morphological analysis of the landscape and does not interfere with the field of complex adaptive systems theory.

An alternative to this approach might try to trace the limits of the independency of landscape analysis scale from the scale of regional planning, for it to be able to cope with the landscape specificity. It is true that landscape architecture as a field, has traditionally defended a multi scale approach both to analysis and design: multi scale approach is one of the distinctive traits of the discipline, almost the first of the lessons received when entering a program or masters in Landscape Architecture. Nonetheless, the approach to scale has been traditionally essentially sequential: from "big" to "small", or vice versa. An interesting question arises: What alternatives might result through the cartographic interpretation of atmosphere that would intrinsically include two traditionally detached scales: this of the subject and that of the territory?

## Patterns

The concept of pattern, crossing in the field of landscape architecture influences from the study of the urban (Alexander 1977) and from ecology (Forman 1995), generally places the emphasis to the distributional structure of relations between landscape elements. The idea is increasingly gaining ground as an instrument for the characterization of the landscape (Bell 2004, CRPPb 2008, 2010), responding to the need of affronting its spatial complexity.

It is interesting to understand how the definition of pattern might be extended, or even deformed, when embodied experience is considered as another element participant in this structure: this thesis is interested in the expansion of the definition seeking to explore possible relationships between pattern, embodied perception and a revised definition of form <sup>12</sup>. Inspired from the proposal of Ludwig Wittgenstein <sup>13</sup> on form as the possibility of structure, and structure as the determine way in which objects of an endlessly changing configuration, although in themselves unalterable and subsistent, are inter-connected in a specific state of affairs, pattern is defined as a system of relations between processes <sup>14</sup>, natural or/and cultural, interconnected in a structure of a specific bodily experienced form. Thus defined, patterns incorporate their embodied experience as an equally important agent as the elements, the processes and their distributional patterns are. What might be the effect of the crossing of the concept with that of atmosphere in terms of the attribution of importance to a global structure when emphasis is placed not so this structure as "global" to be perceived through movement but rather to its perception from specific points of view, potentially thus redefining the relation between "local" parts and their "global" configuration?

## Frontiers

The importance of frontiers in landscape analysis as areas of dense meaning has already being widely acknowledged (Goula 2007) as also their influence in the re-conceptualization of the idea of the unit (Goula 2007) <sup>15</sup>, considered the traditional tool for landscape characterization, inherent in the definition of landscape as "a portion of land which the eye can comprehend in one glance". (Council of Europe 2000).

This thesis explores the following question: What does the analysis of the embodied experience of the landscape from the point of view of the atmosphere might offer over more to the conceptualization of frontiers as points of considerable ecological and/or morphological complexity <sup>16</sup>? And on the other hand, how this contribution can further update the conceptualization of the "unit"?

Fig. 7: The search of multiple spatial scales of representation: temporality

Val Britton, *Where could you have been, or where could i?*, 2006

Ink, pencil, gouache, collage and cut-out on paper 80" x 106"

Available at the personal web-page of the artist : <http://valbritton.com/work>



*These mixed media abstractions map not only physical locations but also psychological and emotional spaces. I work in an explorative mode, employing the abstract space of the map to create a pliable structure for intuition, improvisation and chance. Connecting paper fragments together through collage, drawing, painting, staining, printing, stitching and cutting paper have become my methods for navigating the blurry terrain of memory and imagination.*

*Using paper shapes as collage material and cutting into the ground paper of a work brings the drawings into a sculptural space that hovers between two- and three-dimensions. I am exploring this sculptural potential through site-specific installations of paper and string. Recently, using recycled materials in an effort to reduce my environmental impact has informed my work in unexpected ways, imbuing it with unknown histories.* Val Britton.

My experience has powered the hypothesis that atmosphere is a concept closely related with the above issues and concepts and can provide new paths worthy of investigation for the identification, characterization and evaluation of the landscape in large scale environments, through which a differentiated, yet complementary approach to the "official" methodologies of landscape analysis, might be made possible.

## Hypotheses

This thesis parts from a series of points of departure. Some of them are general, related with the desired contribution of this thesis in the wider spectrum of landscape analysis as a field while others introduce the specificity of the subject of this research:

This thesis proposes that the investigation of variables that perhaps exceed those "objective" or traditionally "parameterized" values can provide access to alternative and innovative characterizations of the qualities of landscape.

Linked to this first and fundamental hypothesis, the second one, more specific, is that the embodied experience is a variable, traditionally belonging to these considered "intangible" values, able of offering with new conceptualizations for the characterization of the landscape in large scale environments. The embodied experience displaces the accent from visual perception, where it has been traditionally placed, re-equilibrating the importance to the holistic experience of the body.

The third one, introducing the specificity of this thesis, is that the most operative manner to introduce aspects of the embodied experience into large scale analysis and design is through cartography. This thesis takes in cartography as an instrument through which we gain access to interpretation, aware that this access can only be partial and selective.

The fourth one, also specific, is that the concept atmosphere is a useful filter for the conceptualization of the embodied with a double function: first, as a mark that frames the embodied to a very specific act of perception and secondly as a lens in order to study in depth the configuration of this process.

The fifth one is that this deeper understanding in the structural hues of atmosphere, in the perceptual and cognitive processes that underlie the levels of intelligibility of the environment to which atmosphere refers to, provides with an initial point of departure for its cartography: The working hypothesis is that insofar as the word "atmosphere" denotes an immediate and intuitive response to environment it is important to ask how far its cartographic "interpretation" can work not only at a level of a reflexive understanding of this response (or its effects to our emotional sensibility), but essentially to a more generic understanding of the environment in terms of the factors that activate it.

Fig. 8: The search of multiple spatial scales of representation

Josh Dorman, *Boston Harbor*, Ink acrylique paper on panel 19x27"

Available at the personal web-page of the artist: <http://www.joshdorman.net/gallery/paintings>



*I find the same family of forms in images of the solar system, botany, airplane engineering, cattle disease, microbiology... To create a place on the canvas where these images can live together seems natural. The combination of excavating imagery from topographic maps and imposing found images allows me to jump in space, scale, and meaning hundreds of times within a few square inches. Scale is spiritual for me—fractal forms echo infinitely, from the microscopic to the cosmic. Josh Dorman.*

<http://www.joshdorman.net/about/artist-statement>

## Objectives

The first objective is related with the theoretical investigation of the existing references of atmosphere: our aim is not to trace all the definitions that the word atmosphere has acquired in the theoretical discourse, but to explore those attributes of atmosphere that define its specificity as a spatial property. On the other hand, the revision of existing cartographic approaches and landscape analysis methodologies is intended to identify the points where the contribution of this thesis might result significant.

The second objective aims to offer a passage from the theory to the practice, through cartography: The goal is to investigate how the approach to some of the inter-subjective characteristics that define the perception of atmosphere might lead to a working definition that enhances the interpretation of the concept through cartography.

The third one is related more concretely with the cartographical interpretation of atmosphere: the search for shared structural patterns of perception that helps define atmosphere in terms of the properties of the environment that potentially activate it, is accorded with the objective to interpret atmosphere in terms of its causes and not to represent its effects to our emotional sensibility.

The fourth objective has to do with the particular morphology of the landscapes of the selected case studies: through cartography the atmospheric qualities of the selected rural, Mediterranean landscapes will be explored, offering some selective re-conceptions for the "aesthetic" dimension of the "plain".

The fifth objective is related with the aim of this thesis to trace an initial process of mapping atmosphere in large scale environments. The cartography of the embodied sense of the landscape is interpreted in this scale, a scale into which atmosphere, as the embodied in general, has been traditionally considered as "intangible" and thus as non representable through cartography. This approach to scale will consider the possibilities opened through an inter-scale approach that does not linger neither towards the scale of the territory nor towards the scale of the body, but embraces both.

Last but not least, the sixth objective aims to the investigation of the possible influence of atmosphere towards the conceptualization of cartography not merely as a descriptive analogy between values and geographical space, but as an interpretative analogy for the specificity of the landscape. The potentialities of a synthetic cartographic approach to atmosphere will be thus explored, including the relation of atmosphere with concepts as pattern, frontier and unit as concepts intrinsic of landscape analysis as a field, representing insights that affront the morphological complexity of the landscape.

## Methodological aspects and structure

The thesis is developed based on a scheme of two interweaving inputs: the first one is related with a theoretical inquiry, while the second one is dedicated in the development of a series of cartographic essays. This thesis opts for cartography as an instrument that filters, controls, exemplifies and inspires the theoretical arguments. The linkage thus between theory and cartography is considered of major importance and it is reflected in its structure:

Fig. 9:  
Localization of the two case studies in the territory of Catalonia



The **first** part of the thesis hosts the theoretical inquiry, initially related with the existing theoretical references to atmosphere coming from the field of architecture and philosophy. The insight is selective and especially focused in the references that provide hues on the spatial properties of atmosphere. On the other hand, this theoretical inquiry has been expanded to a selective review of references coming from cognitive science and environmental psychology, in the search for shared inter-subjective patterns of perception that might help to define a working definition of atmosphere as a vehicle for its cartographic interpretation.

The review of existing approaches to the cartography of atmosphere has been a more difficult task: No methodology on how the atmosphere of a landscape, natural or designed, can be identified through cartography exists. We could mention examples of three-dimensional representations of the atmospheric effects pursued by design proposals of a bounded scale, or even seek parallel references from the field of art. Still, experiments on cartographies of atmosphere are absolutely missing from the map of the "official" cartographies of landscape analysis. For this reason, the investigation turns to cartographical approaches to concepts tangent to atmosphere coming mainly from the field of landscape analysis, urban planning and environmental psychology.

The majority of the illustrative figures in this part of this thesis have been selected intuitively from the field of the conceptualization of maps as art, a relatively new tendency that gains an increasing interest among the discipline of landscape architecture. Their function is to visually exemplify and accompany the theoretical arguments.

The **second** part of the thesis hosts the series of cartographical essays, developed in two differentiated case studies although both rural and plain landscapes: the first situated in the region of Lerida, coinciding with one of the landscape units that have been delimited in the Landscape Catalogue of the Lerida region, is a dry-land agricultural, essentially ordinary landscape under transformation due to the implementation of a new irrigation channel that crosses its territory. The second one is situated in the region of Barcelona, forming part of the agricultural park of the Llobregat River, one of the last agricultural landscapes remaining in the metropolitan area of the city of Barcelona whose cultural value is widely acknowledged.

I share a close relation with both landscapes. My knowledge of the first territory emerges from my participation as a researcher in the redaction of the Landscape Catalogue of Lerida. My initial approach to this landscape has been through the eyes of a that was affronting landscape analysis not as a new challenge but as newly introduced as official instrument for regional planning. The relation is far more intimate with the second territory, as it forms part of my extended "neighborhood": my personal residence is situated in its outskirts. The contact with this second landscape is continuous and feeds a constant review of the thoughts related with its atmospheres. The cartographic essays aim at tracing a path for the mapping of atmosphere that can be possibly and easily transposable to other landscapes and potentially shared with other researchers, using the same tools and also restrictions of most landscape analysis studies. For this reason, the cartographic essays assume GIS technologies as a mapping tool. They also assume the basing on already available cartographic databases, which are later processed as to be adjusted to the requirements of my investigation.

Fig. 10, 11: Textures of the first case study: landscape unit of Secans de Belianes i d'Ondara, CRPPb 2007



The challenge is placed initially in the cartography of the landscape unit of Lerida on the possibility of mapping atmosphere in terms of its causes and not to represent its effects. The cartographic essays propose a cartographic interpretation of these causes, defined as atmosphere activators, pretending to translate the levels of intelligibility of the environment that structure atmosphere, as previously defined through the theoretical inquiry, into localizable properties of the environment. The resulting essays of the cartography of atmosphere in the landscape unit of Lerida Region already sketch some first reflections on the relation of atmosphere with the concept of the pattern, pointing towards the configuration of atmospheres in form of overlapping spatial patterns.

The cartographic essays are developed towards a specific approach to morphological complexity and its cartographic interpretation based mainly on the evaluation of the quality of the visual information perceived in the field. In the cartography of the complexity experimented in the landscape the methodology followed is structurally different, as it proposes a step back into the cartographic analysis of the atmospheres as conducted so far: If up to this point the cartography has been based essentially to a synthetic crossing between mainly discreet morphological elements and attributes of the landscape, now the investigation is directed to the proposal of a method that could serve as an indicator of differentiated patterns of atmosphere before passing on to the morphological analysis.

The incorporated photos and snapshots from google earth of this landscape unit pretend to help the visualization of certain features of this landscape, while representing one of the most commonly used instrument of approaching the "reality" of the landscape during the process of landscape analysis. Google earth, or streetview are increasingly becoming essential and undeniable tools for the control but also for the inspiration of landscape analysis nowadays, absolutely necessary especially in large scale environments, partially filling in the gap provoked by the difficulty of a direct or continuous access to the field.

The cartographic essays redacted for the landscape unit of the Lerida Region should be considered as an "open ended" process. On the contrary, the methodology proposed aims in suggesting arguments through which specific contributions in landscape analysis are implied.

The passage to the second case study does not pretend to thoroughly test the transposition of the methodology followed in the first case study to a different landscape. In a complementary manner, what it is pretended is to deepen into the potentials of the investigation of the cartographic, but also theoretical interpretation of atmosphere that at this stage finds specific resonances with the concepts of frontier and units. The change of point of view in the second case study has engaged me with overcoming the initially imposed restriction of the software and scale. I have felt the need of incorporating a limited series of collages, in form of personal sketches of interpretation of the atmosphere along with a series of photos that intent to transmit this specific quality of this landscape.

The evaluations of the cartographical essays, presented in varied scales according to their significance for the construction of the arguments, are described in form of **arguments and considerations that do not pretend to function as final conclusions**. As abovementioned, this thesis marks a specific stage of an on-going process. **These arguments are incorporated along the development of the cartographical essays**, and not in a separate chapter, as their proximity to the maps has been considered as methodologically significant.

Fig. 12, 13: Textures of the second case study: agricultural park of Baix Llobregat



Last but not least, the end of each section and chapter on the other hand is accompanied by a diagram, or by a synthetic description of the arguments previously developed. The diagrams aim to spatially synthesize, resume and visually exemplify the pattern of relations between the arguments and references, developed and consulted in each section, and thus help the reader follow the argumentation and understand also the relation between sections.

## Chapters contents

**Chapter 1** is divided in two sections:

The first one hosts the research of existing references focusing in the existing theoretical context on atmosphere, tracing its roots to the phenomenological approach to perception and its contemporary reactivation. The majority of references to atmosphere are coming mainly from the field of architecture, with the perhaps most known examples of Norberg Schulz (1980) and Peter Zumthor (2006), but also from the field of the philosophy of aesthetics as represented by Gernot Böhme (1993a, 1993b, 2013). Among the detected common points, atmosphere defined as first impression, or even as a kind of prediction, or as emotive reaction towards the environment directly connected with the world of feelings, are some of the most widely accepted hypothesis on atmosphere.

The second one is dedicated in the selective revision of existing examples of approaching concepts tangent to atmosphere, related with existing methods of "localizing" the intangible, mainly coming from the field of urban geography and environmental psychology: the overview of the existing spatial analysis methods focus on the intangible mainly interpreted through the visual, or its complementary senses, or as the localization of the feelings attached to place. The review is complemented by an insight to the process proposed for the identification and characterization of landscape character in the landscape methodologies that have emerged for the implementation of the European Landscape Convention.

The overview of both theoretical references on atmosphere and cartographic practice in landscape analysis not only provides me with some structural points of departure for the theoretical conceptualization of atmosphere but also helped me detect where my contribution in the research of atmosphere might result suggestive for the re-conceptualization of the embodied experience and its cartography in landscape analysis: A considerable effort is commonly being invested in trying to provide a definition of the concept in terms of its effects in our perception. Nonetheless, and independently from the fact that most definitions seem equally valid, they all refer to impressions of atmosphere, while a considerable gap can be detected when it comes down to its definition in terms of its causes.

**Chapter 2** hosts the development of the second objective: If we are to accept that atmosphere is not at least thoroughly subjective we must search for the variables that define its potential objectivity. As it will be proposed, it is precisely the opening up of the theoretical frame towards fields that investigate perception in a systematic manner, as cognitive science or environmental psychology do. These references allow to interpret the existing definitions of atmosphere in terms of a series of structural aspects of embodied experience which are related with the experience of atmosphere that can be potentially "translated" in terms of the objective properties of the environment that actually activate it at first place.

Fig. 14:  
Yves Brunier: Collages/atmospheres  
S: Auricoste I, 1996, *Yves Brunier*, Basel: Birkhauser



**Chapter 3** includes the cartographical interpretations of atmosphere in the two case studies and the derived arguments and considerations. Both case studies share the criteria defined by the objectives of scale, tool, and morphological properties of the selected landscapes as agricultural and plain. If in the first case study the attention is placed on the exploration of the cartographical interpretation of the objective properties of the environment that activate atmosphere, of the interaction of atmosphere with the concept of pattern and with its potential influence to an inter- scale approach, in the second case study the elaborated cartographies are focusing, enhanced by the analysis towards the investigation of the relation of atmosphere with the concept of frontier and unit (intentionally referred to as "interiors").

### Some limitations

The cartographic explorations of atmosphere in the second case study also point towards some of the limitations of the methodology proposed. Further analysis would demand the structural change of the practical conditions imposed initially in the methodology, related with the tool, the scale of the work and the necessary databases.

This thesis opts for a series of synthetic morphological interpretations of atmosphere. Among the available databases, the cartographical process shows a special interest towards the habitats database, as a means of introducing the discourse with potential linkages between atmospheric qualities derived by the morphological configuration of the habitats and the ecological perspective. Nonetheless, the potential of the interrelation of atmosphere with the processes, ecological and other, present in the landscape is not examined thoroughly. Although the selection of the habitats database, as one of the most important inputs for the elaboration of the cartographical essays, provides a point of departure at least for the analysis of a possible consideration of the linkage of experience with the ecological processes in large scale environments, this objective has not been examined in depth.

At this point the question might arise on if the methodology here proposed could be transposed into environments of a different scale, and what is more, if it can be used as an instrument of analysis of landscape design or equally as a tool for the process of design. The potential of this possibility is one that has interested me intensively. The investigation on the cartography of atmosphere in the scale of the territory has been parallel to the insight into the construction of atmosphere through design, pointing towards a specific relation between construction language and spatial embodied experience as the main activator for atmosphere. A series of diagrams that visualize the case studies I have been analyzing during these last years are already included in this thesis (p.54, 56, 60, 62).

Nonetheless, these paths exceed the purposes of this thesis and constitute the following steps of the investigation: this thesis has mainly incorporated my interest in atmosphere for landscape analysis from a point a view more close to planning and landscape assessment and it is precisely where I hope that my investigation can contribute in order to bridge the detected "gaps" both for the theoretical approach and for the application of the concept of atmosphere in the practice of landscape architecture as a selective approach to the embodied experience of the landscape<sup>17</sup>.

**[17]** There is another type of limitations:

The first has to do with time: this thesis shouldn't be conceived as a finalized product: it is an on-going process. I have felt that, at this point, the investigation has reached sufficient degrees of "maturity" to be shared with the academy, and that it at least formulates a series of arguments worthy to be discussed collectively.  
The second one has to do with language: I have decided to write this thesis in english, opting for the criterion of eventually opening up this investigation to a wider context. I hope that this decision will not affect drastically the communication of the arguments.

# STRUCTURE

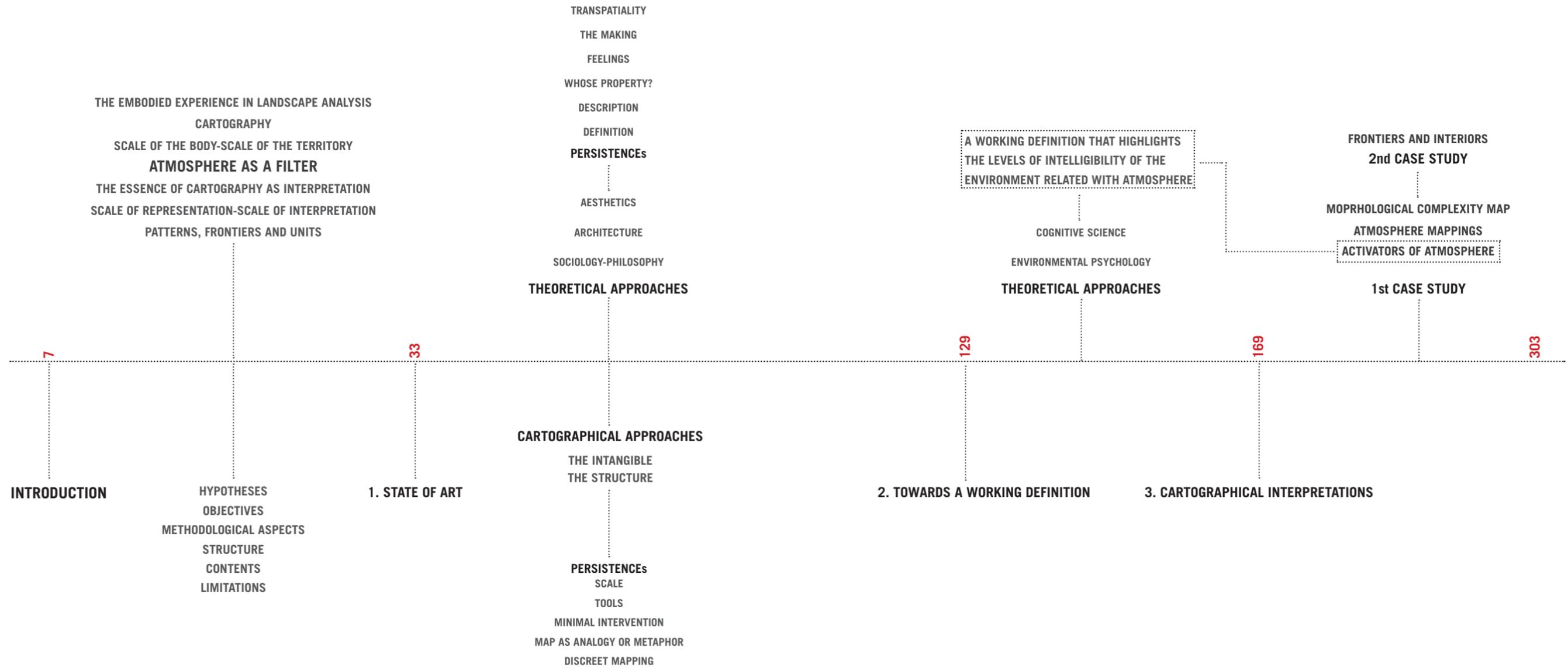


Fig. 15:

Caspar David Friedrich, *the monk by the sea*, 1809  
S: Beat Wyss, 2008, "The whispering Zeitgeist, Caspar David Friedrich", *Tate Etc.*, issue 14, Autumn 2008.  
Available at <http://www.tate.org.uk/context-comment/articles/whispering-zeitgeist>

*The concept of atmosphere troubles architectural discourse-  
haunting those that try to escape it and eluding those that chase it.*  
**Wigley 1998.**



## 1.1. Theoretical Approaches

There are words whose definition can better be imagined as a pattern of oscillation or undulation, tangent to, or enveloping the more exact shape of things. Raymond Williams (1966, 1976) has shown that the range of variation of meaning associated with some such words holds greater interest and can reveal more about patterns of thought and understanding than any attempt to arrive at a precise definition. "Atmosphere" is such a word. At an elementary level it is associated with the properties of environment that directly bear on the possibility of life and on the comfort of organisms; by metaphorical projection it also describes the resonance between the properties of environment and patterns of feeling or emotion. Atmosphere, in this metaphorically extended sense, does not arise by design only. It is powerfully present in ekistic units evolved over time but also in natural landscapes. Either in its literal or metaphorical meaning, it has always been somehow connected with "mysterious" phenomena, as outcome of "signs" of inexplicable forces.

The intent for legitimizing its literal meaning hasn't been less complicated than its metaphorical one. As Susan May (2003) explains: *Beginning from Aristotle's Meteorologica, written around 350 BC, that intended to provide a logical explanation to anything that fell from, or was suspended in, the sky, as its denomination suggests (coming from the greek meteoron), it wasn't until the 19th century that meteorology had become an increasingly valid and popular branch of science. With the work of Luke Howard, the systematisation of observable phenomena meant that rather than relying on geologists' detailed and complex atmospheric measurements, anyone could comprehend the processes of nature. Meteorology inspired the work of prominent figures as Johann Wolfgang von Goethe, Caspar David Friedrich, J.M.W. Turner and John Constable. In particular, Turner's study of Goethe's colour theory and Howard's classifications, embodied in depictions of furious rainstorms and dazzling manifestations of sunlight, produced some of the most extraordinary meteorological studies of the day.* (May 2003:2)

Through meteorology<sup>18</sup>, atmosphere is decoded to mathematics: Science put its veil of protection and its seal of certificate of truthiness in atmosphere. What is more, as a new finding of "science", has highly influenced the art of painting. J.M.W Turner didn't doubt of exclaim: *Atmosphere is my style...*(MW Turner to John Ruskin in 1844). Mystery transformed to science and science influencing art.

**[18]** Aristotle's *Meteorologica*,..., written around 350 BC, first outlined the philosophy of 'meteorology', so called because it was concerned with anything that fell from, or was suspended in, the sky. In this treatise, the knowledge of atmospheric phenomena was consigned to four primary bodies: fire, air, water, earth. Despite the fact that most of Aristotle's observations were erroneous, his work remained influential for almost two thousand years. However, it was not until the end of the sixteenth century that meteorology started to gain legitimacy as a natural science. The invention of instruments designed to measure the properties of the atmosphere (temperature, moisture, air pressure) enabled scholars to categorise and predict changes in the weather. **Mysterious phenomena such as rainbows, long held as signs from God, were decoded by mathematicians using simple geometric calculations.**

By the beginning of the nineteenth century, meteorology had become an increasingly valid and popular branch of science. In 1803, the English naturalist and amateur meteorologist Luke Howard was the first to identify and classify scientifically the different types of cloud formations and to predict an outcome signified by their form and structure. The systematisation of observable phenomena meant that rather than relying on geologists' detailed and complex atmospheric measurements, anyone could comprehend the processes of nature.

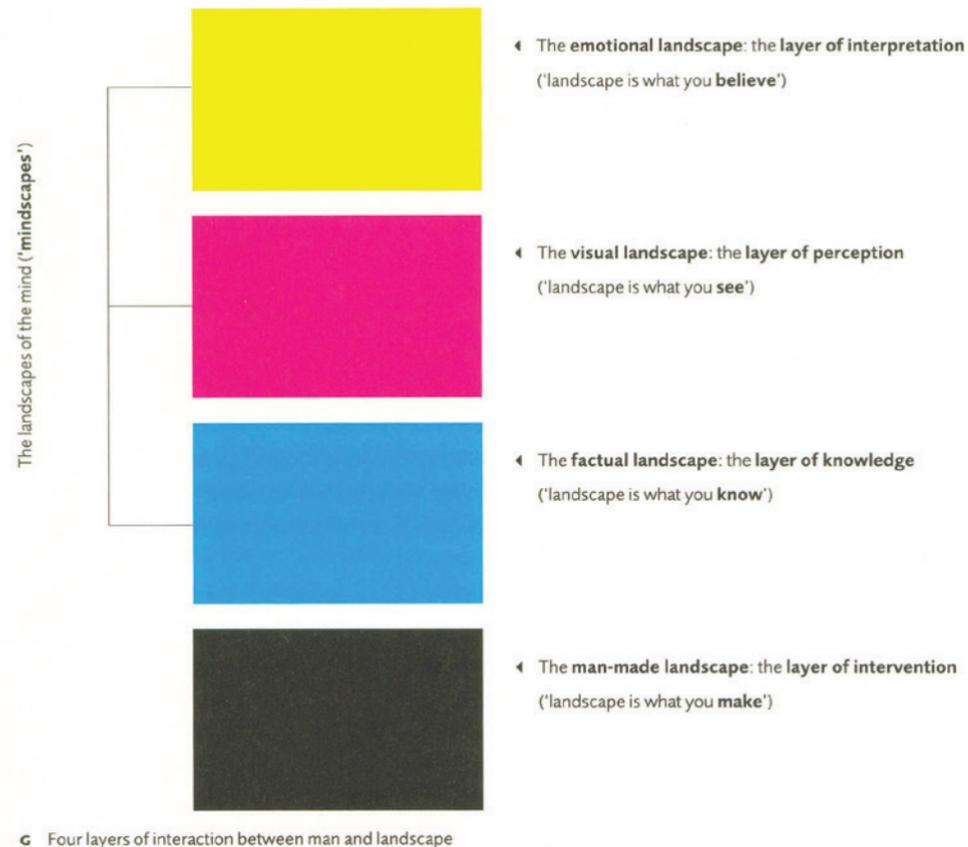
Ranked in four basic groups stratus ('spread' for sheets of clouds), cumulus ('heap' for fluffy clouds), cirrus ('curl' for wispy clouds) and nimbus (for rain clouds) –Howard's taxonomy struck a chord with the German Romantic artist and scholar Johann Wolfgang von Goethe. Inspired by the naturalist's system, Goethe urged others to adopt a more scientific approach in their studies of nature, a notion that was unacceptable to some artists such as Caspar David Friedrich, whose work ventured to embody the spirit of pure essence, and not what he saw as abstract, fixed concepts of nature.

Nevertheless, the effects of Howard's analysis would later be seen in the work of J.M.W. Turner and John Constable. In particular, Turner's study of Goethe's colour theory and Howard's classifications, embodied in depictions of furious rainstorms and dazzling manifestations of sunlight, produced some of the most extraordinary meteorological studies of the day.

May 2013:1-2, (bold mine)

Fig. 16: The four levels of interaction with the landscape, according to Appleton.

S: Appleton Jay, 1975, *The Experience of Landscape*, London & New York: Wiley



This sequence has not resulted so fluent for the metaphorical meaning of atmosphere, in the context of architectural discourse at least, where theories seem to be still contrasted between those that search the major affinity to mathematics and those engaged with the mystery of everyday experience.

These represent the *two contrasting models that have served to configure our possible experience of architecture. The first being the imposition of a geometric idealization of space that afforded all objects a location (measurable, fixed, controllable), whereby location becomes an “external property, projected onto and defined via a system of coordinates”- the geometrical predetermination of ontology’. The second, being the phenomenological perspective that develops notions of space and time as directly derived from experience- with all its (internalized) quotidian practices.*(Haptmann, Neidich 2010:24) <sup>19</sup>.

The metaphorical meaning of atmosphere is clearly influenced by the second. As Julianne Preston (2008) comments: *it seems no coincidence that the dictionary definition of the word ‘atmosphere’ expanded in the late 18th century – the Romantic era in England – from that pertaining solely to planetary gases to the ‘sense of surrounding influence, mental or moral environment’*<sup>20</sup>. (Preston 2008:5)

Although the various existing discourses share as many structural differences as common points of view, it is true that they approach atmosphere through an essentially phenomenological perspective that is through embodied experience and certainly not through anything close to a measurable, fixed or controllable property.

[19] As Deborah Hauptmann and Waren Neidich, explain in *Cognitive Architecture: From Bio-politics to Noo-politics ; Architecture & Mind in the Age of Communication and Information*, 010 Publishers (p. 23), referring to the article of Lucas Ebensperger, Suparna Choudhury and Jan Slaby, “Designing the Lifeworld: Selfhood and Architecture from a Critical Neuroscience Perspective”

[20] 1. [www.etymonline.com](http://www.etymonline.com). Atmosphere: 1638, from Mod.L. *atmosphæra*(1638), from Gk. *Atmos* ‘vapor’ + *sphæra* ‘sphere’. First used in Eng. in connection with the Moon, which, as it turns out, doesn’t have one. Figurative sense of ‘surrounding influence, mental or moral environment’ is 1797. (Preston 2008:5)

## The phenomenological roots to atmosphere

There are two figures coming from the phenomenological approach to perception that refer to atmosphere as a concept linking perception to the "total" phenomenon of embodied experience. These are: Hermann Schmitz (Schmitz, Müllan, Slaby 2011) and Mikel Dufrenne (1953).

Schmitz's philosophy *removes-at least partially-the insecure status of atmospheres against the background of the subject/object dichotomy. Schmitz introduces atmospheres phenomenologically, that is, not through definition but through reference to everyday experiences such as those indicated above, the experience of a strained atmosphere in a room, of an oppressive thundery atmosphere, or of the serene atmosphere of a garden. The legitimacy of this use of atmospheres derives for Schmitz on the one hand from the phenomenological method which recognizes what is indisputably given in experience as real and on the other hand from the context of his philosophy of the body.* (Böhme 2006:8)

We pull the thread of possibilities for further investigation activated by Schmitz' philosophy of the body as concreted in the recently translated introduction into English of the article: Emotions outside the box —the new phenomenology of feeling and corporeality<sup>21</sup>. As described in the introductory text, *Schmitz outlines and defends a non-mentalistic view of emotions as phenomena in interpersonal<sup>22</sup> space in conjunction with a theory of the felt body's constitutive involvement in human experience.* (Schmitz, Müllan, Slaby 2011:1).

Atmosphere, following Schmitz, is a phenomenon. And as such is not "the thing itself", but rather things as they appear from a particular (historical, cultural, local, etc.) conceptual framework. This appearance is perceived in form of atmospheres, which are nothing less than emotions poured out spatially<sup>23</sup>.

It is quite clear that the absolute interest of Schmitz was focused on the recovery of the emotions<sup>24</sup> as a vehicle of meaning and thought while atmosphere is their spatial expression.

The spatial character of atmospheres has a very particular definition: although they occupy space, this is a *surfaceless* space, impossible to map or trace its limits, fact that transforms atmosphere to a *not localizable* (Böhme 2006) entity. Nonetheless, it is perceived through our affective involvement:

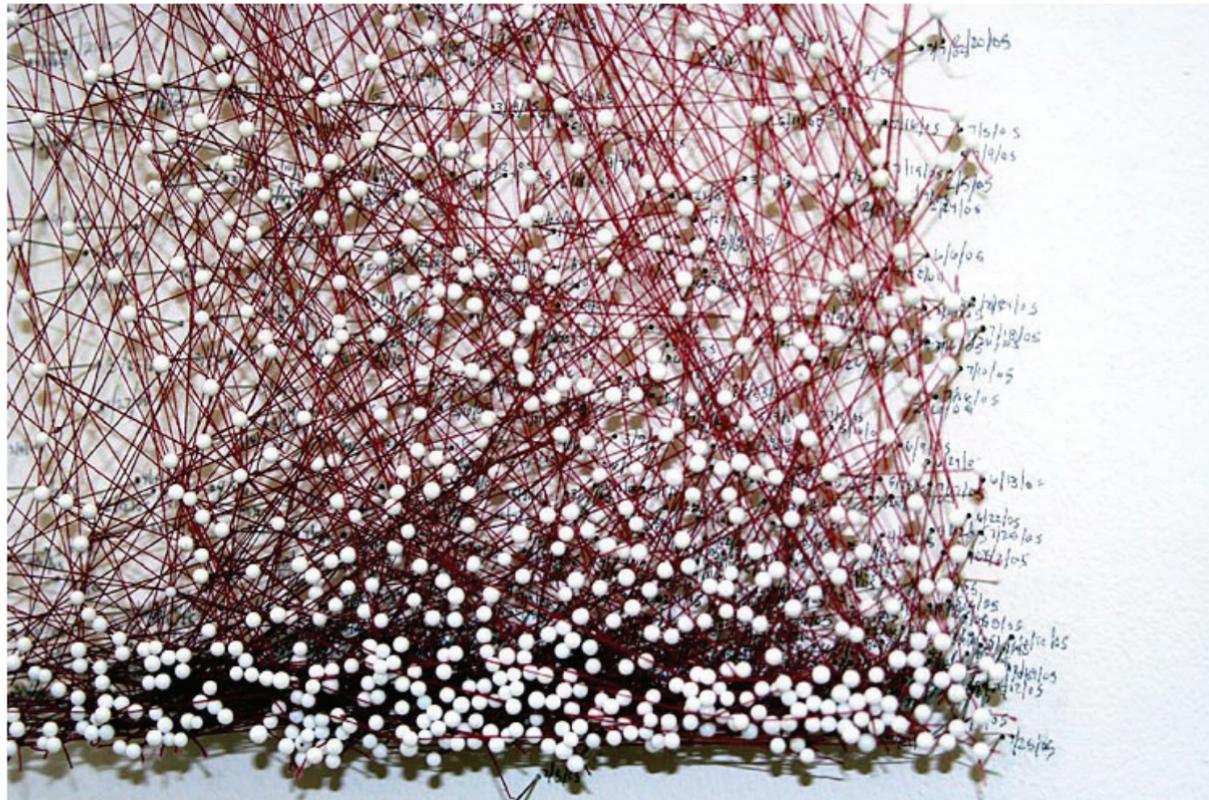
[21] Translated by Rudolf Owen Müllan and Jan Slaby, offering a short introduction to Schmitz's philosophy, an overview covering some central issues of his theory developed in his massive System of Philosophy, published in German in a series of volumes between 1964 and 1980.

[22] *On the other hand, however, it is incorrect to say that emotions are always private affairs, i.e. that they are only accessible to one individual. Just as well, and maybe not less often, there are collectively moving emotions, e.g. the boundless courage or panic of groups as momentary incidents or love as the atmosphere of a situation with shared responsibility of a couple or a larger group of people. The latter is an emotion that is sustained and managed by loving in the form of intransferable facts that are subjective for each individual.* (Schmitz, Müllan, Slaby 2011:18).

[23] *Emotions are atmospheres poured out spatially. An atmosphere in the sense intended here is the complete occupation of a surfaceless space in the region of experienced presence. This surfaceless space, apart from emotions, can also be occupied by the weather experienced as enveloping you or by (e.g. festive, pregnant or calm) silence. There are also atmospheres that do not so completely occupy the space of experienced presence: the holistic corporeal stirrings that strike you at once without being segmented into individual islands of corporeality, for instance, in the morning after waking up, when you feel languid and weak and are urged, with the help of a few cups of coffee, to boost this holistic condition. Such merely corporeal atmospheres are locationally circumscribed. This stands in contrast to the way in which emotions are (or have a claim to being) unboundedly poured out, as I will shortly clarify. Objections to the spatiality of emotions of the sort that they are not three-dimensional bodies, surfaces or lines, that they are not round or square, that they could not possibly be located at this position or that distance, are based on the false presumption of an space containing surfaces. However, the space of emotions is as surfaceless as that of sound or silence, of the weather or a driving headwind (including movement without change of location), of the water plunged into and crossed by a swimmer, as that of freely unfolding gesture, of feeling something in your own body.* (Schmitz, Müllan, Slaby 2011:15)

[24] *In my opinion, emotions are atmospheres poured out spatially that move the felt (not the material) body. This change in the conception of emotion is contingent on an anthropological revolution by means of which I wish to replace the dominant trend in human self-interpretation that has loomed large in European intellectual culture since Democritus and Plato. Therefore, facts of affective involvement contain a self-consciousness prior to any identification and self-ascription, since in their plain factuality, without regard to their propositional content, the subjectivity for the conscious subject already contains a 'mine-ness' [Meinhaftigkeit], as Kurt Schneider has called it (1950, 130). This priority of self-consciousness is only possible if, in the case of affective involvement, the conscious subject is, without identification, aware of itself. Occasions of this awareness are marked by the sudden affectedness accompanying new experience, which disrupts duration [Dauer] and exposes the present, for instance, in fright, in a violent jerk, in a twitch of pain or if one, either literally or metaphorically, is dumbstruck or has the ground knocked from under one's feet.* (Schmitz, Müllan, Slaby 2011:7)

Fig. 17:  
 Katie Lewis Holland, *201 Days*  
 Pins, pencil, thread; 84"x 48"x 1.5"  
 Available at the personal web-page of the artist: <http://katiehollandlewis.com/portfolio/201-days/>



My current work traces experiences of the body through methodical systems of documentation, investigating chaos, control, accumulation and deterioration. The artificially rigid organization of my materials alludes to control— of the individual body as an institutional domain, and of irrational experience as a manageable, concrete set of events. My choice to use the body as a starting point aims to give visual form to physical sensations that are invisible to the eye and medical imaging, and only exist in the subjective realm. I collect data through daily documentation processes, and then generate numerous systems to allow the information to exist in a material form. I abstract and quantify the data in order to give authority and agency to subjective experiences. Katie Holland Lewis

<http://katiehollandlewis.com/statement/>

The key notion here is that of affective involvement: the conscious subject's constantly being affected by and involved with what goes on—an involvement both realized and mediated by corporeal feelings that in turn make manifest (disclose) goings-on in the environment. **Affective involvement is an immediate, pre-reflective, not yet articulated self-consciousness**—Schmitz calls it “self-consciousness without identification”. (Schmitz, Müllan, Slaby 2011:5, bold mine)

Schmitz directly attacks in the text the conceptual split of the subject into a material body and an immaterial soul through the idea of the felt body. In parallel with Merleau Ponty's dual valence of the notion of body distinguishing *bodiness as a combination of a physical structure (to the biological body) and an experiential structure, which corresponds to the living, moving, suffering, and enjoying body (the lived body)* (Garbarini, Adenzato, 2004:101), Schmitz's felt body...with its quite specific dynamics, rhythms of stirrings and corporeal movements, and its ways of being constantly involved in the manifold forms of holistic sensing of situations....sensing by means of the felt body is a holistic exchange of corporeal dynamics, a vibrant attunement to meaningful surroundings. Instead, sensing by means of the felt body is a holistic exchange of corporeal dynamics, a vibrant attunement to meaningful surroundings. (Schmitz, Müllan, Slaby 2011:4)

What results more interesting is that the idea of felt body permits Schmitz to think of the perception of the world not as a neutral realm of already separate entities but **as the atmospheric fields of significant situations, opportunities or quasi-corporeal forces or 'opponents' that in the first instance become manifest to the conscious person in form of the 'internally diffuse meaningfulness' of holistic corporeal impressions.** According Schmitz, articulation of significant situations into constellations of separate objects and structures is a later-coming achievement (although it is usually taken as primary by theoretical thinking). On this view, much of what the dominant systems of Western thought have jammed into a narrowly circumscribed inner realm of each individual's mind is set free to populate the shared sensible space around us: significant situations, affective atmospheres, meaningfulness, concrete possibilities. (Schmitz, Müllan, Slaby 2011:4, bold mine)

Following Schmitz, the first impression of atmosphere would lie in the perception of **atmospheric fields of significant situations with concrete possibilities, felt as 'internally diffuse meaningfulness' of holistic corporeal impressions. The articulation of significant situations into constellations of separate objects** is essentially a reflective process: Schmitz calls this an achievement, because it presupposes a conscious effort of interpretation of the atmospheric fields as composed by constellations of separate objects.

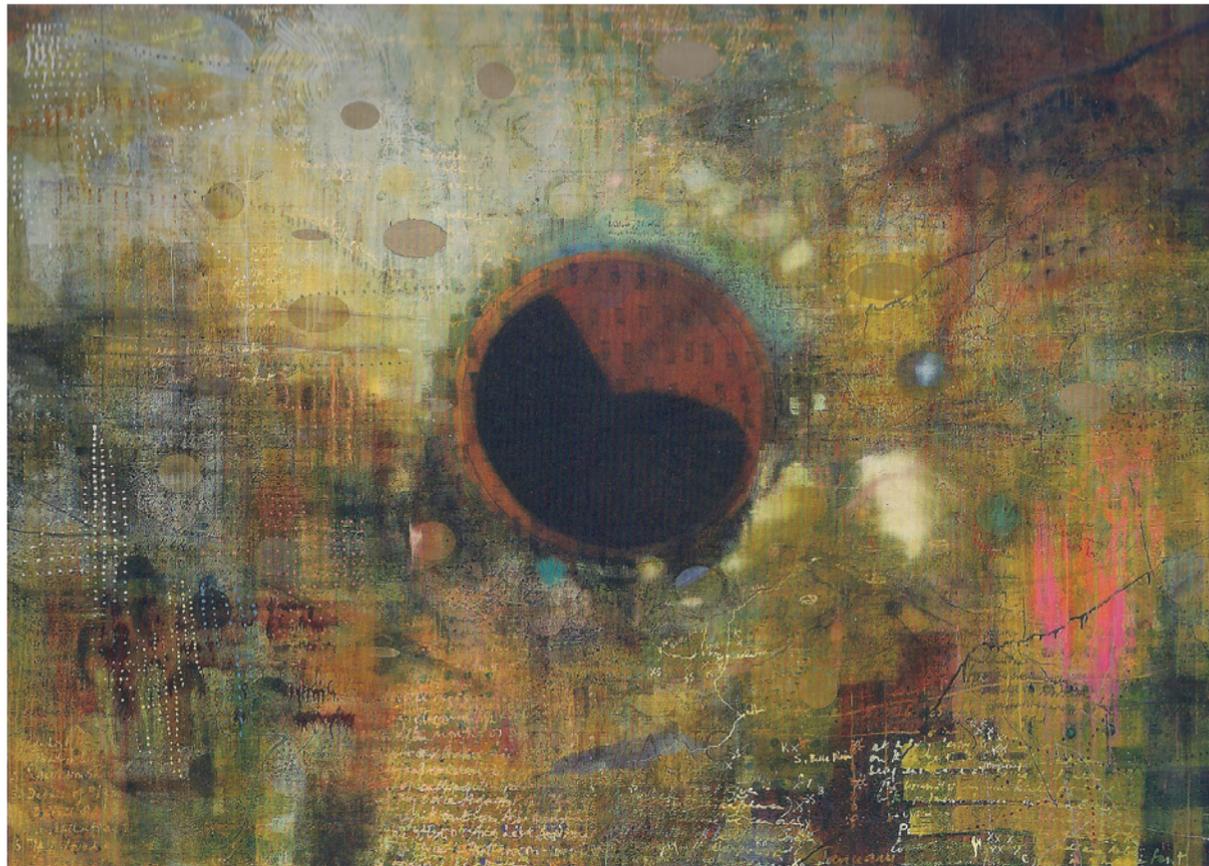
So, might we suppose that the “reading” of atmosphere is twofold? First comes this “*first holistic corporeal impression*”, and then, if the subject is willing of interpreting this first impression, would proceed with its categorization into constellations of objects?

This implies that a first level of atmosphere is automatic, instinctive while a second level would imply a conscious will. On the other hand the subject perceives automatically meaning in the environment in form of concrete possibilities. This means that the first impression is not preserved into an inner stable and self-referenced state but it intrinsically carries interpretations and the detection of concrete, neither generic nor general, possibilities of interaction with the environment.

Fig. 18:

Katie LandonMackenzie, *Interior Lowlands, Still the Restless Whispers Never Leave Me*, 1996  
Synthetic polymer on linen, 7 ½ x 10 ¼ feet (228.6cm x 312.4cm), Collection of Vancouver Art Gallery  
Available at the personal web-page of the artist: <http://www.landonmackenzie.com/pastwork/past-046.html>

Far from obliterating conventional maps, Mackenzie's apocryphal paintings start with facsimiles of significant charts from Canada's past that she then layers with her own stories and impressions. What results is still a map, but you are not quite sure where it takes you. "Those tidy red lines," she says. "That fascinates me." Alan Morantz (2001)



**This has resulted a fundamental point for my understanding of atmospheres: The distinction proposed by Schmitz between the first pre-reflective and the second conscious level of the perception of atmosphere doesn't imply that the first level is not related with the interpretation of the perceived environment, neither that it doesn't influence action through the reading of these "concrete possibilities".**

The work of the phenomenologist Hermann Schmitz is not the only key reference for atmosphere coming from the field of phenomenology:

Ben Anderson<sup>25</sup>, geographer, makes reference to the phenomenologist Mikel Dufrenne (1973) as providing *one of the few explicit reflections on the concept of atmosphere in his classic work on the phenomenology of aesthetic experience* (Anderson 2009:79), placing the emphasis on some of the principal qualities of atmosphere according to Anderson: atmospheres are embodied, unfinished, dynamic and affective:

*Rather than re-present a world, a perceived work of art expresses a certain bundle of spatial-temporal relations – an 'expressed world'. Atmosphere is the term Dufrenne uses for how the 'expressed world' overflows the representational content of the aesthetic object as "[a] certain quality which words cannot translate but which communicates itself in arousing a feeling"* (Anderson 2009:79)

We find Dufrenne's approach quite similar to that of Hermann Schmitz. **Although Dufrenne does not explicitly refer to embodied perception, he also points out to atmosphere as a specific kind of reality situated in the in-between of perceiving subjects and perceived objects<sup>26</sup>.** Dufrenne does not settle on a clear definition of what an atmosphere is, instead he offers a series of approximations in order to attend to the aesthetic object. What is common across these approximations is that an atmosphere is a singular affective quality (Anderson 2009). And through this affective quality, the aesthetic object creates an intensive space-time. One that exceeds lived or conceived space-time: *The space and time which we find there are not structures of an organized world but qualities of an expressed world which is a prelude to knowledge.* (Dufrenne 1973: 183)

Dufrenne, makes an important distinction between two categories of reflection in aesthetic discourse that results suggestive in my understanding of atmosphere: The first of these comprises *"the sort of reflection which treats of the structure of the aesthetic object"* – an approach in which the perceiver *"detach[es himself] from the work by substituting an analytical perception for the perception of the whole"*. Dufrenne, contrasts this structural discourse with a second type of reflection which considers the **"sense"** of the aesthetic object, constituting an approach in which the perceiver *"gains intimacy"* with the artwork as opposed to *"decomposing"* it.

Atmosphere **refers to the expression of the sense of the objects**, nonetheless it does not *belong to them in their own right because they do not bring it about.*(Dufrenne 1973: 183). As such, atmosphere is rendered once again as **not localizable<sup>27</sup>.**

The work of Hermann Schmitz and of Mikel Dufrenne both point towards atmosphere as an indicator of the importance of experience as embodied: atmosphere equally by Schmitz and Dufrenne is treated **as a body-subject pre-reflective corporeal awareness expressed through action and typically in sync with and enmeshed in the physical world in which the action unfolds** (Seamon 2010:1)<sup>28</sup>.

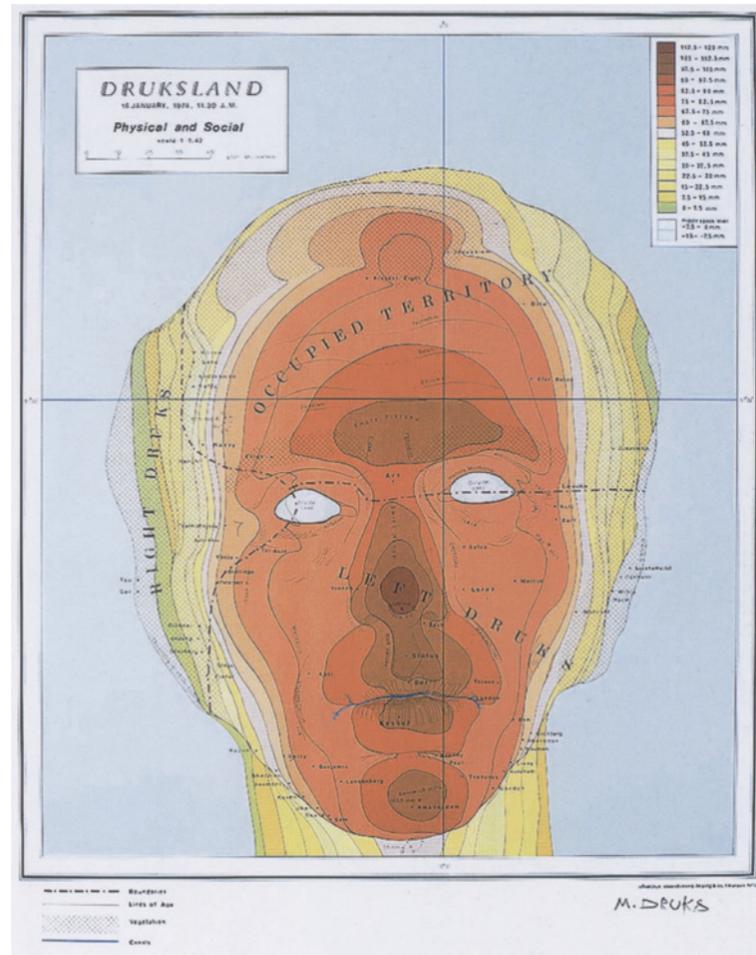
[25] Ben Anderson's (2009: 78) suggestion of atmospheres as *"a class of experience that occur before and alongside the formation of subjectivity, across human and non-human materialities, and in between subject and object distinctions"* redresses the concept of affective atmospheres in the context of the distinction between affect and emotion. Anderson defines atmospheres as *singular affective qualities that emanate from but exceed the assembling of bodies. As such, to attend to affective atmospheres is to learn to be affected by the ambiguities of affect/emotion, by that which is determinate and indeterminate, present and absent, singular and vague.*

[26] *'Thus it[atmosphere] is a matter of a certain quality of objects or of beings, but a quality which does not belong to them in their own right because they do not bring it about. This principle is embodied in individuals or in things. It is somewhat like the collective consciousness that governs individual consciousness at times of change. Whether or not it is a principle of explanation, it is at any rate a reality that we feel keenly when we come into contact with the group from which it emanates'* (Dufrenne 1973: 168).

[27] *The symphony or the novel has a rhythm, a force, or a restraint of which an objective measure like the metronome gives only an impoverished image. We should realize that, in seeking to grasp expression, we disclose an unpopulated world, one which is only the promise of a world. The space and time which we find there are not structures of an organized world but qualities of an expressed world which is a prelude to knowledge.* (Dufrenne, 1973: 183)

[28] David Seamon, in Merleau-Ponty, Perception, and Environmental Embodiment: Implications for Architectural and Environmental Studies, referring to Merleau-Ponty.

Fig. 19:  
 Michael Druks, *Druksland Physical and Social 15 January 1974, 11:30 am, 1974*  
 From a folio collection, *Flexible Geography: My private atlas*  
 Lithograph, 18x5 inches  
 S: Katharine Harmon (ed), 2004, *You are here: Personal Geographies and other maps of the imagination*,  
 New York: Princeton Architectural Press, p.33



*Druks's conceptual map – the print Druksland: Physical and Social (1974) – has become an iconic image in both Israeli and international art, featured in numerous exhibitions, books, magazines, exhibition catalogues and posters. This work evolved from his “geographical technique” with which he intended to provide a coded visual language of signs understood all over the world; and reflected Druks’s preoccupation in the 1970s, with borders and boundaries and their social and political implications.*

*Since the early 1980s, Druks has concentrated primarily on painting, making works he says are “details detached from a context” that require time and active participation from the viewer. Described by Arturo Schwarz as ‘mindscapes’, these enigmatic paintings are intended to entice an investment of time and imagination in the process of contemplating and decoding them – Druks sees this time element as incorporating “an extra dimension to a two-dimensional product”, saying that “my elusive images create the space for playfulness and involve the viewer’s participation in an active and democratic role”. He creates fictions, making images that emerge from his subconscious, although “the trigger for the picture is not the subject for the work”.*

Their approaches reveal atmosphere as operating in the in-between between object and subject. Although their point of departure are the objects, they are not ascribed to them. From this selective approach to their work, **atmosphere results a non localizable affective quality of the perceived expression of the sense of objects, operating essentially in a pre-reflective level of cognition.**

Although highlighting the concept, these approaches also enhance the cultural baggage related to atmosphere as a non localizable property of the environment, whose methodological analysis exceeds the search for structure, belonging essentially to the field of expression, fact that might explain partially why atmosphere has been removed, or was never incorporated as a significant variable in spatial analysis.

It is true though that the phenomenological approaches to “atmospherics”, as developed in the work of Hermann Schmitz and Mikel Dufrenne represent the phenomenological approach to atmosphere, are situated in a specific spatio-temporal context distant from the contemporary one. Phenomenology at the decade of the 60’s was not supported by scientific investigation on cognition. As a theory, it emerges from the same premises it defends: experience. Nonetheless, contemporary science seems to endorse the phenomenological approaches to perception, revealing the importance both of embodiedness and embededness with the environment. Recent findings in the field of cognition, and more specifically in the field of embodied cognition, this last clearly influenced by phenomenology, offer sufficient evidence<sup>29</sup> as to overcome some basic dualisms concerning perception. Among them are: The three fold distinction between body, mind and soul<sup>30</sup>, the schismatic distinction between person and environment, the conception of perception, thinking and decision making as three detached or consecutive parts of cognition. Overmore, feelings are recognized as an integral aspect of the cognitive process.

This revitalized interest in the phenomenological approach to cognition as essentially embodied, also coincides, perhaps not casually, with the recovery of the concept of atmosphere in contemporary philosophy as represented by the work of Peter Sloterdijk<sup>31 32</sup>.

In his third volume of the series Bubbles, Globes and Foams, Peter Sloterdijk thematizes the modern world in terms of a theory of spatial multiplicities. In his interview with Bettina Funche (2005), he explains: *I begin with the idea that the world is not structured monospherically and all-communicatively, as the classical holists thought, but rather polyspherically and interidiotically. At the center of this volume is an immunological theory of architecture, because I maintain that houses are built immune systems. I thus provide on the one hand an interpretation of modern habitat, and on the other a new view of the mass container. But when I highlight the apartment and the sports stadium as the most important architectural innovations of the modern, it isn’t out of art- or cultural-historical interest. Instead **my aim is to give a new account of the history of atmospheres**, and in my view, the apartment and the sports stadium are important primarily as **atmospheric installations**. They play a central role in the development of abundance, which defines the open secret of the modern. The praise of luxury with which the book ends is, in my opinion, the decisive act in terms of diagnosing the present.....**In reality, I think that it is through the occurrence of abundance in the modern that the heavy has turned into appearance and the “essential” now dwells in lightness, in the air, in the atmosphere.***

[29] The phenomenological approach has formed the roots for the emergence of the contemporary philosophy of the embodied mind, represented among others by George Lakoff (a cognitive scientist and linguist) and his collaborators (including Mark Johnson, Mark Turner, and Rafael E. Núñez). Just as Varela, Thompson, and Rosch (1991) before them, Lakoff and Johnson identified the matrix of the concept of embodied specifically in the phenomenology of Merleau-Ponty (1945/1962). This modern version of phenomenology depends on insights drawn from recent research in psychology, linguistics, cognitive science, dynamical systems, artificial intelligence, robotics and neurobiology. Varela even got to call this new approach as neurophenomenology. As Eric Bredon, in *Cognitivism, situated cognition, and deweyian pragmatism* (Bredon 1994), states:

*The book The Embodied Mind (Varela, Thompson and Rosch 1991) was an attempt to re-direct the cognitive sciences by infusing them with the phenomenological perspective developed in the work of Maurice Merleau-Ponty (1945). Varela, Thompson and Rosch argued that the standard division between pre-given, external features of the world and internal symbolic representations should be dropped, as it is unable to accommodate the feedback from embodied actions to cognition via the actions of a situated cognitive agent. The fundamental differences between their perspective and classical views lies in the answers to the questions of what cognition is, how it works, and when a system functions adequately.*

The truth is that this change of point of view marks a change of paradigm in the studies of cognitive science during the decade of the 90's, that it might be summarized as "cognition beyond the brain".

As Benoit Hardy-Vallée, Nicolas Payette, 2008) in *Beyond the brain: embodied, situated and distributed cognition*, ed Benoit Hardy-Vallée, Nicolas Payette, Cambridge Scholars Publishing explain:

*From 1990 to 1999, the U.S. Library of Congress and the National Institute of Mental Health sponsored an interagency initiative that designated the 90's as the Decade of the Brain. Paradoxically, the cognitive science of this decade was marked by a major methodological and conceptual change that one can summarize as "cognition beyond the brain". Whereas the brain was traditionally conceived as being the only seat of intelligence, many trends of research emphasized the functional entrenchment of the brain in the body, environment and culture. In neuroscience (Churchland, Ramachandran, and Sejnowski 1994), psychology (Barsalou 1999; Thelen and Smith 1994) Artificial Intelligence (Ballard 1991), robotics (Pfeifer and Scheier 1999; Brooks 1999), Artificial Life (Langton 1995), linguistics (Lakoff and Johnson 1999) and philosophy (Clark 1997), researchers began to be dubious of the "standard picture"...*

*Perception is commonly cast as a process by which we receive information from the world. Cognition then comprises intelligent processes defined over some inner rendition of such information. Intentional action is glossed as the carrying out of commands that constitute the output of a cogitative, central system. (Clark, 1997, p. 51)*

*According to the new approaches, cognitive processes are not limited to the symbolic processing of internal information structures, but implemented in various sensorimotor processes (motricity, perception, emotions, coordination, imagery, emulation, simulation) and various substrates (members, bodies, artifacts, environmental regularities). The major theme of these new approaches is the embeddedness of cognition: in the body and in the world. If one can, conceptually, distinguish the brain from the body and from the environment, a dense and continuous flow of information binds the three together.*

*The authors distinguish between threetypes of embeddedness of cognition: embodied cognition, situated cognition and distributed cognition:*

*Whereas embodied cognition refers to the embeddedness of the brain in the body (and the functional integration of action, perception and cognition that flow from it), situated cognition refers to the embeddedness of the brain-body complex in an environment (see essays in Aydede and Robbins, in press).*

*Cognition is not only embodied and situated, but also distributed: in certain cases, collectives (or networks of situated brains) process information conjointly (Hutchins 1995).*

*Cognition is therefore embodied, situated in an environment and distributed among agents, artifacts and external structures. The constant sensorimotor dynamics, the role of action in perception and learning, the agent/environment coupling and collective intelligence are cognitive determinants which one must take into account to describe adequately natural cognitive systems and to build artificial cognitive systems.*

[30] According Dewey (1958:311): The origins date back to the Hellenistic period:

*In Hellenistic thought, the three-fold distinction became that of body-mind-soul and spirit; spirit being elevated above all world affairs and acts, even moral concerns, having purely "spiritual" (immaterial) and religious objects. This doctrine fell in with the sharp separation made in Christianity for practical moral purposes, between flesh and spirit, sin and salvation, rebellion and obedience. Thus the abstract and technical Cartesian dualism found prepared for it a rich empirical field with which to blend, and one which afforded its otherwise empty formalism concrete meaning and substance.*

<http://archive.org/stream/experienceandnat029343mbp#page/n311/mode/2up/search/mind+body>

[31] Christian Borch, 2011, "Foamy Business: On the Organizational Politics of Atmospheres", In *Media Res, Peter Sloterdijk's spherological poetics of being*, Willem Schinkel & Liesbeth Noordegraaf- Eelens (ed), Amsterdam University Press, 2011:29  
*One of the most intriguing parts of Peter Sloterdijk's recent work is undoubtedly his trilogy on spheres, Sphären I-III.1 In this spheres project, Sloterdijk offers a grand theory of our spatial embeddedness in the world. Being is simply being-in-spheres, as he puts in an unmistakably Heidegger inspired fashion, and which means that all life takes place within membranes that protect us (give us immunity and meaning). According to Sloterdijk, such membranes are always spatially situated and often even take physical spatial forms. The three volumes of the spherology unfold life's spherical constitution on different scales. The first volume is devoted to micro-spheres, more specifically to so-called bubbles, i.e., dyadic relations that make up the tiniest possible forms of sociality. Examples of such bubbles include pair relations such as that between placenta and fetus. One of the key ideas in the analysis of bubbles is that the pair or couple is always primary to the individual. Put differently, co-subjectivity is the basis for subjectivity.*

*The emphasis on atmospheres (or 'air conditions') is one of the most original aspects of Sloterdijk's theory. Briefly put, Sloterdijk demonstrates how, from the beginning of the twentieth century onward, the environment has acquired an increasingly prominent place in the conception of and approach to life. This is the case both physically-biologically and in a more psycho-social sense. Thus, both climate control systems and media manipulation are examples of how life is managed through interventions in the atmosphere or air conditions. In both cases foamy business: on the organisational politics of atmospheres foam bubbles are affected by the management of the environmental conditions.*

Peter Sloterdijk talks of ecological atmospheres, referring **not merely to the affective qualities of ecological niches in natural and artefactual mixtures**, but also to **an ethics and politics of such spheres of existence**<sup>33</sup>. Peter Sloterdijk's philosophico-morphological theory is based on an understanding of the history of culture as spatialisations of forms. The world in which we live now requires us to design new types of 'spatialised immunity'. More broadly, the concept of a spherical logic of space – a polymorphologic of form, order and thinking – is explicated in *Spheres*, his three-volume archaeology of the human attempt to dwell within spaces, from womb to globe. The *Spheres* project (Bubbles, Globe, Foam) is a significant topological turn in the field of contemporary philosophy, 'a super-workout for communicative energies capable of finding contact throughout the entire world.' (Sloterdijk 2012)<sup>34</sup>

Sloterdijk was initially inspired by the phenomenology of Gaston Bachelard and his *Poetics of Space* (Bachelard 1969), although later he admits that he *quite stubbornly departed from his promptings*<sup>35</sup>:

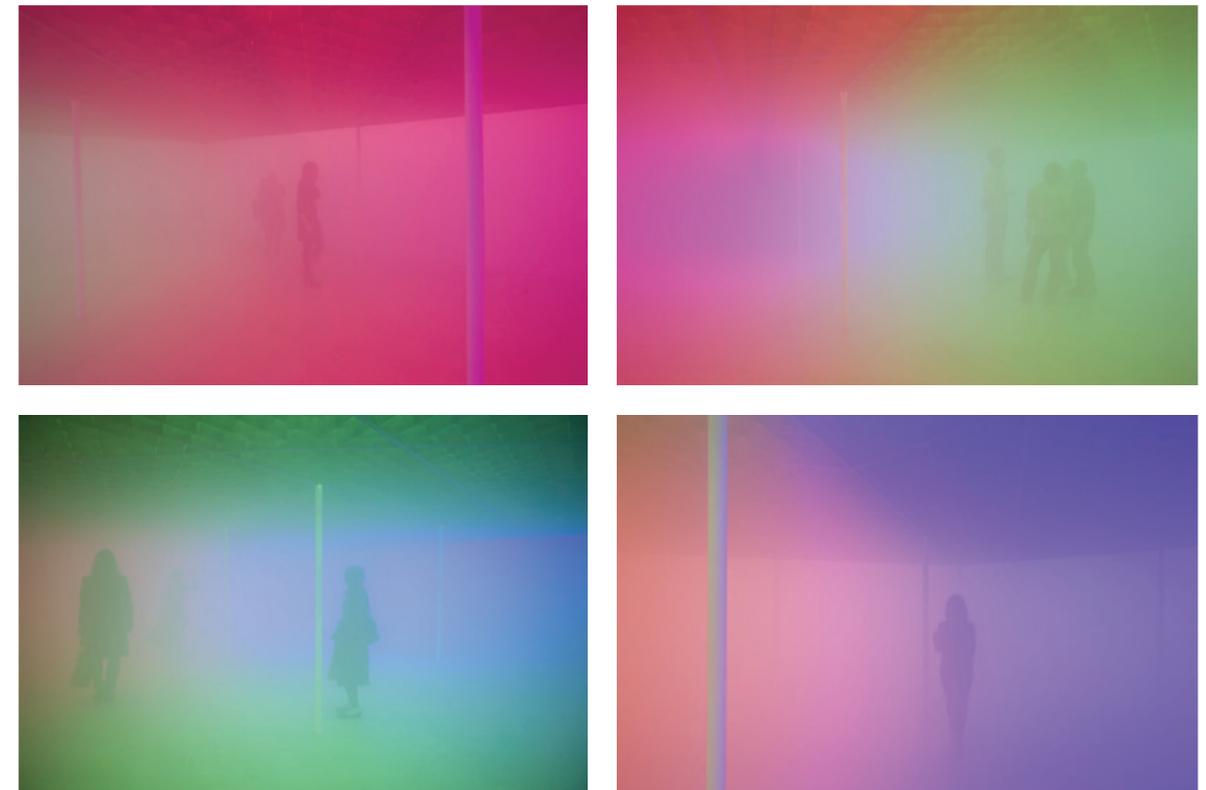
*...he was one of the authors who privileged the rediscovery of the atmospheric, Bachelard certainly played a role in my thinking. In my younger days I read him, but when I wrote the trilogy, aside from a few quotations from his book *L'air et les songes [Air and Dreams, 1943]*, he wasn't central to my thinking. Although we share a certain predisposition toward the phenomenological tradition and also a combination of the psychoanalytical and phenomenological aspects, the emphasis in my work is very different from his*<sup>36</sup>.

Atmosphere, for Sloterdijk reflects two equally important senses of the environment, reflected by both the literal and the metaphorical attributes of atmosphere, that is in both physical-biological terms and in a more psycho-social sense. *Thus, both climate control systems and media manipulation are examples of how life is managed through interventions in the atmosphere or air conditions. In both cases foamy business: on the organisational politics of atmospheres foam bubbles are affected by the management of the environmental conditions. .... Most importantly for the present purposes, architecture is a crucial way of establishing immunity, whether this is done by creating thick, stable walls or by living in mobile architectures that allow for pre-emptive escape. The emphasis on the immunity created by architecture leads Sloterdijk to describe the '[r]esidence as a spatial immune system'.* (Borch 2011:31)

Parting initially from a phenomenological basis, through the work of Peter Sloterdijk atmosphere is projected far beyond aesthetics as to enclose differentiated aspects of perception more proper to the social and political dynamics defining our contemporary context<sup>37</sup>. Nonetheless, the most recurrent contemporary reference to atmosphere still comes from aesthetics.

Fig. 20:

Olafur Eliasson, *Your atmospheric colour atlas*, 2009  
Installation views at: 21st Century Museum of Contemporary Art, Kanazawa, 2009-10  
Available at the personal web-page of the artist  
[http://www.olafureliasson.net/works/your\\_atmospheric\\_colour\\_atlas.html](http://www.olafureliasson.net/works/your_atmospheric_colour_atlas.html)



According to Sloterdijk, this atmospheric aspect merits close attention in current social theory. At one point he even asserts that if one were to take up the thread of Walter Benjamin's Arcades Project in a contemporary context, this would have to take the form of an Air Conditions Project.

The final point that I wish to draw attention to here is Sloterdijk's interest in the architectural dimensions of foam and air conditions. This interest in architectural matters is a reflection of his concern with the spatial embeddedness of foam and spheres. Most importantly for the present purposes, architecture is a crucial way of establishing immunity, whether this is done by creating thick, stable walls or by living in mobile architectures that allow for pre-emptive escape. The emphasis on the immunity created by architecture leads Sloterdijk to describe the '[r]esidence as a spatial immune system'.

[32] 'Atmosphère, Atmosphère', Bruno Latour, (P-104) «Atmosphere, Atmosphère», an entry for the catalog of Olaf Eliasson, New Tate Gallery, 2003:

In a legendary scene from Marcel Carné's *Hôtel du Nord* (1938), the beautiful actress Arletty mocks the odd vocabulary of Louis Jouvet, Monsieur Edmond, her unwanted suitor, exclaiming in her husky working-class Parisian: 'Atmosphère, atmosphère, est-ce que j'ai une gueule d'atmosphère?' ('Atmosphere, atmosphere, do I look like someone with atmosphere?'). A word that sounded pompous in the 1930s has now become commonplace, perhaps reflecting a universal condition. Indeed, in a series of daring books, the German philosopher Peter Sloterdijk has recently gone so far as to take a new approach to philosophy by stressing the importance of atmospheric conditions on our lives. In what amounts to a sort of expanded meteorology he argues that philosophers have been far too obsessed with objects and subjects, and not enough with air conditioning. Envelopes, spheres, skins, ambiances: these are the real 'conditions of possibility' that philosophy has vainly attempted to dig out of totally inaccessible infrastructures.

What Sloterdijk does in philosophy, Olafur Eliasson does in his art. In both cases, the tired old divisions between wild and domesticated, private and public, technical and organic, are simply ignored, replaced by a set of experimentations on the conditions that nurture our collective lives. Seen through this approach, climate control is not inspired by a mad ambition for total mastery of the elements, but by a reasonable wish to ascertain what sort of breathing space is most conducive to civilised life. The most important question is, how are we going to survive? In what sort of interior milieu should we be insulated? Since the sciences have expanded to such an extent that they have transformed the whole world into a laboratory, artists have performed become white coats amongst other white coats: namely, all of us. We are all engaged in the same collective experiments.

Both Sloterdijk and Eliasson are exploring new ways of escaping the narrow constraints of modernism. They benefit from the rich humus provided by the sciences, but they turn scientific results upside down, not to tell a great narrative of progress, but simply to explore the nature of the atmospheres in which we are all collectively attempting to survive.

[33] "The Atmospheric Ecologies of Peter Sloterdijk: A New Thinker for Architecture?" in *Performative Ecologies in the Built Environment: Sustainability Research across Disciplines ANZAScA*, 43rd Annual Conference, School of Architecture and Design, University of Tasmania, Launceston (25–27th November, 2009). Peer Reviewed Conference Proceedings.

[34] Peter Sloterdijk, "Spaces of Transformation: Spatialised Immunity", conference, Tate Modern, Starr Auditorium, Saturday 16 June 2012, 14.00–16.30

[35], [36] "Against Gravity: Bettina Funche Talks with Peter Sloterdijk", in *Artforum International* II, no5 (February/March 2005): 27-29.

[37] DESROCHES D, 2012, "La politique comme création d'ambiances | Politics as the creation of ambiances", editorial note at [www.ambiances.net](http://www.ambiances.net), Edito N°50, available at <http://www.ambiances.net/editorials-of-the-network.html>

In an article published in a collective, the German philosopher Peter Sloterdijk examined the conditions that led to democracy. According to him, this political regime must be understood as an atmospheric invention with spatial and mediatic origins. He rests on the capacity to create waiting rooms. Let us understand why. Indeed, the democratic community rests upon atmospheric premises. From Sloterdijk's point of view, democracy is in part related to the development of architecture. To illustrate his thesis, he resorts to the Crystal Palace metaphor to recall the first climatic structure. He adds that plants belong also to the ambiance of human structures. Men belong to the "environment", even ecological homes may date back to the thinkers of the Greek polis, notably Aristotle and the designers of Greek cities. How can this be explained?

The concept of polis (city) necessitates sharing, in an « artificial » world, in other words, built by man, within the same walls. The polis is an ecological home in the psychopolitical sense: to live together according to the Greeks was to experiment a new way of conceiving power and the laws within a limited space. Men are not « citizens » by nature because the climate to become such must be fabricated. They must build a space to allow others within their proximity. Thus, the development of democracy implied a specific urbanization because, to realize its ideal, philosophers needed to reflect on politics in terms of ambiance, in other words, on the "psychopolitical conditions of social integration".

Sloterdijk's originality underlines that, from a pre-political condition, the idea of a public space is found. This public space is not only a reunion of people, but also the building of a place allowing the meeting of others in proximity, as is the case of the agora. Already, this installation had to favor the participants' views in order to create a sort of citizen immersion. We had to go out of ourselves to imagine the will of others. One of the atmospheric premises of democracy is this meeting – a space that favors a new and integrative experience – between those who witness and those who participate, between those who speak and those who must, whilst waiting, listen. For the first time, the actor and spectator are found within the same person. But the structure had to imply a particular acoustic. It had to favor the public discourse, that is to say the transportation of sound in order to facilitate the discussion. With the art of speech, democracy necessitates an ambiance and a rigorous acoustic. It is thus not accidental that democracy and the development of rhetoric and philosophy, that is the knowledge of writing, go hand in hand. In effect, to speak of things and also to grasp concepts, this is what democracy calls for and makes its structure possible.

## An approach from the field of aesthetics

*The polis becomes, in this sense, the symbolic reservoir of future democratic debates. In this atmospheric context, democracy appears only when citizens are finally able to hear the other's discourse and to concentrate on its content. It requires "waiting rooms", or in other words structures of temporalisation, in N. Luhmann's words. It will have already called for participants to learn to use and manage time, concretely in the allotment of speaking and the limitation of elongated discourses of Athenians. They will have understood, as well, the importance of synchronicity, reciprocity, patience and self-control (sophrosyne), which are qualities that require a specific atmosphere. The democratic regime, as we see, calls on itself a training because it has its own « political time », which is longer and more demanding than a monarchy and a tyranny. And if Greek psychology rests on pride, courage or force on the thymós, democracy must re-assure itself that pride wasn't going to transpose itself immediately to actions and reactions. This regime demanded citizens a certain self-control that is impossible without a new relationship to time and ambiance. This is what gave way to a new extension of thymós.*

*This statement translates perhaps the revolutionary character of all democratic ideas. In democracy, indeed, the target of equality can only be realized if the atmospheric conditions allow it. Against a tyranny where the thymós has gone mad, a tyranny that does not respect its adversaries, the length of speech or the reflection, democracy demands a reflective relationship in time. Democracy is an atmospheric political art, concluded Sloterdijk, because where there is no compensatory space, fear and constraint will tend to impose their laws against liberty.*

[38] These "revised aesthetics" could be defined as "ecological aesthetics" as proposed by Kate Rigby in RIGBY K, 2011, Gernot's Böhme Ecological Aesthetics of Atmosphere in GOODBODY A; RIGBY K (eds), 2011, Ecocritical Theory: New European Approaches, University of Virginia Press.

*Böhme's work on aesthetics is part of a wider project entailing the rehabilitation of the German tradition of Naturphilosophie (natural philosophy) in the guise of a critical theory of social-natural relations, interweaving pot) Marxist social critique and the "new phenomenology" of Hermann Schmitz. This project is underwritten by a sober recognition that "we no longer stand on the brink of environmental catastrophe: we are in the midst of it". Under these circumstances, Böhme calls for a pragmatically oriented Naturphilosophie, which, like the older Critical Theory as defined by Max Horkheimer, would be "driven by the interest in reasonable conditions"; while nonetheless recognizing that what constitutes "reasonableness" with regard to social-natural relations cannot be presupposed, but must be communicatively elucidated over time, and oriented toward safeguarding the reproduction of natural systems as the necessary foundation for human society. The urgent need for such a critical theory of social-natural relations arises from the increasingly anthropogenic character of our earthly environs, or "the nature that we are not", coupled with the growing technologization of the human body, or "the nature that we ourselves are". ...Böhme insists that although the global environment might everywhere bear traces of human impact, that does not mean that we should simply consign "nature" to the past, as promodernists (and "postmodernists") would have us to do: on the contrary, "nature" represents a possibility that as yet lies "before us".... Yo construe "nature" as a cultural project might well seem overweeningly anthropocentric. Böhme's philosophy is nonetheless far from endorsing human supremacy. p 140*

*...In order to answer the question as to what kind of nature we wish to inhabit and embody, we need to begin by ascertaining what "nature" means to us from a noninstrumental perspective...For Böhme this is a question for the phenomenologist, for it concerns the way in which things manifest themselves to human perception in potentially mood altering ways. Somatics in other words, precedes semantics. P 141*

*...in the context of our technological civilization, the reconstruction of a more corporeal sense of self assumes the status of an ethical imperative. P 142*

Gernot Böhme, German philosopher and his article: Atmosphere as the Fundamental Concept of a New Aesthetics (1993) forms a constant point of reference in the theoretical discourse related with the concept of atmosphere in the fields of architectural aesthetics and aesthetics in general.

Böhme proposes atmosphere as the central pillar for the construction of a revised theory of aesthetics<sup>38</sup>, understood as the production of atmospheres which form our primary object of perception:

*The new aesthetics is thus as regards the producers a general theory of aesthetic work, understood as the production of atmospheres. As regards reception it is a theory of perception in the full sense of the term, in which perception is understood as the experience of the presence of persons, objects and environments....The new aesthetics is first of all what its name states, namely a general theory of perception. The concept of perception is liberated from its reduction to information processing, provision of data or (re)cognition of a situation. Perception includes the affective impact of the observed, the reality of images; corporeality. Perception is basically the manner in which one is bodily present for something or someone or one's bodily state in an environment. The primary object of perception is atmospheres. What is first and immediately perceived is neither sensations nor shapes or objects or their constellations, as Gestalt psychology thought, but atmospheres, against whose background the analytic regard distinguishes such things as objects, forms, colours etc. (Böhme 1993: 116).*

Böhme argues that aesthetics should be a theory of perception that treats "the experience of the presence of persons, objects and environments" via atmospheres (Böhme 1993). It seems clear that in Böhme's approach to atmosphere, **atmosphere belongs neither in the sphere of the object nor in that of the subject**; it is a co-presence that exists within the terms of the subject/object division. Atmosphere is only differentiated retrospectively into a polar relation between "me" and the thing I perceive, thus taking on the fixed duality of subject and object:

*Sensing atmospheres requires our attention to which state we are in; how we sense ourselves in the surroundings we are part of (Böhme, 1993: 120). They refer to both my being somewhere and to how I feel about being there (Böhme 1993:120). "In perceiving an atmosphere I sense what sort of environment I find myself in. The perception thus has two sides to it: on the one hand, there is the environment which radiates a certain quality of mood, on the other hand - me, participating in this mood through my very situatedness and thereby becoming aware where I now am..." (Böhme 2013)*

In a parallel manner to the approach to art as experience by John Dewey (1934)<sup>39</sup>, but also close to Schmitz and Dufrenne, Böhme differentiates his theory from traditional aesthetics in a number of ways: He writes of the judgmental nature of the “old” aesthetics, citing its function as facilitator of criticism, and as justifier of a “positive or negative response” to art, noting the progression from this to the dominance of semiotic theory in which consideration of the sensuous experience of the artwork is conspicuously absent. Böhme, however, is chiefly concerned with this sensuous experience as the point of departure for his aesthetic theory, with the concept of atmosphere providing a way through the notion of the experiential “in-between” in a way that occupies this intermediary space, rather than denying its existence through the polarisation of subject and object that occurs in traditional aesthetics. Böhme’s second critique of traditional aesthetics confronts its specific role as a theory of the arts: In Böhme’s theory the concept of atmosphere encapsulates the affective nature not only of art works, but also of the broader “life-world”—the world which we inhabit, engage with, build and dwell in. Indeed, in Böhme’s definition, atmosphere accounts for the way in which we describe an evening as melancholy, or a valley as serene. He writes of “the atmosphere of a city”, and the way in which a story can “conjure up” an atmosphere. Thus we can see in these examples a broad applicability, which encompasses, and, importantly, reconnects, the artistic, the human and the natural.

Drawing from Benjamin’s concept of “aura” (Benjamin 2003) and Hermann Schmitz’ phenomenological approach, Böhme resists of proposing a precise definition of atmosphere. Instead he proposes a manner in which it would be possible to conceive atmospheres in a meaningful way. *They are spaces insofar as they are tintured through the presence of things, of persons or environmental constellations, that is, through their ecstasies. They are themselves spheres of the presence of something, their reality in space. As opposed to Schmitz’s approach, **atmospheres are thus conceived not as free floating but on the contrary as something that proceeds from and is created by things, persons or their constellations.*** (Böhme 1993:122, bold mine)

What Böhme calls “atmosphere” relates to moods and their spatial carriers - which are essentially what the beholder of a work of art and what he or she perceives share in common. By perception, Boehme understands a mode of bodily presence - with an emphasis on emotional components. Perception for him is primarily the sensation of a presence or, alternatively, a certain atmosphere. An atmosphere flows out into a space in a far from definite way. We can only follow up its traces to the extent that we have direct experience of it. We have to open ourselves up to it, be affectively influenced by it: Thus for example a certain cheerful or oppressive mood can prevail in a space. But this is not something subjective.

The atmosphere is something we have an immediate experience of, as quasi-objectively exterior to us. What is designated as atmospheric here is a condition common to the perceiving individual and his/her environment. We have an immediate experience of “atmospheric phenomena” as free-floating qualities, like energy in the bodily or emotional sense or the partly personified forces of nature.

*“Atmospheres are indeterminate above all as regards their ontological status. We are not sure whether we should attribute them to the objects or environments from which they proceed or to the subjects who experience them. We are also unsure where they are. They seem to fill the space with a certain tone of feeling like a haze.”* (Böhme 1993:114).

[39] *“beauty, conventionally assumed to be the especial theme of aesthetics, has hardly been mentioned in what precedes. It is properly an emotional term, though one denoting a characteristic emotion. In the presence of a landscape, a poem or a picture that lays hold of us with immediate poignancy, we are moved to murmur or to explain “How beautiful”. The ejaculation is a just tribute to the capacity of the object to arouse admiration that approaches worship. Beauty is at the furthest remove from an analytic term, and hence from a conception that can figure in theory as means of explanation or classification. Unfortunately, it has been hardened into a peculiar object; emotional rapture has been subjected to what philosophy calls hypostatization, and the concept of beauty as an essence of intuition has resulted. For purposes of theory, it then becomes an obstructive term. In case the term is used in theory to designate the total aesthetic quality of an experience, it is surely better to deal with the experience itself and show whence and how the quality proceeds. In that case, **beauty is the response to that which to reflection is the consummated movement of matter integrated into a single qualitative whole.**”* in Art as Experience (Dewey 1934:322)

He names one method for creating atmospheres as the production of particular reception, exemplified through the art of stage, in other words, scenography, relating it with the phantastike techne as defined by Plato:

*This art of phantastike<sup>40</sup> is perhaps not yet quite what we mean by the art of making atmospheres, but it already contains the decisive feature: that the artist does not see his actual goal in the production of an object or work of art, but in the imaginative idea the observer receives through the object. That is why this art is called phantastike techne. It relates to the subject's power of representation, to the imagination or imaginatio. (Böhme 2013:5).*

*In scenography, therefore, we have an art form which is now directed explicitly, in its concrete activity, towards the generation of imaginative representations in the subjects, here the audience. It does not want to shape objects, but rather to create phenomena. The manipulation of objects serves only to establish conditions in which these phenomena can emerge. But that is not achieved without the active contribution of the subject, the onlooker. It is interesting when Umberto Eco claims precisely this for all pictorial representation (Eco, 1976, p. 32, footnote 7): It does not copy the object, he asserts, but only creates the conditions of perception under which the idea of the object appears for the viewer of the image. (Böhme 2013:6).*

Atmosphere thus, in a parallel manner to Eco's pictorial representation, doesn't copy but puts out the necessary conditions of perception under which the idea of the object appears. Once again, the pre-existence of an object, or of its idea, seems necessary. It is obvious that according to Böhme, atmosphere expresses something as his definition of atmosphere as the felt presence of something or someone in space also implies.

The "staged materiality"<sup>41</sup> (inszenierte Materialität) constructed through scenography refers to the pure appearance of building materials: "Wood, glass, steel, marble as features of architecture and design no longer denote the materials worked upon, but qualities of appearance." (Böhme 2013:2). The physiognomy and cultural signification of materiality induces atmospheres in which materiality is experienced synaesthetically (e.g., the warmth of rough-hewn timber's texture, perceived visually). The idea of staged materiality provides according to Böhme a basic paradigm for both the producing and the perceiving of atmospheres<sup>42</sup>:

*All the same, can one really make atmospheres? The term making refers to the manipulating of material conditions, of things, apparatus, sound and light. But atmosphere itself is not a thing; it is rather a floating in-between, something between things and the perceiving subjects. The making of atmospheres is therefore confined to setting the conditions in which the atmosphere appears. We refer to these conditions as generators. (Böhme 2013:4).*

The generators of atmospheres, nonetheless, are not related with specific properties that objects possess, but rather with the manner in which they radiate outwards into space, to their output as generators of atmospheres:

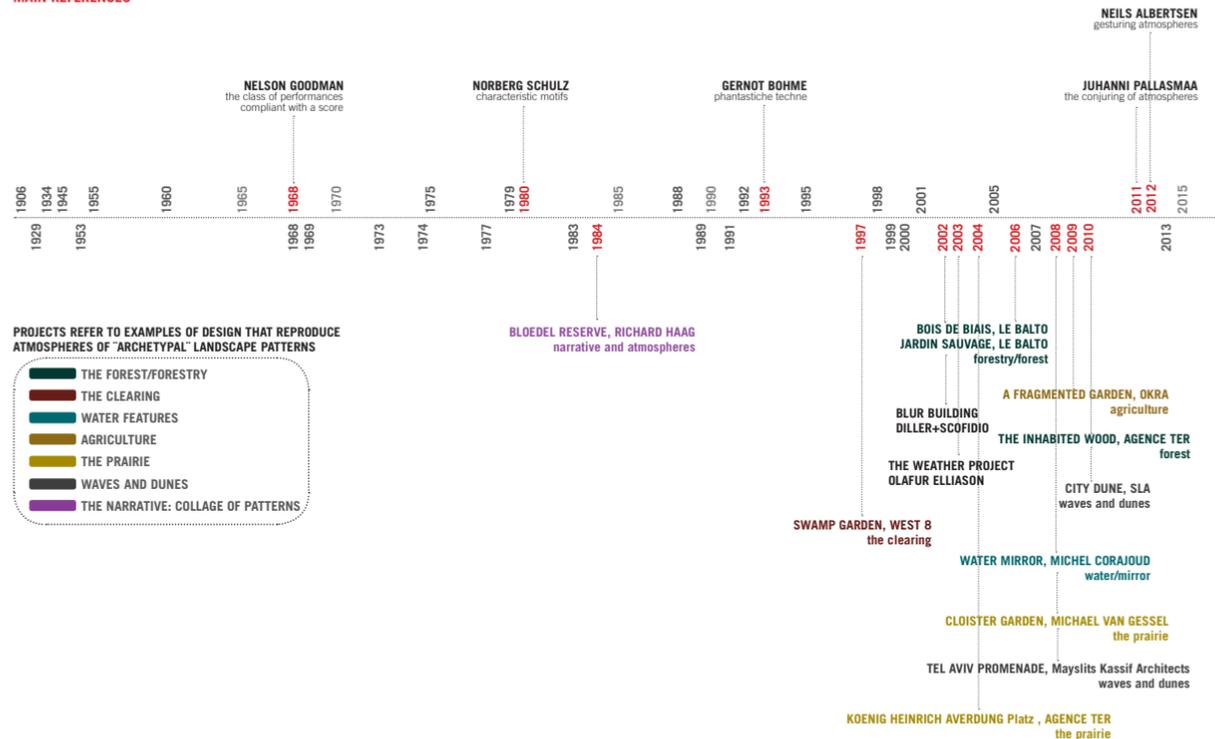
*Instead of properties, therefore, I speak of ekstases - that is, ways of stepping-outside-oneself. The difference between properties and ekstases can be clarified by the antithesis between convex and concave: a surface which, in relation to the body it encloses, is convex, is concave in relation to the surrounding space. The difference between properties and ekstases can be clarified by the antithesis between convex and concave: a surface which, in relation to the body it encloses, is convex, is concave in relation to the surrounding space.*

[40] In the dialogue *Sophist*, Plato draws a distinction between two kinds of performing art, in order to unmask the mendacious art of the Sophists (*Sophist*, 235e3-236c7). There is a difference, he argues, between eikastike techne and phantastike techne. It is the latter which interests us here. In eikastike techne, mimesis consists in the strict imitation of a model. Phantastike techne, by contrast, allows itself to deviate from the model. It takes account of the viewpoint of the observer, and seeks to make manifest what it represents in such a way that the observer perceives it "correctly". Plato bases this distinction on the practice of the sculptors and architects of his time. For example, the head of a very tall statue was made relatively too large, so that it did not appear too small to the observer, or the horizontal edges of a temple were curved slightly upwards, so that they did not seem to droop to the observer. (Böhme 2013).

[41] Two aesthetic forms of production as different as that of the garden architect and the writer demonstrate a high degree of consciousness as regards the means by which particular atmospheres can be produced. A comprehensive investigation of the whole spectrum from stage designer to cosmetician would certainly throw new light on aesthetic objects, including works of art. Their properties; would be understood as conditions of their atmospheric effect. (Bohme 1993)

[42] The conception of atmospheres as a phenomenon has its origin in reception aesthetics. Atmospheres are apprehended as powers which affect the subject; they have the tendency to induce in the subject a characteristic mood. They come upon us from we know not where, as something nebulous, which in the 18th century might have been called a *je ne sais quoi*, they are experienced as something numinous - and therefore irrational. The matter looks different if approached from the side of production aesthetics, which makes it possible to gain rational access to this "intangible" entity. It is the art of the stage set which rids atmospheres of the odour of the irrational: here, it is a question of producing atmospheres. This whole undertaking would be meaningless if atmospheres were something purely subjective. (Bohme 1993)

**THE REPRODUCTION OF ATMOSPHERES**  
**MAIN REFERENCES**



We are concerned, therefore, with ekstases, with the expressive forms of things. We are not accustomed to characterising things in terms of their ekstases, although they are crucial to design, for example. In keeping with our ontological tradition, we characterize things in terms of their material and their form. For our present purpose, however, the thing-model of Jacob Böhme is far more appropriate. He conceives of things on the model of a musical instrument (Böhme, 1922). In these terms, the body is something like the sounding board of a musical instrument, while its outward properties, which Böhme calls “signatures”, are moods which articulate its expressive forms. And finally, what is characteristic of things is their tone, their “odour” or emanation - that is to say, the way in which they express their essence. (Böhme 2013:7)

Böhme’s definition of ecstasies as the expressive form of a thing in space doesn’t make reference to the literal presence of the things in space, but to what they express:

*Tone and emanation - in my terminology, ekstases - determine the atmosphere radiated by things. They are therefore the way in which things are felt present in space. This gives us a further definition of atmosphere: it is the felt presence of something or someone in space. For this the ancients had the beautiful expression parousia. Thus, for Aristotle, light is the parousia of fire (De anima, 22b17).*(Böhme 2013:8)

Böhme’s example of fire, through Aristotle, sheds more light to the meaning of expression. Light is the parousia of fire. That would mean that abstract meanings, or even objects and processes, can express their presence through the materiality of uncanny objects. A spatial metaphor thus is constructed and it is this precise spatial metaphor that configures the tones and emanations that determine the concrete atmosphere radiated by things. Atmosphere results thus as structurally metaphorical: fire is expressed by light, but accordingly could be correlated with a “warm” or even with a “homely” atmosphere. What is more, though expression, atmosphere as the feeling felt at the presence of something or someone, can be respatialized<sup>43</sup>.

Ecstasies are equally important as their distributional pattern in space defined as their constellations. The constellational appearance of ideas means that they are not definable except as an arrangement. Similarly, atmospheres occur when the spatiotemporal arrangement of the concrete elements of phenomena becomes perceptible.

Ecstasies and constellations thus are the two central figures both for the construction as for the reception of atmosphere and it is at his precise point where, according Böhme atmosphere is mediating between the aesthetics of reception and the aesthetics of production: “An aesthetics of atmospheres pertains to artistic activity that consists in the production of particular receptions.” (Böhme 1993: 235). And more specifically for architecture:

*Exactly architecture produces atmospheres in everything it creates. Of course, it also solves specific problems and fabricates objects and buildings of all sorts. But architecture is aesthetic work in the sense that it always also generates spaces with a special mood quality, i.e., atmospheres. ... The visitor, the user, the customer, the patient are met with or seized by these atmospheres. The architect, however, creates them, more or less consciously.* (Böhme cited in Borch 2009:235)

**[43]** On the “reproduction” of atmospheres:

Neils Albertsen in his article Gesturing atmospheres (Albertsen 2012) investigates the reproduction of atmosphere: *From a phenomenological point of view only people exposing themselves directly to it in place and time can characterize an atmosphere. How can such characterization be “transported” to other people in other places and times in such ways that the atmospheric experience is somehow presented again? How can the description of atmosphere itself be atmospheric and what can atmospheric similarity mean?* (Albertsen 2012:69)

Albertsen draws from Wittgenstein conception of gesture and proposes “gesture” as appropriate to communicate atmospheres atmospherically:

*With a point of departure in Ludwig Wittgenstein’s conception of gesture this paper proposes “gesture” as an adequate conceptualisation of such processes. For Wittgenstein gesture is in the tone of language and in our “word feelings”. Further, gestural communication can be a guidance of others in the right direction by pointing to similarities in different media, e.g. by guiding the understanding of a piece of music by pointing towards similarities in a painting. Gesture thus seems appropriate to communicate atmospheres atmospherically.* (Albertsen 2012:69)

**Gesture according to Albertsen has a twofold meaning. It is conceptualized both pointing towards or comparing with something else in another medium in terms of both the sense of experiencing meaning and also of that of directing attention.**

Albertsen proposes 4 manners in which atmospheres can be communicated atmospherically through gestured, begging with that of linguistic gesturing that does not intend to communicate a literate meaning but to construct an expression:

*Firstly, it is quite evident that atmospheric effects are obvious entities for linguistic gesturing. In gestural language sensuousness and meaning merge into experience of meaning through the tone, the rhythm, the cadences of words and our feelings for them. ....one should not formulate sentences that as literately as possible transmit information. Rather, it is a question of finding the right constellation of gesticulating words that fit each other in an affective/emotional expression, which somehow is similar to the original emotions of the atmosphere. These expressions do not “carry” atmosphere, they contain it. Atmosphere as such is a property of the expression. Through expression atmosphere can be “decontextualised” from their original context.* (Albertsen 2012:72)

*Secondly, from such atmospheric constellations of words we can get the feeling that they contain their meaning in themselves, that they contain the atmosphere as we just have seen. This, it seems, is what Vilém Flusser has in mind when he –on the background of a distinction between mood (Stimmung) and “moodness” (Stimmtheit) –conceptualizes “Gestimmtheit” as mood transformed into gesture and ascribes to gesture the ability to decontextualise the atmosphere from its original context (Flusser,1997: 14). **Turning atmosphere into gesture makes it transportable to other places and times.*** (Albertsen 2012:72)

Thirdly, gestural transport of atmosphere can take place not only in linguistic gestures, but also in other forms of gesture, auditive, visual, tactile, or by pointing toward pieces of music, works of art etc. (Albertsen 2012:72)

**This transportability of atmospheres liberates them from the constrained sense given by Schulz (Schulz 1980), limited down to a series of “conventional elements” that can be literally transposed, or literally imitated as to re-produce a specific atmosphere. The issue of similarity, through Albertsen approach is defined as atmospheric similarity subject to laws of a gestural family resemblance:**

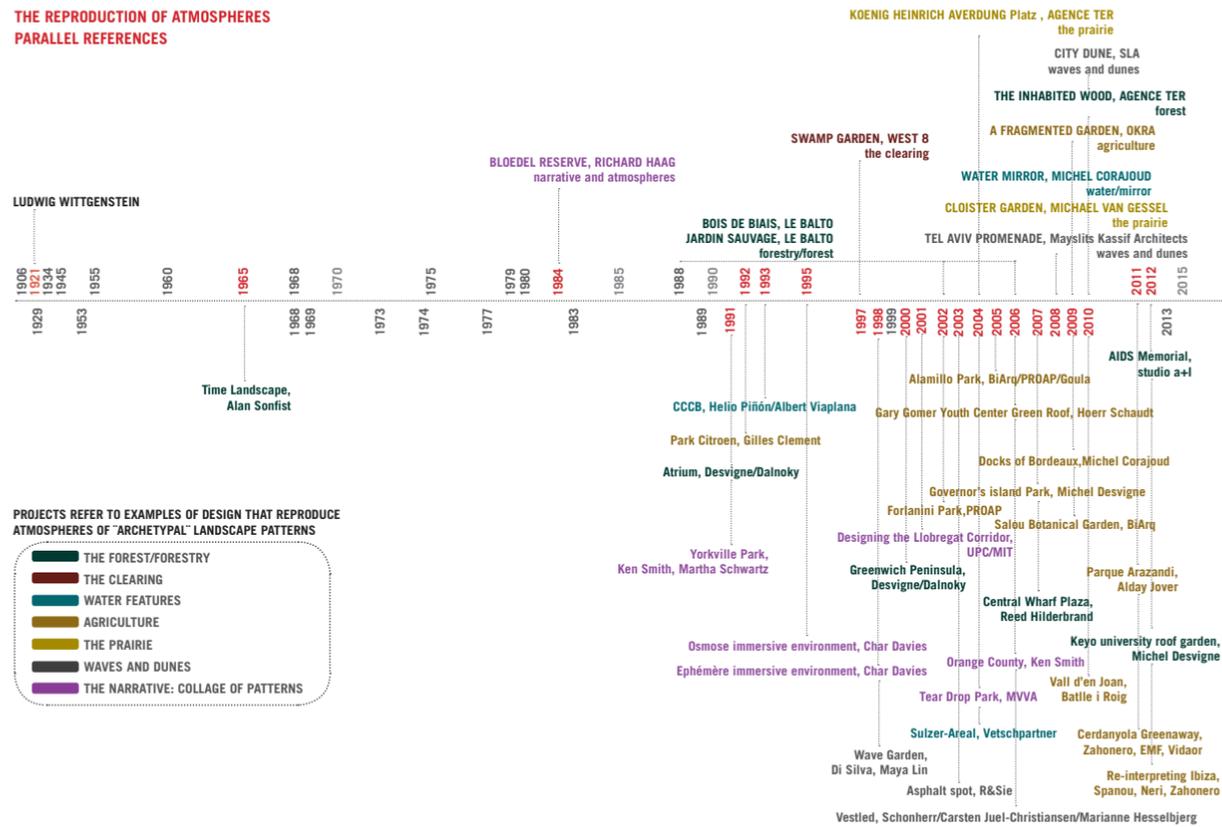
*Which then, forthly, answers the question: What can atmospheric similarity mean? It can mean gestural family resemblance within a semiosphere of gestures.* (Albertsen 2012:72)

**A transported atmosphere thus, is not experimented as a transported atmosphere. It is experienced in itself as “anew”:**

*Gestures transporting atmospheres in an atmospheric way work differently. Rather than keeping an undistorted constant in different media, the key is the ability of the mediating chain to make the atmospheric experience present again, not in the sense of representing it exactly as it once was, but in the sense of presenting it “anew”. ...That is: ....Similarly, gestures transporting atmospheres in an atmospheric way is “atmosphere making”, which presences the atmosphere “again and anew” in other times and places.*

(Albertsen 2012:73)

**THE REPRODUCTION OF ATMOSPHERES**  
**PARALLEL REFERENCES**



Albertsen through the idea on the atmospheric transporting of atmospheres through gestures deliberates the idea of reproduction, or transportation, from that of similarity. It is definitely not a new idea, if we consider references already used in this writing: Goodman's distinction between denotation and exemplification (Goodman 1976), or the work of Gombrich on art and illusion (Gombrich 2000), reach the same conclusions. Nonetheless, its direct correlation with atmosphere permits us answer a question inspired through the work of Schmitz: Through gesture, atmosphere might work as to orient atmospheric descriptions in other mediums of expression. Over more, Albertsen offers specific clues on how this exemplification might work as an atmospheric means of transporting atmospheres. It is through re-experience meaning and directing attention. The control of similarity then should be subject to these two basic criteria.

We might thus reach the conclusion that the reproduction of an atmosphere is the production of the atmosphere. Nonetheless, we cannot obviate the fact that if we are to "reproduce" a specific atmosphere, then a specific resonance between the "original" and "reproduced" atmosphere must be established. Down the bottom-line, the central question might result to be which are the "laws" that might help us structure this reproduction?...

Timothy Chandler (Chandler 2010) does a similar question. In his research article on the reproduction of the atmosphere of natural environments through linguistics, using as a case study the Pastoral Atmosphere of Virgil's Eclogues, draws from another idea from Böhme, this of "conjuring up" (Böhme 1993):

*Is atmosphere itself representable? If one takes Virgil to be representing the natural world in the Eclogues (something critics in the past have done), at what point does atmosphere enter and leave the text? Böhme suggests that works of art can "conjure up" (beschwören) the atmospheres they describe...It seems straightforward enough to speak of the atmosphere encountered in a given environment—a forest or a football stadium, for example—as the result of physiognomic ecstasis. But what happens when I attempt to describe such environments from outside them, that is to say, when I attempt to represent them? Böhme himself writes that a work of art in a way only represents itself, and to forget this is to deny the material presence of the artwork and hence also its atmosphere...I read Böhme's "conjuring" as recognition of the differential process of signification that has become broadly understood since Saussure, rather than as an argument for a mimetic function in language or other means of artistic representation. (Chandler 2010:192)*

Böhme's idea that works of art "conjure up" the atmospheres they describe is based on the fact that atmospheres reproduce the physiognomic ecstasies of the objects and their constellations in space. Nonetheless, Timothy Chandler through a critical review of this idea specifically when reproducing textually a spatial atmosphere, offers us an insight on Böhme's work and specifically on the tools that might be applied in order to "atmospherically" reproduce an atmosphere:

*One way of textually producing certain atmospheric spaces is through insignia, a term Böhme adopts from the poet Gottfried Benn. An insigne is a particular kind of mark or sign that is connotatively overloaded and concentrated. Böhme argues that certain words or phrases in poems can act as insignia that produce conventionally constituted effects, and hence can be organized to generate textual atmospheres. Insignia conjure up an atmosphere, I suggest, by their constellation. Atmosphere cannot be represented per se. Naming a certain atmosphere does not suffice to produce it textually. Rather, following the line of Adorno's aesthetic theory, poetry configures insignia around the unrepresentable concept—atmosphere—and from such a constellation it bodies forth. It is a matter of coherence rather than mixture. Constellation depends upon perspective. It is necessarily paratactical; its elements, like those of a star sign, are separated by darkness.*

If architects are, or should be according Böhme, conscious producers of atmospheres then we would expect a structurally differentiated approach focusing not to the effects of atmosphere to our emotional sensibility but on the contrary on the concreteness of its causes.

## Atmosphere in the architectural discourse: a brief review

As Shierry Weber Nicholzen writes: "The configuration ... is formed from the crossconnections of interrelated equivocal terms with their penumbræ of associations brought to them in the subjective experience of the thinker." (Chandler 2010:192)

The idea of constellation gains a protagonist role in the "reproduction" of an atmosphere, as almost the unique form of actually "re-presenting" an unrepresentable concept.

Chandler searches into the idea of the "unrepresentable", through Theodor Adorno's idea on natural beauty (Adorno 1997), while contrasting it with the related objections by Timothy Morton (Morton 2007) :

Adorno argues that natural beauty is unrepresentable: "nature, as something beautiful, cannot be copied [ abbilden ]. For natural beauty as something that appears is itself an image its portrayal [ Abbildung ] is a tautology[;] ... natural beauty cannot be copied [ Unabbildbarkeit ]" ... Natural beauty—that is, the aesthetic experience of nature—is already representation in Adorno (again, the dialectic of closeness and distance). Aura then becomes a trace of "the unique and the non-identical" and the relationship of the modernist artwork to nature is one of sublime negativity (representation of the unrepresentable); in art, "nature is sublimated to the point of disappearance, leaving only its aura." For Morton, that nature is already representation is problematic, as it signifies a process of identification with non-identity. Nature, he argues, is ideological, "an arbitrary rhetorical construct, empty of independent, genuine existence behind or beyond the texts we create about it." (Chandler 2010:192)

**We retain the idea of the insignia, as signs of condensation of meaning.**

[44] Schulz (1980) proposes 4 categories of archetypal landscapes:

Archetypal natural places:

*Romantic landscape: original forces are still most strongly felt (Nordic forest). As a whole the environment seems to make a mutable and rather incomprehensible world manifest, where surprises belong to the order of the day, characterized by an indefinite multitude of different places.*

*What kind of dwelling is possible in the Nordic landscape? We have already suggested that Nordic man has to approach nature with empathy; he has to live with nature in an intimate sense. Direct participation is this more important than abstraction of elements and order. This participation however is not social. Rather it implies that the individual finds his own "hiding-place" in nature.*

Cosmic landscape.

*Desert: as a whole, the environment seems to make an absolute and eternal order manifest, a world which is distinguished by permanence and structure. Even the dimension of time does not introduce any ambiguities. It does not contain individual places but forms a continuous neutral ground.*

Classic landscape.

*The classical landscape, "discovered in Greece, and later it became one of the primary components of the Roman environment, is neither characterized by monotony nor by multifariousness. Rather we find an intelligible composition of distinct elements. A true microstructure is lacking, all dimensions are "human" and constitute a total, harmonious equilibrium. The environment thus consists of palpable "things" which stand out (ek-sist) in light. In general the classical landscape may be described as a meaningful order of distinct, individual places.*

Complex landscape.

*The romantic, cosmic and classical landscapes are archetypes of natural place. Being generated by the basic relationships between earth and sky, they are relevant categories which may help us to understand" the ingenious loci of any concrete situation. As types however, they hardly appear in "pure" form, but participate in various syntheses.*

### Genius Loci

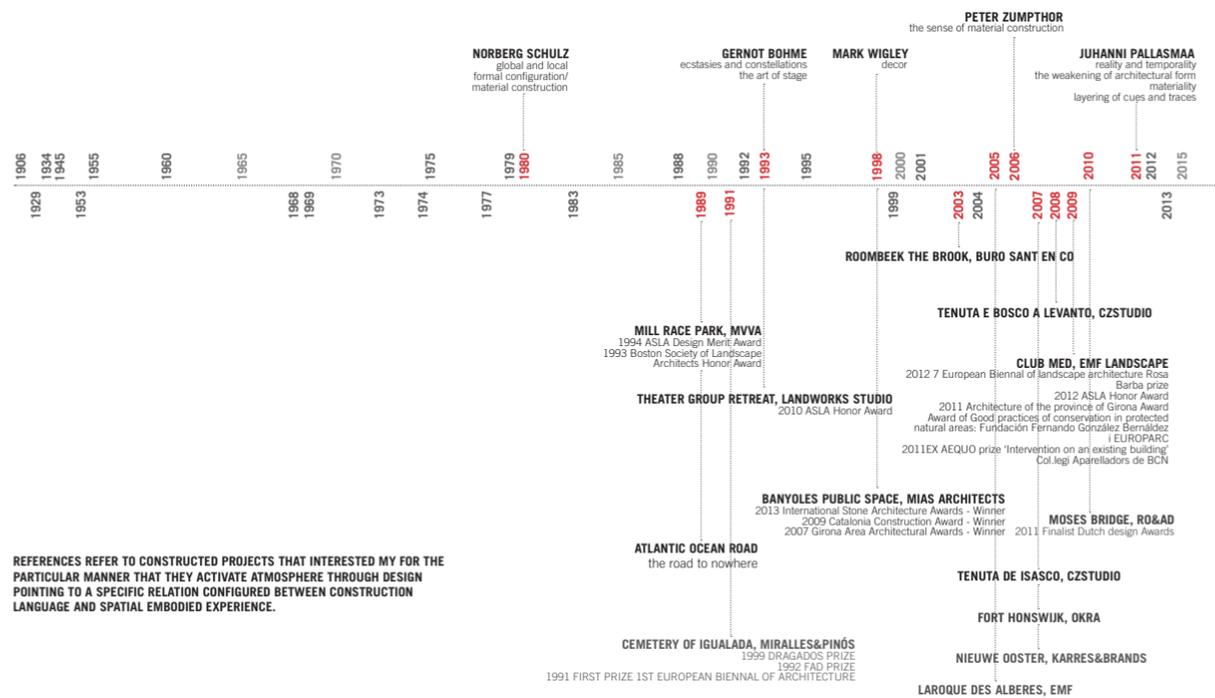
Norberg Schulz, is one of the first theorists to introduce the concept of atmosphere phenomenologically in the architecture discourse. In *Genius Loci: Towards a Phenomenology of Architecture* (1980), Schulz defines atmosphere as the manifestation of the character of place, where place stands for: "a totality made up of concrete things having material substance, shape, texture and colour. Together these things determine an 'environmental character' - or atmosphere - which is the essence of place." (Schulz 1980:8).

According Schulz, *man dwells when he can orientate himself within and identify himself with an environment, or, in short, when he experiences the environment as meaningful. Dwelling therefore implies something more than 'shelter'. It implies that the spaces where life occurs are 'places', in the true sense of the word. A place is a space that has character. Since ancient times the genius loci, or 'spirit of place' has been recognized as the concrete reality man has to face and come to terms with in his daily life" (Schulz 1980, p.5)....it implies that the environment is experienced as 'meaningful' (Schulz 1980:21).*

Schulz's contribution to atmosphere is perhaps underestimated. The interest from the architectural field has been placed or misplaced more to the recovery of the concept of genius loci in a post modern era or to his quite generic categorization of the archetypal landscapes<sup>44</sup> rather to the specific suggestions made by Schulz on the specific qualities of atmosphere. I must also admit that I recovered Schulz after many years of denial, until I came up with the following reference through which the metaphor between the construction of atmosphere with that of a poem is made possible:

*Trakl's poem illuminates some essential phenomena of our life-world, and in particular the basic properties of place. First of all it tells us that every situation is local as well as general. The winter evenings described is obviously a local, Nordic phenomenon, but the implied notions of outside and inside are general, as are the meanings connected with this distinction. The poem hence concretizes basic properties of existence. To "concretize" here means to make the general "visible" as a concrete local situation. In doing this, the poem moves in the opposite direction of scientific thought. Whereas science departs from the "given", poetry brings back to the concrete thing, uncovering the meanings inherent in the life world. (Schulz 1980:10, bold mine).*

**THE MAKING OF ATMOSPHERES**  
**MAIN REFERENCES**



What I find suggestive is this particular connection between **global and local**. It seems that atmosphere retrieves global notions in a local scale. The relation between global and local, as Schulz proposes, is a relation of concreteness: To "concretize" here means to make the general "visible" as a concrete local situation (Schulz, 1980:10). **Atmosphere thus, concretizes global and potentially transpatial meaning into a concrete situation, as poetry brings back to the concrete thing, uncovering the meanings inherent in the life world** (Schulz 1980:10). Schulz quotes Susanne Langer (1953) for the concretization of the genius loci: *Architecture comes into being when a "total environment is made visible"; to quote the definition of Susanne Langer. In general, this means to concretize the genius loci...*(Schulz 1980:10).

Susanne Langer's philosophical approach to aesthetics has a clear resonance with the field of the philosophy of symbolic forms (Cassirer 1944; Langer 1979; Goodman 1976), that resides precisely in the idea that it presents structures of feeling and emotion independently of the individual experiencing subject, in terms that are communicable inter-subjectively. Thus, according to this conceptualization of feelings and emotion, it is possible to ask whether we can describe the objective properties of environments that account not for particular or individual subjective responses, but for structures of feelings or emotions that are expressed through space. Langer (1953) offers one of the denser definitions for atmosphere:

*A culture is made up, factually, of the activities of human being; it is a system of interlocking and intersecting actions, a continuous functional pattern. As such it is of course intangible and invisible. It has physical ingredients-artifacts, also physical symptoms. But all such items are fragments that "mean" the total pattern of life only to those who are acquainted with it may be reminded of it. They are ingredients in a culture, not its image. The architect creates its image: a physical present human environment that expresses the characteristic rhythmic functional patterns which constitute a culture. The place created by architecture is an illusion, begotten by the visible expression of a feeling, sometimes called atmosphere.*(Langer 1977:96).

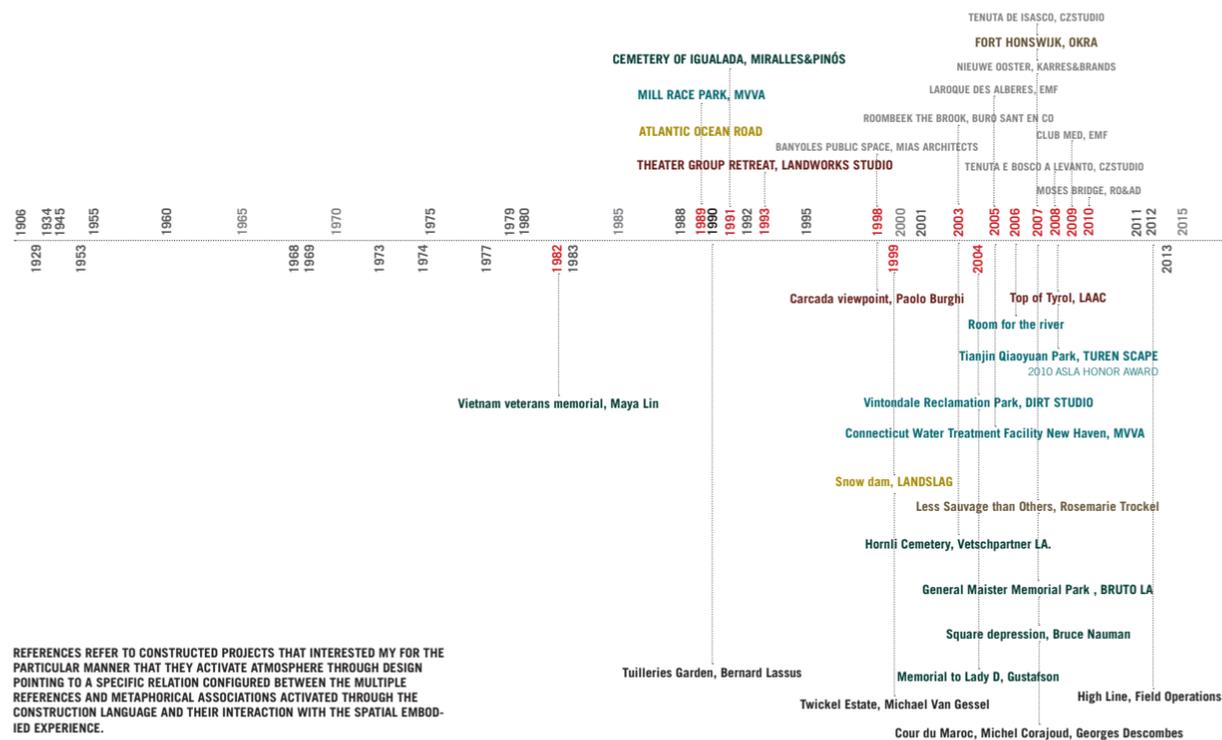
Atmosphere thus must uncover through the embodied experience the meaning inherent in the feeling and concretize it through a specific spatial interpretation and a specific material configuration as Schulz proposes:

*Character is determined by how things are made...by the material and formal constitution of the place. We must therefore ask: how is the ground on which we walk, how is the sky above our heads, or in general; how are the boundaries that define the place. How a boundary is depends upon its formal articulation, which is again related to the way it its "built". Looking at a building from this point of view, we have to consider how it rests on the ground and how it rises towards the sky. Particular attention has to be given to its lateral boundaries, or walls, which also contribute decisively to determine the character of the urban environment.* (Schulz 1980:14).

In order to do so, formal configuration and the material construction of the boundaries that define the place are keys to the construction of the architectural atmosphere. Nonetheless, as Peter Zumthor (2006) suggests:

*In order to design buildings with a sensuous connection to life, one must think in a way that goes far beyond form and construction.* (Zumthor 2006).

THE MAKING OF ATMOSPHERES  
PARALLEL REFERENCES



## Posterior inputs

Almost 20 years after Schulz's phenomenological approach to architecture introduces character and atmosphere as two central concepts in the architectural discourse, the input by Peter Zumthor has influenced a certain retrieval of the concept of atmosphere as one of the basic aims of design. Without a doubt his book of 2006, entitled Atmospheres has marked a critical point for the contemporary recovery of the concept of atmosphere. Coming from a renowned architect, the defense of atmosphere as a key to the success of his working process seems to partially at least win the battle against the veil of embarrassment that used to cover the use of atmosphere as a means or aim of design.

*Quality architecture is when a building manages to move me...One word for it is atmosphere. Our first impression...* (Zumthor 2006)

According Zumthor, in this idea of atmosphere as **first impression** relies its connection to an instinctive interpretation of the environment: *We perceive atmosphere through our emotional sensibility- a form of perception that works incredibly quickly and which we humans evidently need to help us survive. Not every situation grants us time to make up our minds on whether or not we like something or whether indeed we might be better heading off in the opposite direction. Something inside us tells us an enormous amount straight away. We are capable of immediate appreciation, of a spontaneous emotional response, of rejecting things in a flash. That is very different from linear thought, which we are equally capable of: thinking our way through things from A to B in a mentally organized fashion.*(Zumthor 2006:13)

Zumthor manages to condense in just a few sentences a multiplicity of concepts that seem to cross repeatedly the theoretical discourse related to atmosphere:

- The role of atmosphere in spatial experience seems to be concentrated at this first impression through an instinctive act of perception directly linked with basic instincts of survival and well being.
- Atmosphere is targeting right to the heart of our emotional sensibility, leading us all the way through towards an aesthetic appreciation of the data perceived.
- This process is far distant from that of linear thought.

Fig. 21:  
 Photo of the High Line before the implementation of the project by Field Operations/ Diller Scofidio+Renfo.  
 Photo by Joel Sternfeld, 2000  
 S: INTERVIEW, Architect James Corner On NYC's High Line Park by Jill Fehrenbacher, 08/26/12  
 Available at <http://inhabitat.com/interview-architect-james-corner-on-the-design-of-high-line/>



Jill: I think part of the inspiration that people around the world found in the original, untouched High Line was that there existed this unusual piece of wilderness in New York. How much of this aspect have you incorporated in your design?

James: Well, there were several influences from the beginning. One would be the post-industrial railroad character of the site – the rail tracks, the linearity, and the fact that it really is a thin, narrow ribbon that happens to be quite extensive. The entire High Line really cuts through blocks and buildings, and I sought to create a distinct juxtaposition where there is this green ribbon existing against the stoic grid of the city.

**There is also this almost sad, melancholic, silence that permeates the place. As a visitor you can assume this mood and feel like you've come across a found object in a vast cityscape. You can stroll through the space and become a little bit of a voyeur, or a little bit of an observer, rather than being so visible.**

**These were the sorts of experiential or phenomenal characteristics we wanted the design to embody.** We wanted to make sure that every detail from the paths to seating down to the trashcans, lighting and water features would make this a generous, safe and secure space, but also **give people the feeling that they've come across a secret, magic garden in the sky.** That they're almost surprised and delighted by how long it is, by the twists and turns it takes, by the views it affords, and ultimately that they are engaged in some of the delight in discovering these moments.

INTERVIEW: Architect James Corner On NYC's High Line Park by Jill Fehrenbacher, 08/26/12  
<http://inhabitat.com/interview-architect-james-corner-on-the-design-of-high-line/>  
 (bold mine)

Zumthor not only theorizes on the effects of atmosphere but also introduces us with nine main questions that he tries to consider when he thinks about a particular project. These nine "guidelines" could be classified into two more general categories: the first makes reference to the materiality of space and the second one to the configuration of space in terms of movement and relationships constructed between man and space and between the architecture's edifice and the surrounding environment.

"Material compatibility" in my interpretation of Zumthor writings condenses his idea of materiality:

*The sense that I try to instil into materials is beyond all rules of composition, and their tangibility, smell, and acoustic qualities are merely elements of the language we are obliged to use. Sense emerges when I succeed in bringing out the specific meanings of certain materials in my buildings, meanings that can only be perceived in just this way in this one building.* (Zumthor 1988:11)

The tangibility, the sound, even the temperature of space, that acquires also a metaphorical meaning in Zumthor, depends on the precise manner that meaning is perceived through the construction of the space. Construction is thus conceived as a construction language that expresses *meanings that can only be perceived in just this way in this one building.* (Zumthor 1988:11)

This specificity regarding the shape, the materiality and even the method with which the materials are applied is completed through a tactic of "seduction" regarding the orchestration of the movement in space: movement should not only direct people, but seduce them...This seduction has a clear bearing on the human sensation also configured by the "Tension between Interior and Exterior", the special relation between the inside and the outside immediately created when new building is constructed into a specific site. This gesture is controlled by concrete "Levels of Intimacy" that doesn't only relate to the relation between the interior and the exterior but also between the subject's body and the body created by architecture.

His notion of light, through the ninth point of "The Light on Things" seems to summarize in a certain manner his method: light exemplifies the relation between the interior and the exterior world but also the paths that light, and consequently bodily movement will follow in the interior, while material's reflection of the light on the other hand is the epitome of his sense of materiality.

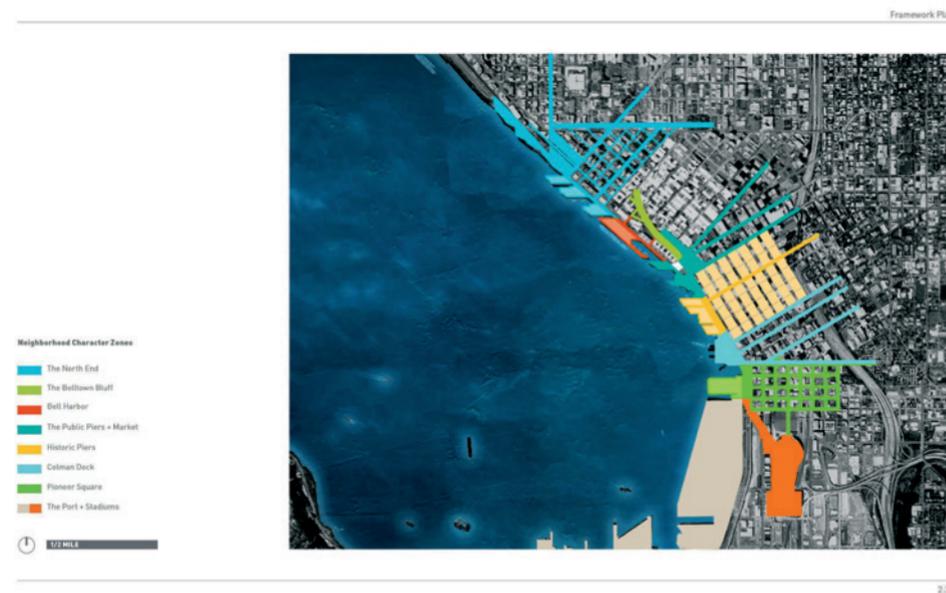
Materiality of construction is thus a vase of meaning communication of atmosphere. Materiality conveys meaning. And this meaning is directly related with the construction of atmosphere. This construction language is combined with the configuration of the spatial relations of space, relations of **tension**, regarding equally the movement in space, object to criteria of seduction rather than pure functional connectivity, and also the relationship between the exterior and the interior, between the body and the building. All configuring this first impression that constitutes atmosphere....

Atmosphere as **first impression** finds its resonance with the definition of Juhani Pallasmaa (Pallasmaa 2011) as an epic experiential dimension or **prediction**.

Urban planning though seems to draw more upon character than atmosphere as a concept that informs design.

Fig. 22: Characterization of neighborhood Character Zones for the city center of Seattle, in the framework of the Waterfront Seattle Framework Plan.

S: Waterfront Seattle Framework Plan, July 2012 (book 2 of 5, p 2:35)  
Available at: <http://waterfrontseattle.org/design/plans.aspx>



The waterfront is less a single line than it is an amalgamation of neighborhoods, districts, connections, streets, passageways, landmarks, piers, structures, vistas, and topography. Working from earlier research and analysis studies, the center city of Seattle is divided into character zones, each with unique urban qualities and characteristics of the areas to shape the design of the waterfront, and establishing strong connections between the waterfront and the neighboring Character Zones.

Waterfront Seattle Framework Plan, July 2012 (book 2 of 5: p 2:34)  
Prepared for: Central Waterfront Committee,  
The Seattle Department of Transportation,  
Department of Planning and Development, and Department of Parks and Recreation

Prepared by:  
James Corner Field Operations  
CH2MHill, Shiels Obletz Johnsen, Inc.  
SHoP Architects, Mithun, Berger Partnership, Nelson/Nygaard, Parsons Brinkerhoff, Parametrix, Envirolssues  
Creative Time, Mark Dion, Erik Fredericksen, Tomato

<http://waterfrontseattle.org/design/plans.aspx>

*Atmosphere or ambience is an epic experiential dimension or prediction, as we automatically read behavioral and social aspects – either existent, potential or imaginary– into the atmospheric image.... (Pallasmaa 2011: 7(16))*

Pallasmaa defines atmosphere as mental “thing”, as an *experiential property or characteristic and also specifies, coinciding with the abovementioned references, that is suspended between the object and the subject.... Atmosphere is the overarching perceptual, sensory and emotive impression of a setting or a social situation. It provides the unifying coherence and character for a room, space, place, and landscape, or a social encounter. It is “the common denominator”, “the colouring” or “the feel” of the experiential situation.* (Pallasmaa 2011: 2(16))

Pallasmaa, similar to Zumthor, also defends: *This instant recognition of the inherent nature of a place...akin to the automatic reading of the creature-like identities and essences in the biological world. Our innate capacity to grasp comprehensive atmospheres and moods is akin to our capacity of imaginatively projecting the emotively suggestive settings of an entire novel, as we read it. We live simultaneously in material and mental worlds and they are constantly fused.* (Pallasmaa 2011: 4)

Juhani Pallasmaa also insists that atmosphere depends on an intense presence of **materiality**, whose final aim is the accentuation of **reality and temporality**<sup>45</sup>. Pallasmaa draws from the distinction made by Gaston Bachelard between “formal imagination” and “material imagination”, *suggesting that images arising from matter project deeper and more profound experiences than images arising from form. Matter evokes unconscious images and emotions...* (Pallasmaa 2011: 10)

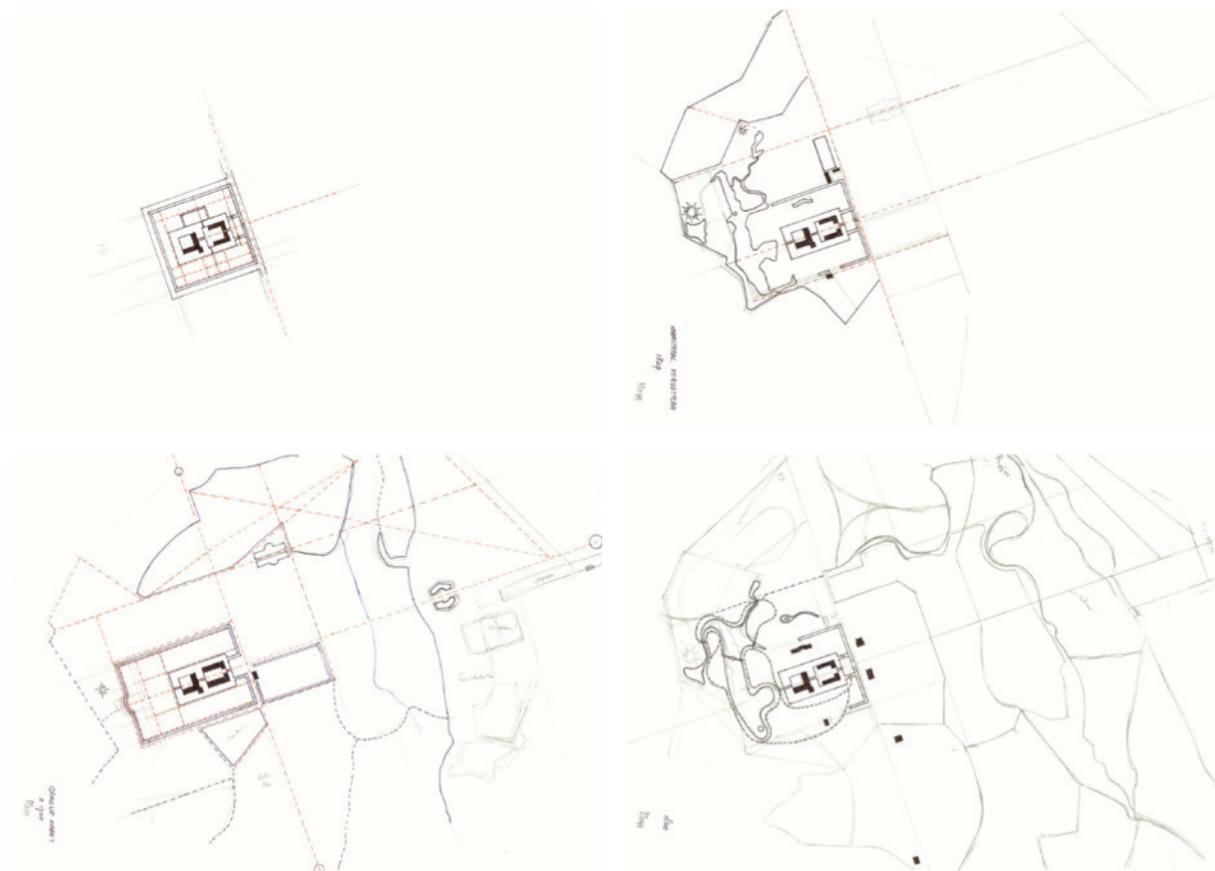
This materiality is not limited to palpable objects:

*The atmosphere of a setting is often generated by a **strong presence of materiality**. The heightened experience of materiality strengthens the **feeling of reality and temporality**. But the dominant atmospheric feature of a place can well be an acoustical character, smell, or even especially pleasant or unpleasant weather.* (Pallasmaa 2011: 9(16))  
The feeling of temporality is present in our encounter with a **layering of cues and traces**, as well with historical dense settings<sup>46</sup>:

*We also read a temporal layering or narrative into the setting, and we appreciate emotionally the layering of temporal cues and traces as well as images of past life in our settings. We like to be connected with signs of life instead of being isolated in hermetic and artificial conditions. Don't we seek historically dense settings because they connect us experientially and imaginatively with past life, and we feel safe and enriched to be part of that temporal continuum? Traces of life support images of safety and generate images of continued life.* (Pallasmaa 2011: 7)

Pallasmaa goes one step further proposing a peculiar sense of “weakening” of formal architectural logic as having a drastic role in our preference of atmospheres. Pallasmaa proposes this sense of “weakening” in multifold manners. For example it is present through *ruination, destruction, weathering and wear that strengthen the atmospheric impact of architecture, but also in the re-use and renovation of buildings. The insertion of new functional, aesthetic, and symbolic structures short-circuits the initial architectural logic of the building and opens up unexpected emotional and expressive ranges of experience. Architectural settings that layer contradictory ingredients project a special sensory richness and empathetic charm.* (Pallasmaa 2011: 10)

Fig. 23:  
*Twickel estate*, en Delden, Holanda, por Michael Van Gessel  
 Analysis of the historical depth of the site  
 Courtesy of the landscape architect



This “weakening” of formal architectural logic offers an adaptive image, also favored by the ecological approach:

*The ecological approach also favours an adaptive image, parallel to the inherent ‘weakness’ of ecologically adapted processes. This ecological fragility is reflected in contemporary art, for instance, in the poetic works of Richard Long, Hamish Fulton, Wolfgang Leib, Andy Goldsworthy, and Nils-Udo, all set in a subtle dialogue with nature. (Pallasmaa 2011: 10)*

*Here again, artists set an example for architects. The art of gardening is an art form inherently engaged with time, change, atmosphere, and fragile image. On the other hand, the geometric garden exemplifies the traditional western attempt to domesticate nature into patterns of man-made geometry. The tradition of landscape and garden architecture provides an inspiration for an architecture liberated from the constraints of geometric and strong image. Biological models have already entered various fields of science, medicine, and engineering; the use of biological models for human innovations is nowadays often called “Bio-mimicry”<sup>31</sup>. Why should biological models not be valid in architecture? Indeed, the more subtle line of high-tech architecture is already heading in that direction. (Pallasmaa 2011)*

A certain dominance of materiality on form, evoking deeper and more profound experiences, is thus necessary for the creation of an atmospheric effect. This materiality also favors the peripheral vision which is, according to Pallasmaa, **the perceptual mode through which we grasp atmospheres**:

*... The all-encompassing and instantaneous perception of atmospheres calls for a specific manner of perception – unconscious and unfocused peripheral perception. In fact, there is evidence that peripheral and unconscious perception is more important for our perceptual and mental system than focused perception<sup>47</sup> (Pallasmaa 2011: 11)*

Focused perception, according to Pallasmaa, is partially causing the contemporary phenomenon of alienation to space, limiting perception to a momentary situation:

*While the hectic eye of the camera captures a momentary situation, a passing condition of light, or an isolated, framed and focused fragment, the real experience of architectural reality depends fundamentally on peripheral and anticipated vision; This assumption suggests that one reason why contemporary spaces often alienate us—compared with historical and natural settings that elicit powerful emotional engagement—has to do with the poverty of our peripheral vision. Focused vision makes us mere outside observers; peripheral perception transforms retinal images into a spatial and bodily involvement and gives rise to the sense of atmosphere and participation. (Pallasmaa 2011: 11)*

Pallasmaa accentuates the importance of the senses for the construction of the architectural atmosphere, due to their non-directional and embracing character.

*The importance of the senses of hearing, smell, and touch (temperature, moisture, air movement) for atmospheric perception arises from their essence as non-directional and embracing character. The role of peripheral and unconscious perception explains why a photographic image is usually an unreliable witness of true architectural quality; indeed, architects would do better if they were less concerned with the photogenic qualities of their works. (Pallasmaa 2011: 12)*

[45] See reference projects: Twickel Estate, Delden, Netherlands by Michael Van Gessel, Cité Internationale, Lyon, Cour Du Maroc, Paris, by Michel Corajoud, Tuilleries Gardens by Bernard Lassus. These projects share a common interest for the recovery of the historical depth of the site as a point of departure for design.

[46] See reference project: High Line, James Corner, Diller Scofidio+Renfo.

[47] Anton Ehrenzweig offers the medical case of hemianopia as a proof for the priority of peripheral vision in the psychic condition of our mechanism of sight. In a case of this rare illness, one half of the visual field turns blind while the other retains vision. In some cases of the illness, the field of vision later reorganizes itself into a new complete circular field of vision with a new focus of sharp vision in the centre and an unfocused field around. As the new focus is formed, the reorganization implies that parts of the former peripheral field of inaccurate vision acquire visual acuity, and more significantly, the area of former focused vision gives up its capacity for sharp vision as it transforms into a part of the new unfocused peripheral field. “These case histories prove, if proof is needed, that an overwhelming psychological need exists that requires us to have the larger part of the visual field in a vague medley of images”, Ehrenzweig notes. Anton Ehrenzweig, *The Hidden Order of Art*. Paladin, Frogmore, St. Albans, 1973, p. 284, as quoted in (Pallasmaa 2011).

But among all senses, Pallasmaa distinguishes the sense of touch as the most significant. Emphasizing in this manner the importance of materiality in overwhelming atmospheres and drawing from the synaesthetic approach of Merleau Ponty (1962) and the work of the anthropologist Ashley Montagu (1971) who confirms the primacy of the tactile realm based on medical evidence, Pallasmaa defends the importance of haptic qualities of space:

*All the senses, including vision, are extensions of the sense of touch: the senses are specializations of the skin, and all sensory experiences are related to tactility. We can also acknowledge that overpowering atmospheres have a haptic and almost material presence, as if we were surrounded and embraced by a specific substance.* (Pallasmaa 2011: 9)

*Our culture of control and speed has favored the architecture of the eye, with its instantaneous imagery and distanced impact, whereas haptic and atmospheric architecture promotes slowness and intimacy, appreciated and comprehended gradually as images of the body and the skin. The architecture of the eye detaches and controls, whereas haptic architecture engages and unites. Tactile sensibility replaces distancing visual imagery through enhanced materiality, nearness, and intimacy.* (Pallasmaa 2011:9)

The awakening of the senses<sup>48</sup> through an intense presence of materiality that promotes a sense of reality and temporality, materiality over form, are the basic gateways for the construction of an overwhelming atmosphere, according to Pallasmaa.

Peter Zumthor and Juhani Pallasmaa place the emphasis on emotions, first impression and the spatial character of atmosphere. Their approach is quite similar to this of Mark Wigley (1998), although this last puts a special emphasis to the role of atmosphere as an intangible effect:

Wigley defines atmosphere as: *A swirling climate of intangible effects generated by a stationary object, and to enter a project is to enter an atmosphere. What is experienced is the atmosphere, not the object as such.* (Wigley 1998:18)

Now, for Wigley, the most important effect of atmosphere is how it displaces the importance from the object to its perception which might have as an eminent consequence the proper displacement of the predominating role of the architect:

*Architecture is but a stage set that produces a sensuous atmosphere. To construct architecture is simply to prop up a surface that produces an atmosphere. Architects are special effects experts.* (Wigley 1998: 20)...*To focus radically on the architecture of atmosphere is to displace the building and, in so doing, the architect.* (Wigley 1998:24)

Wigley offers as an interesting example the situationists' attempt to redefine architecture as pure atmospheric. The ultimate goal of the situationists, as declared in Guy Debord's Introduction to a Critique of Urban Geography, 1955: would be to *"redesign architecture" itself by exploiting the radical potential of atmosphere, tracing the initiation of the concept of atmosphere as an operative tool for the design of the built environment back to the 60s through the interrelation between atmosphere and the concept of "situation"*<sup>49</sup>. (Wigley 1998:25)

[48] The interest on the senses for the construction of the architectural atmosphere has also been investigated through in the field of research dedicated to marketing and retailing. The article by Philip Kotler (1973), Atmospherics as a marketing tool, can serve us as a good introduction to this investigation. Published at the early seventies, Kotler proposes the term atmospheric to describe **the conscious designing of space to create certain effects in buyers. More especially, atmospheric is the effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability.** (Kotler 1973:50)

According to Kotler, *atmosphere is apprehended through the senses. Therefore the atmosphere of a particular set of surroundings can be described in sensory terms. The main sensory channels are sight, sound, scent, and touch. Specifically, the main visual dimensions of atmosphere are: color, brightness, size, shapes. The main aural dimensions of an atmosphere are: volume and pitch. The main olfactory dimensions of an atmosphere are: scent and freshness. The main tactile dimensions of an atmosphere are: softness, smoothness and temperature. The fifth sense, taste, does not apply directly to atmosphere. An atmosphere is seen, heard, smelled, and felt, but not tasted. At the same time, certain artifacts in an atmosphere can activate remembered tastes. Thus the atmosphere of particular surroundings can be described in sensory terms.* (Kotler 1973:50-51)

Kotler's article leaves no space for doubts regarding the power of atmospheric as a powerful marketing tool, having an effect on purchase behavior in at least three ways: **Firstly atmosphere may serve as an attention-creating medium, secondly as a message-creating medium and thirdly as an affect-creating medium.** (Kotler 1973:50)

Kotler's article is still influencing marketing studies as the work of Ingrid Vogels (Vogels 2008) and Katelijin Quartier (Quartier 2008) demonstrates, both based on empirical research and intending in a way to measure the perceived atmosphere.

Vogels (2008) proposes a new measurement tool to quantify the atmosphere of an environment as experienced by human observers, defining atmosphere as the affective evaluation of the environment that can change people's affective state. Her experiments, based mainly on questionnaires pretend to demonstrate that atmosphere can be described by four underlying dimensions, called coziness, liveliness, tenseness and detachment. (Vogels 2008:1)

Quartier (Quartier 2008) on the other hand, intends to develop a methodology to measure the influence of the retail environment on consumers via the analyses of several retail atmospheric, through the 'research by design' method. Her main question is how to 'activate' shopping via moods, mostly defined as 'pleasure', 'arousal' and 'dominance'.

Fig. 24  
Constant Nieuwenhuys, *New Babylon north*, 1971

Fig. 25  
Constant Nieuwenhuys, *Symbolische voorstelling van New Babylon*, 1969

Available at: <http://representingplace.wordpress.com/tag/military/>

Fig. 24

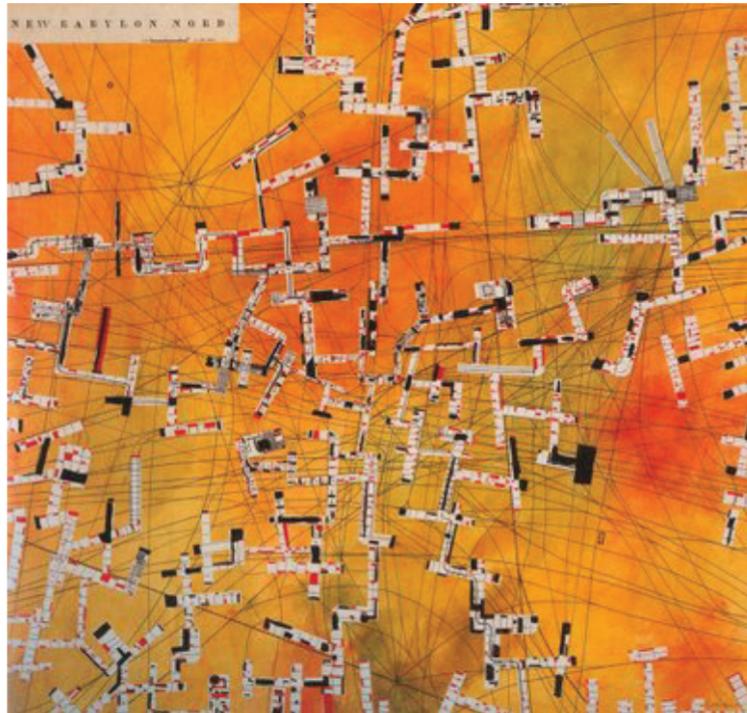


Fig. 25



[49] The 1958 Amsterdam Declaration by Debord and Constant Nieuwenhuys argues that the reconfiguration of the city starts with the development of “complete decors”. In 1953, Ivan Chitchevlov’s *Formulary for a New Urbanism* had introduced the idea of “constructing situations” by playing with “new, changeable decors”. In 1954, F. Concorde reacted against the spartan “box” produced by Corbusier’s generation: “Décor determines gestures, we will build passionate houses”. Constant took up this mission to rethink and rebuild architecture, conceiving of the habitat as “a décor for life as a whole”. He proposed an “in-depth study of the means of creating ambiances, and the latter’s psychological influence” and came up with *New Babylon*, a project for a vast city that would obsess him from 1956 to 1974. The project is nothing more than a vast machine for producing discrete and ever changing atmospheres, an “infinite variety of ambience”. Debord enthusiastically promoted this “ambience-city” but soon rejected it, along with the very idea of the situationist architect, arguing that society “has started to mold its own décor more or less everywhere”. But Constant always insisted that his project was just a speculative image of a world of the future that he, by definition, could not imagine, a world that would be constructed by its users rather than by an architect. (Wigley 1998: 24)...

[50] The immersive effect of being surrounded by dense fog, to walk alone or in groups in a cloud – a dreamlike or surreal situation – with just the noise of the nozzles, has something of the dramatic visionary of Victorian fantastic novels, indeed. (Fischer 2007:28)

[51] In addition to this epistemological and ontological reflection Eliasson questions the construction and mediation of human apperception: For him, weather is not only addressing physical presence, but is a cipher for time, including the future. Weather in urban societies, he says, is a mediation of indeterminacy, the unforeseeable, the dialectic of duration and constant movement. The term ‘mediation’ describes the degree of representation that interferes with the experience of a situation – which can be language, cultural codes, media, or social, moral and ethical ideologies. Eliasson is well aware, that experience is mediated per se, but he wants to problematise the subconscious mediation (by others). In his works he questions and frames the construction of accustomed ways of experiencing by inflecting the view of the observer back on perception: ‘seeing yourself seeing’. The *Weather Project* disclosed its imaginary machinery, (Fig. 27) and was meant to unmask the artificial aesthetic environment as a constructed experience. Though Eliasson’s critical inquiry does not halt at his own work, his installations aim at the frame of the museum as an ‘institution’, not by repeating formal avant-garde moves, but by taking responsibility of media reports, public relations, marketing and the museum education of the Tate Modern. Eliasson believes in the utopian aspect of artwork: ‘museums are radical’, because they enable alternative frames and constructions of life, providing evidence, that ‘reality’ is just one out of many possible world models, and therefore functioning as the ‘immune system’ of society. But critical strategies have to be light, flexible, temporal, for the context of here and now, in order to avoid the inefficiency of petrified critical gestures: an art beyond objects. And last but not least: staging the topic ‘weather’ had less to do with neo-romanticism, than with sociological considerations, since ‘everybody talks about the weather.’ (Fischer 2007:39)

[52] as suggested by Somol & Whiting: “Notes around the Doppler effect”, in *Constructing a New Agenda: Architectural Theory 1993-2009*, Krista Sykes (ed), p. 197-198

As Julieanna Preston (2008) summarizes, *Wigley subsequently attributes decoration as the outer visible layer of the invisible climate, an envelopment centered on the inhabitant, not the building. In these terms, a building is a device for producing atmospheres, interiors within interiors, demarcated by thresholds of difference.* (Preston 2008:9) As Wigley calls on Semper’s works to direct architectural concerns for atmosphere towards decor, architecture is linked to the craft of **illusion**.

Mark Wigley might talk of atmosphere as an effect, beyond construction, but actually admits that it stems out of a building and produced by a physical form.

*Atmosphere seems to start precisely where the construction stops. It surrounds a building, clinging to the material object. Indeed it seems to emanate from the object... **The atmosphere of a building seems to be produced by the physical form.** It is some kind of sensuous emission of sound, light, heat, smell and moisture; a swirling climate of intangible effects created by a stationary object.* (Wigley 1998:18)

The idea of atmosphere as a *swirling climate of intangible effects* (Wigley 1998) seems to mark a contemporary tendency of **architecture shifting from object to atmosphere** (Mostafavi 2013). It seems that the literal sense of atmosphere gains certain weight, now in form of transposing in the construction of space its literal property as an involving sphere of ever changing conditions that permits life. As proposed by Ole W. Fischer (2007), the work of the artist Olafur Eliasson, seen from the perspective of spatial design could certainly exemplify this tendency that also finds its correspondence in the blur building by Diller and Scofidio: The blur building exemplifies the special kind of weakening of the architectural logic, a proper characteristic of atmospheres as proposed by Pallasmaa (2011), through which atmosphere enables architecture as an immersive effect, as Ole W. Fischer<sup>50</sup> (2007) explains.

Nonetheless, Fischer distinguishes the work of Olafur Eliasson as not only interested to *a constant reference to indeterminate elements of atmosphere and weather, and as a detour to contemporary installation art, but to the fundamental aspect of life, because he reads culture as a process that produces body-friendly environments* (Fischer 2007:26). Fischer detects a certain correlation between the work of Eliasson and the philosophical approach to atmosphere by Böhme, through the precise *notion of physicalness, haptics and presence* that Eliasson<sup>51</sup> is interested in.

What results suggestive for me in the investigation of Fischer on the “atmospheric” work and relative theoretical connotations is the focus on atmosphere, either as exemplified by the work of Eliasson or by Diller and Scofidio, as an indicator of moving from critical to “projective” architecture<sup>52</sup>.

Fig. 26  
Diller & Scofidio, *Blur Building*, inside, Yverdon, Expo02, (Ole W. Fischer 2007)  
Photo: Beat Widmer.

Fig. 27  
Olafur Eliasson, *The Weather Project*, Turbine Hall, Tate Modern, London, UK,  
2003  
Available at [http://www.olafureliasson.net/works/the\\_weather\\_project.html](http://www.olafureliasson.net/works/the_weather_project.html)



Fig. 26

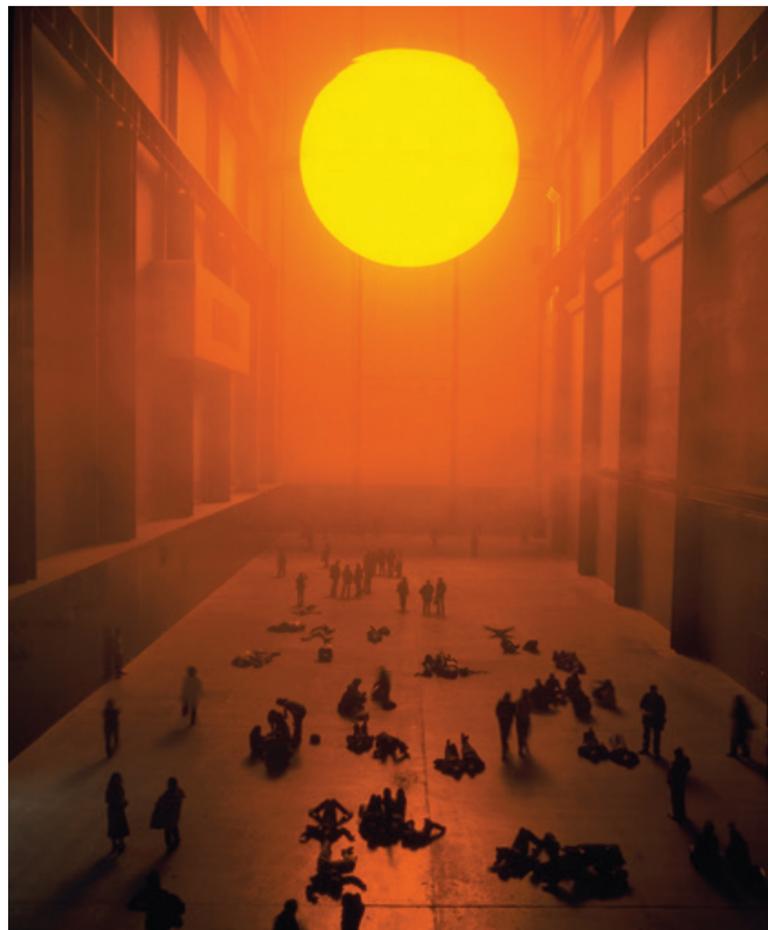


Fig. 27

*Rather than relying upon the oppositional strategy of critical dialectics, the projective employs something similar to the Doppler Effect- the perceived change in the frequency of a wave that occurs when the source and receiver of the wave have a relative velocity. The Doppler effect explains the change in pitch when the sound of a train as it approaches and then moves away from the listener. If critical dialectics established architecture's field or discipline, a Doppler architecture acknowledges the adaptive synthesis of architecture's many contingencies. Rather than isolating a singular autonomy, the Doppler focuses upon the effects and exchanges of architecture's inherent multiplicities: material, program, writing, atmosphere, form, technologies, economies, etc.....A projective architecture does not shy away from reinstating architectural definition, but that definition stems from design and its effects rather than a language of means and materials... (Somol& Whiting 2009:197)*

We might find certain correlation between the Doppler Effect proposal with that of Mark Wigley, when he states that atmosphere displaces the architect, probably referring to critical architecture as proposed by Somol& Whiting.

However might be the case, either if attention is orientated to unmask aesthetic environment as a constructed experience, as the work of Eliasson proposes, or towards the conceptualization of architecture as a "technological sublime" as defined by the blur building of Diller and Scofidio, spatial design, similarly as in aesthetics, uses the term atmosphere posing the emphasis either to its metaphorical or to its literal sense in order to mark a distance from traditional thinking on the meaning of the construction of space.

Fig. 28  
Mary Daniel Hobson, *Territory*, 1997  
kodolith and mixed media, 7-1/8" x 5-1/8" (framed), edition of 2

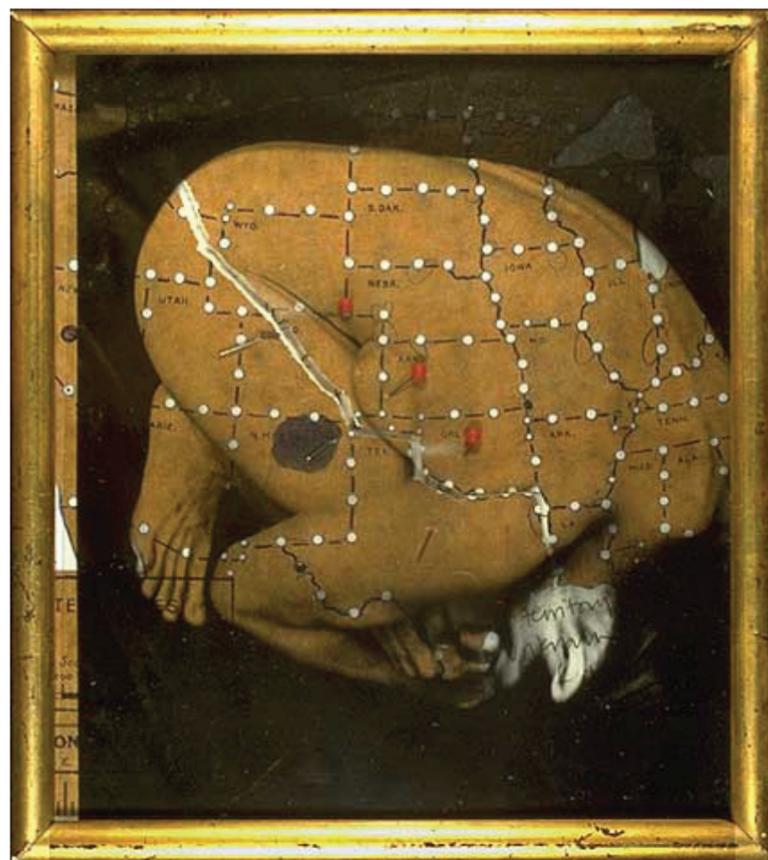
*Mapping The Body series: introduction:*

*I am interested in what lies beneath the surface of the skin. It is not the physical structures that concern me – ligaments, organs, bones. Rather it is the emotions and experiences that are imprinted on our bodies – the places we travel, the music we listen to, the letters we read and write. Our past informs our cells.*

*As early mapmakers used pen and ink to chart the surface of the world, I use collage to navigate the inner world. I print images of the body on kodolith, because black and white transparencies render the surface invisible. I collage in layers using real objects. I delight in insect wings, needles, fishhooks, matches, traintracks, and door hinges because they are so very tactile and convey multiple meanings.*

*Many of the pieces in this series were inspired by personal history. However, my hope has always been that the work transcends its origins and speaks to something larger than myself, to something universal. For this reason, I encourage viewers to discover their own unique reading of each piece*

Figure and text available at the personal web-page of the artist: <http://www.marydanielhobson.com/>



[53] I find interesting the term impression because it relates to memory...Atmospheres seem to be impressed in our memory orienting not only perception but also its posterior description:  
**Los paisajes permanecen en nuestra memoria como hitos, horizontes, signos o ambientes, que valen tanto para el que les recuerda como para el que los descubre, evoca o inventa por primera vez.** Rosa Barba, 1995, "Argumentos en el proyecto de paisaje". En *Revista Geometría 20. Monografías de Arquitectura y Urbanismo*, p6.

## Persistences in the understanding

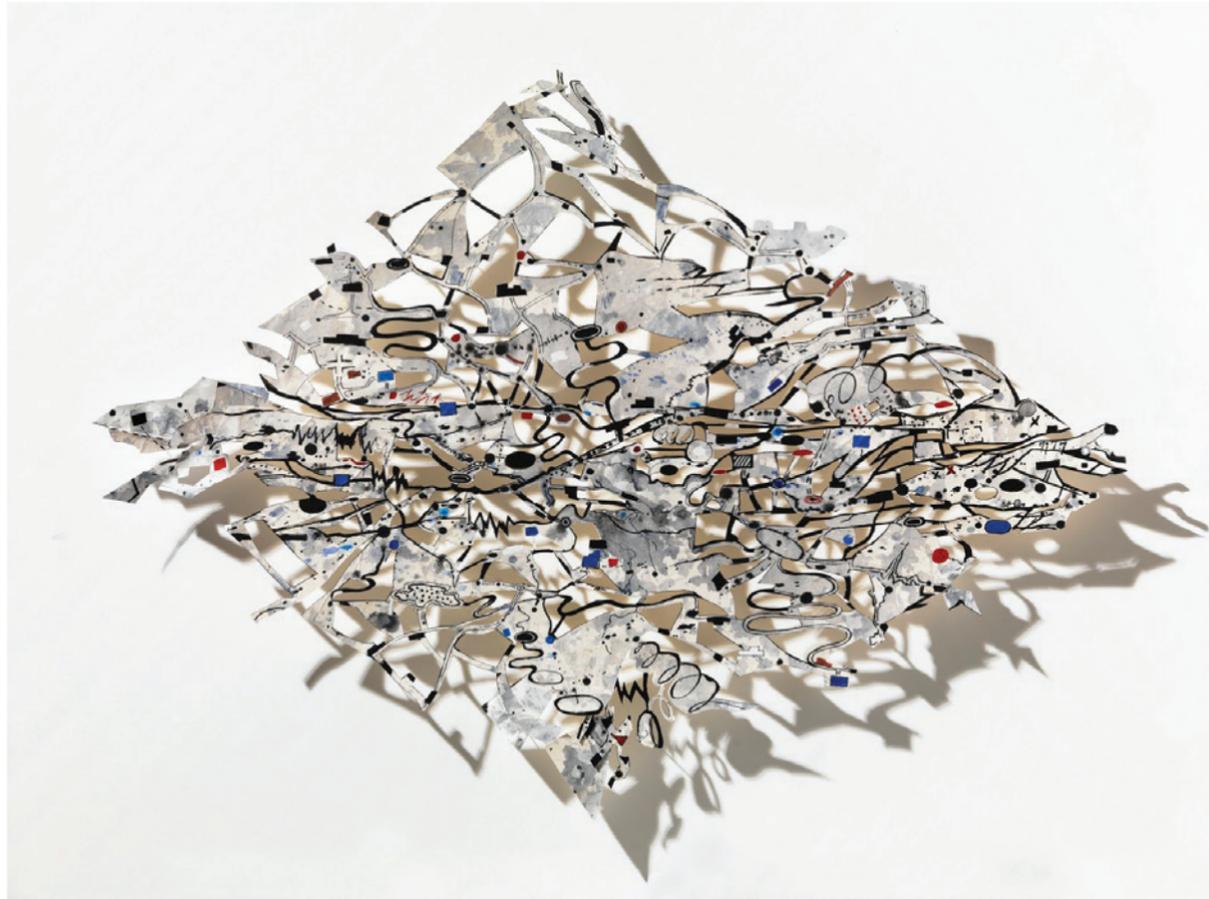
### First impression and feelings

First impression<sup>53</sup>, prediction and instant recognition are concepts that link directly the concept of atmosphere with a pre-reflective corporeal awareness approach, interpreting the perception process through a biological perspective, principally represented through environmental aesthetics, that place our intrinsic biological nature in a neuralgic centre around and through which eventually aesthetic appreciation finds its most profound origins.

Although environmental aesthetics might in a certain manner legitimize the concept of atmosphere as first impression or pre-conceptual reading and interpretation of the environment, one of the main and most difficult problems that have labeled atmosphere as something too subjective is its constant relation with feelings, strikingly recurrent when talking about atmosphere. This observation reflects one of the central issues for the theory of perception, one that attempts to understand the relationship between objective properties of objects and subjective responses. This question is not new. It has been, and still does, troubling the related theoretical discourse that seems to be inspired by two ideas specifically aiming at engaging the manner in which our exposure to a work of art elicits an automatic emotional response, an affective engagement. Both originate in the early 19th century. The idea of "empathy", initially developed by Vischer (1873) and subsequently taken up and modified by Wölfflin (1886) suggests that we project patterns of feeling or emotion onto objects by first perceiving them as products of forces of the same kind as those experienced by our bodies, and then projecting upon them feelings or emotions that we would associate with the effects of such forces (Mallgrave, Ikononou 1993). On the opposite side, the idea of "animation", proposed by Wölfflin (1886) and discussed by Arnheim (1986), locates the sources of resonance in a similar correspondence but supposes an opposite direction of influence, not from ourselves outward to things, but from things inward to ourselves.

Fig. 29

Heidi Whitman - *Invisible Cities - Brain Terrain (318)*, 2010  
Ink, gouache, acrylic, paper, and cast shadows, 25" x 33" x 3"  
Available at the personal web-page of the artist: <http://www.heidiwhitman.com/>



Although contemporary society still promotes a split between the mind and the body, which *doesn't allow for an understanding of feeling as an extroverted activity* (Eliasson 2007), atmosphere brings forward the relevance of feelings as operating exactly in this hybrid in-between, as a bodily experienced effect of the *relationship between a mental and a physical state—it implicates both mind and body* (Eliasson 2007). Böhme's basic definition of atmosphere, sharing actually much with Dufrenne (1973), puts emphasis on the spatiality of atmospheres, describing them as "spatially discharged, quasi-objective feelings" (Böhme 2003). What is more, feelings operate as the activating trigger of action. Once again, the intermediate nature of atmosphere is revealed, shifting between perception and action. Paraphrasing Robert Irwin: *This is not an either/or proposition—it's both/and. And that's a big difference. Once you allow for the possibility of two kinds of "reality," it changes all the rules of the game. If you break the frame of the painting/object you lose something very critical—the existing cultural agreement.* (Eliasson 2007).

Heidi Whitman's paper constructions, paintings, and drawings are invented terrains or mental maps. Contemporary city grids and maps of ancient ruins are primary references.

<http://www.heidiwhitman.com/>

Fig. 30: Covered community road at Fort Honswijk, OKRA

Available at: <http://europaconcorsi.com/projects/171788-New-Dutch-Waterline/images/2661759>

Fig 31: Less Sauvage than Others, Rosemarie Trockel, 2007

Available at: <http://www.skulptur-projekte.de/kuenstler/trockel/?lang=en>

Fig 32: Moses Bridge, by RO&AD Architects in: Halsteren, Municipality of Bergen op Zoom, The Netherlands.

Available at: <http://www.landezine.com/index.php/2011/11/moses-bridge-by-road-architects/jogger/>

Fig 33: Model of Memory Wound, a 3.5m gap cut into the Sørbråten peninsula by artist Jonas Dahlberg as a memorial for the victims of the 2011 massacre. Picture: Jonas Dahlberg Studio.

Available at: <http://www.theguardian.com/artanddesign/2014/mar/06/norway-massacre-memorial-jonas-dahlberg-anders-behring-breivik>

Fig. 30



Fig. 31



Fig. 32



Fig. 33



The "cut" as a strategy for the intensification of the embodied experience:

Atmosphere seems to arise when the designed experience functions as a spatial interpretation of the latent meanings of landscape through the precise way that the construction language and designed spatial experience situates the body in space. Such kind of designed experience is aiming at rendering meaning not merely visible but bodily experiencable by the visitor: the objective is not to construct a visual narrative but the configuration of a dense spatial meaning by crossing the existing pattern as a structure of relations and processes, natural or cultural with the designed embodied experience. The spatial embodied experience could be described in terms of an intensification of the bodily interaction with the landscape, enveloping the body within a field of apparent forces and influences. Attention is captured by a situation that envelops the body sensually and not merely symbolically.

## The construction of atmosphere

Atmosphere as a concept, seems to belong to the sense of the things, as opposed to their structure. And this sense depends highly on the formal configuration and material construction of space, although they both acquire extended senses when they are crossed with the effect they produce through our embodied experience:

Material construction goes beyond the definition of an object as composed by a specific material with a specific construction technique. The emphasis is placed on the effect that materiality provokes to the senses as it interacts not only with the bodily perception of space. What is more, materiality seems to prevail on form. The weakening of the architectural form (Pallasmaa 2011) provides an intense feeling of reality and temporality that promotes the peripheral vision as compared with the focused vision trapped in a singular situation detached from the real experience of architectural reality.

Formal configuration is defined as the constellations of objects, their distributional spatio-temporal pattern, equally important as their "appearance" in space. What is more, atmosphere emerges through the precise manner that these constellations that form the "body" of architecture envelop our body and orchestrate our movement in space. Formal configuration is thus defined essentially as spatial embodied experience.

Both construction language and spatial embodied experience manifest *meanings that can only be perceived in just this way in this one building* (Zumthor 2006) and they contribute in concretizing a very specific and local situation (Schulz 1980). Nonetheless, All references consulted, independently of their punctual differences regarding the point of view from which we look into the construction of the atmosphere, seem to converge into the conclusion that making of atmospheres goes beyond formal configuration and material construction: Atmosphere concretizes meaning, making the general "visible" as a concrete local situation...*uncovering the meanings inherent in the life world* (Schulz 1980).

## Whose property is atmosphere?

Still the question: whose property is atmosphere remains open...And its answer is quite complex, targeting at the very core of the discourse related with atmosphere: All references converge that atmosphere is to be found in the crossroad of the perceptual inputs offered by space and the immediate assignation of meaning to these inputs by part of the observer.

The atmosphere of an object discloses the space-time of an 'expressed world'— it does not represent objective space-time or lived space-time. It creates a space of intensity that overflows represented world organized into subjects and objects or subjects and other subjects. Instead, it is through an atmosphere that a represented object will be apprehended and will take on a certain meaning.

Atmospheres seem to be characterized by a hybrid character that oscillates constantly between the realm of the "real" objective world and the realm of the subjective perception<sup>54</sup>. Atmosphere goes beyond traditional schisms between the ontology of the object and its differentiation from the subject, as functioning in the in-between threshold of the interaction between the subject and the world<sup>55</sup>. Paraphrasing Sloterdijk, it could be suggested that this in-between the internal and the external, forms an autonomous spatial "sphere" that defies the traditional thinking on subjectivity and objectivity: as noted by the neuroscientist Leif Finkel: *much of the consistency and logic of external events is, consequently, a property of the "perceiver" rather than the perceived object. Our view of the world may be more subjective than we realize, even beyond any cultural conventions.* (quoted in Blau 2010)

Although expressed in different manner, Böhme also proposes that atmosphere seems to steam out through the structure of relation between things, persons or environmental constellations. **Atmosphere cannot be localized; it would be difficult to say 'where' an atmosphere is** since *"they seem to fill the space with a certain tone of feeling like a haze"* (Böhme 1993: 113–114).

The fact that atmosphere is widely conceived as not localizable, almost situated in the air<sup>56</sup> as Michel Orsoni (1998) proposes. might also explain that only a very limited amount of references refer specifically to the spatial reproduction of an atmosphere, while most refer to its reproduction through differentiated means of expression, with the exception of Schulz according to whom atmosphere could be transposed **through the characteristic motifs that condense the character of a place**<sup>57</sup>.

[54] *Conceived in this fashion, atmospheres are neither something objective, that is, qualities possessed by things, and yet they are something thinglike, belonging to the thing in that things articulate their presence through qualities-conceived as ecstasies. Nor are atmospheres something subjective, for example, determinations of a psychic state. And yet they are subjectlike, belong to subjects in that they are sensed in bodily presence by human beings and this sensing is at the same time a bodily state of~ being of subjects in space.* (Böhme 1993:122)

[55] *Robert Irwin: The fields of waves are connected to my fundamental interest in exploring the relationship that arises between visitor and artwork. The experience of space –walking down the street, for instance –is a negotiation in which a co-creation takes place. What I am aiming at is to try to isolate the negotiation or engagement; that is, neither looking at the person nor the street, but instead at the in-between.*

*Olafur Eliasson: I first became interested in phenomenology when I was an art student, as it seemed to offer a means for understanding subjectivity and the ways in which one could engage with one's surroundings. But I have sensed a danger in phenomenology's being presented as a kind of truth; there's a tendency to detach experience from social context by justifying it as a phenomenological situation. And it is a more dynamic conception of phenomenology, of course, that has been a source of inspiration in my work. To me the greatest potential of phenomenology lies in the idea that subjectivity is always susceptible to change. I like to think that my work can return criticality to the viewer as a tool for negotiating and reevaluating the environment—and that this can pave the way for a more causal relationship with our surroundings. Whereas earlier decades looked to phenomenology as a sort of formula that constitutes our surroundings, I think the 1990s showed that it can instead be a tool for negotiating these surroundings. It offers an inquisitive, explorative approach to the world that allows for multiple perspectives on artworks, subjectivity, and experience. ("Take your time: A Conversation. Olafur Eliasson and Robert Irwin." In *Take Your Time*: Olafur Eliasson. 2007.)*

[56] *It's in the air. The first thing that the term atmosphere evokes is in the air, the intangibility of air. A gaseous layer enveloping the planet, a zone where clouds move about, atmosphere is the invisible shroud around each object emanating (such is the meaning that the word has taken on over time) a sort of fragrance or warmth. Atmosphere is created by the particular subject matter or place – it is given off from it – and corresponds to it like a sort of spirit that floats around, revealing, betraying a certain essence of the place or subject matter, but remaining ever visible.* (Michel Orsoni, 'Point of view: A question of atmosphere', 1998: 9)

[57] *Usually the character of a "family" of buildings which constitute a place, is "condensed" in characteristic motifs, such as particular types of windows, doors and roads. Such motifs may become "conventional elements" that serve to transpose a character from one place to another.* (Schulz 1980)

The reproduction of the "atmospheres" of landscape archetypal patterns: the clearing and the forest

Archetypal landscapes refer initially to specific landscape patterns that function as landscape "ideals", linked with scenic beauty and an elevated scenic landscape preference and are frequently used as metaphors that form the point of departure for landscape design: landscape design "borrows" from nature not only its raw material, but also their distributional forms and the associated imaginary. Either in form of distributional patterns characteristics of the interaction between man and nature as agriculture or forestry is, or of patterns as the forest, the clearing in the forest and the prairies, or even of discrete elements such as water paths and lagoons, archetypal landscapes form a constant library of references to which landscape design often draws upon.



Fig. 34



Fig. 35

Fig. 34: Le Jardin Sauvage, Atelier le Balto (2002) Palais de Tokyo, Paris

Available at: <http://lebalto.de/2002/12/palais-de-tokyo/>

Veronique Faucher, principal of atelier le balto, in her presentation: Where is the art of gardening? In 2006, H852 Institut für Landschaftsarchitektur ILA of Vienna, makes reference at the Jardin Sauvage project at the Palais de Tokyo and to **its very special atmosphere: "one big shadow, filled with plants"...**

Fig 35: Swamp garden, West 8, 1997, an installation for the Spoleto Art Festival

Available at: ([http://www.west8.nl/projects/installations/swamp\\_garden\\_/](http://www.west8.nl/projects/installations/swamp_garden_/))

*A rectangular structure of steel poles interconnected by steel wires separates a small part of the swamp area from its surroundings. The Spanish Moss which is hung over the wires, forms ultra-light, wavy walls creating an open-air room where changes in light from morning to evening cause constant modulations in atmosphere.*

*A twisted boardwalk leads from solid grounds into the swamps and is extended along two sides within the secluded area. One side offers a landing place for vessels, the other side provides two benches that have been constructed of a cypress trunk, found on the site. Here, in the surreal isolation of the cypress swamp, visitors can meditate on alligators sunbathing on a partly fixed raft in one of the corners.*

([http://www.west8.nl/projects/installations/swamp\\_garden\\_/](http://www.west8.nl/projects/installations/swamp_garden_/))

In the case of the swamp garden, two principal references appear: the swamp and the garden. On the other hand, the garden is configured as a **clearing** in a forest . Thus an added reference appears. The new metaphor constructed is the swamp garden, characterized by a spatial synchrony of both, and perhaps of all three references.

On the other hand, ideas as gesture, initially proposed by Wittgenstein and later discussed by Neils Albertsen (2012) in the research on the possibilities of an atmospheric reproduction of atmospheres through literature, or that of the phantastike techne as defined by Gernot Böhme (2013), condense the sense of reproducing an atmosphere in presenting "again and anew" through differentiated mediums the logical and emotional effects on perception at the presence, imaginative or literal, of the original.

Nonetheless, their approach is either focusing to a scenographic reproduction of atmospheric effects, or to language. No reference from those consulted distinguishes the possibility of a method for "localizing" atmospheres, although almost all offer their personal insight on how atmospheres are reproduced...

Fig. 36: Bloedel Reserve gardens

Available at: <http://www.asla.org/uploadedImages/CMS/About%20%20Join/Honors%20and%20Awards/The%20ASLA%20Design%20Medal/Recipients/High%20Res/haag18.jpg>

The reproduction of "atmospheres": multiple references: the Bloedel Reserve gardens, Bainbridge Island, Washington, Richard Haag

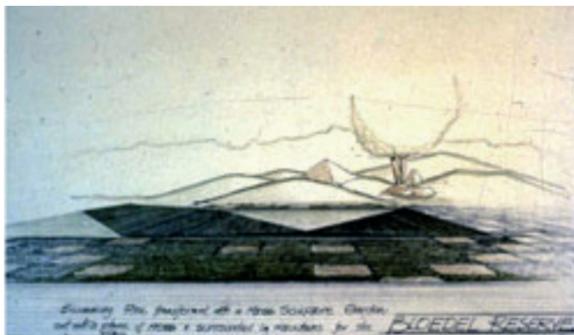
*The gardens are extracted principles from our rich heritage of landscape form--providing living proof that man can be the steward of the land, and can design with nature. To arouse latent emotional and aesthetic instincts and feelings, and to reaffirm man's immutable and timeless bond with nature, is implicit in its primary purpose.*

Richard Haag: "A Series of Gardens," Susan Rademacher Frey, *Landscape Architecture*, Sept./Oct., 1986, p. 54.

Although the first and last of the four gardens have been modified, in its original form, "the series may be seen as two pairs of couplets in A B A B sequence" writes Susan Frey in "A Series of Gardens," *Landscape Architecture*, Sept./Oct., 1986, p. 54: "The Garden of Planes and the Reflection Garden are pure geometry.... The second pair teems with birth, life, and death: The Anteroom in glorious, somber decay with microscopic life digesting the woods into fertile humus; the Bird Sanctuary a vibrant release of dance and song played out over the dark still waters."

Elisabeth Meyer on the other side, in "The Post- Earth Day Conundrum: Translating Environmental values into Landscape design", *Environmentalism in Landscape Architecture*, analyses the gardens of Bloedel Reserve as *analogous to lenses through which the forest can be perceived more clearly*:

*The four gardens that constitute Haag's work at the Bloedel Reserve on Bainbridge Island have been well documented, but the forest they were carved out of has not. By looking closely at how one experiences the boundaries between the forest and the sequence of the four gardens - the Garden of Planes, the Moss Garden, the Reflection Garden and the Bird Marsh- the garden rooms can be interpreted as lenses for viewing the forest rather than as the project's primary subject. When this reversal of figure and frame occurs, the role of the four gardens in the development of new landscape design grammars becomes obvious.*



Sally Schauman on the Bloedel Reserve as a Therapeutic Landscape, Thursday, November 6, 2008, wrights:

*Bloedel sought answers to penetrating questions about the relationship between humans and landscapes, but he wrote little about his intentions for the Reserve. Charles Lewis repeatedly urged him to amplify what he meant by the word, "enjoy" in the 1976 Statement of Purpose for the Reserve. In 1978, Bloedel wrote, "The omission of the words emotional, aesthetic, and spiritual in the Statement is unfortunate." If he was alive today, I am confident Prentice Bloedel would be an enthusiastic student and supporter of the therapeutic landscape movement. He and his wife, Virginia, are buried in the Reserve near the Reflecting Pool, a space that speaks to those who enter-"be still and feel". For me this is the quintessential message of wellness and the Reserve.*

<http://tdb.blogspot.com.es/2008/11/bloedel-reserve-as-therapeutic.html>

## Analog concepts

Atmosphere is often defined obliquely through its relation or even confusion with a series of concepts that seem to share an apparently similar degree of uncertainty: mood, aura, sense of place or even character are some of those. These concepts have been far more extensively applied in order to describe the effects of our relation with space. What is more, atmosphere seems to gain credibility when interrelated with these concepts that have marked the theory of philosophers as Walter Benjamin (2003) and Martin Heidegger (1951).

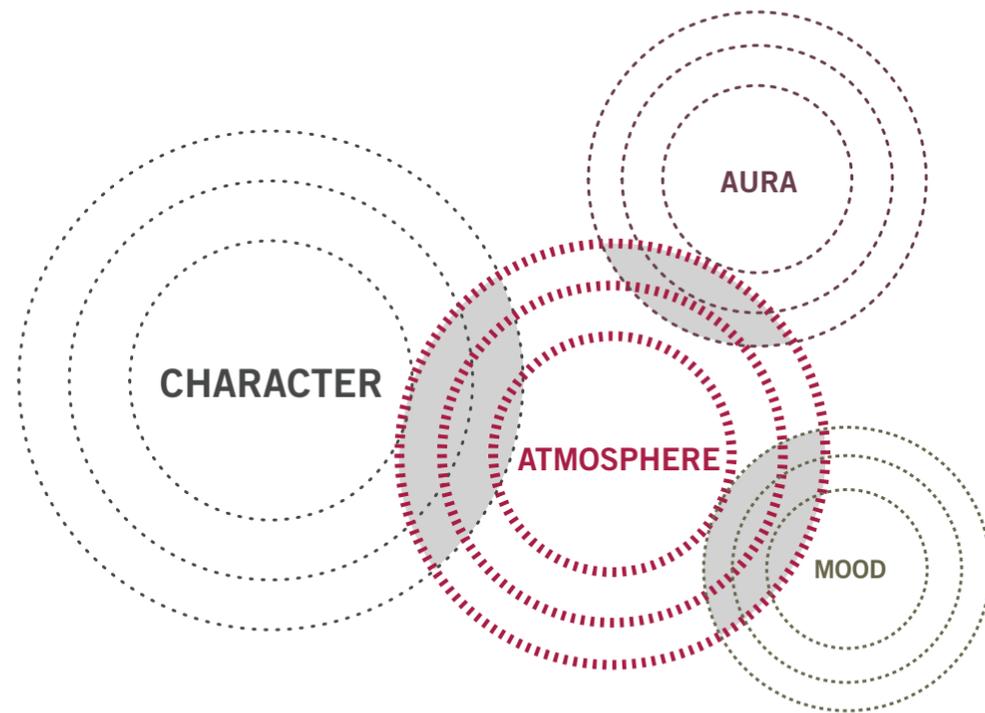
Gernot Böhme, in his research on the embodied perception of atmosphere, for example, draws a parallelism between the effect produced by the perception of atmosphere and that of the perception of the **aura** of a work of art as defined by Benjamin: *To perceive aura is to absorb it into one's own bodily state of being* (Böhme 1993:116). Böhme refers equally to Martin Heidegger's definition of mood and of experiential space, in order to conceptualize each person's corporeality, or bodily mood, as the basis of experiencing space.

On the other hand, examples do exist where atmosphere is essentially defined through its structural difference to **mood**, as exemplified by the distinction drawn by Ingrid Vogels (2008):

*Atmosphere differs from mood in the sense that it is not an affective state or feeling but an affective evaluation of the environment. It is a subjective impression of the environment related to the expected effect on mood, but it does not necessarily correspond to the actual effect on mood. For example, I can evaluate an environment as 'relaxing', but if I have a lot of things going on in my mind I would still feel pretty stressed. Although people might have different opinions about the atmosphere of an environment, atmosphere perception is thought to be a more useful concept than mood to determine the psychological effect of environments. However, no validated methods for quantifying perceived atmosphere are available. (Vogels 2008:2)*

Coming from the field of marketing, Ingrid Vogel's research on atmosphere has a very concrete purpose though: how can we manipulate atmosphere in order to increase sales. Independently of her functionalistic point of view, she still offers us with a clear distinction: atmosphere refers essentially to the evaluation of the designed environment; mood is the expected effect produced through this evaluation.

Fig. 37  
 "Atmosphere" and its relational pattern with analog concepts



Mood is not the only concept often intermingled with atmosphere. **Character** is another one. Norberg Schulz is perhaps the first to cross atmosphere with the character of a place when he defines as *a totality made up of concrete things having material substance, shape, texture and colour. Together these things determine an 'environmental character' - or atmosphere - which is the essence of place.* (Schulz 1980). Nonetheless, while character might refer to this peculiar totality of concrete things that shape place, atmosphere essentially refers to the spatial meaning resulting from this totality as perceived by an observer. In a parallel manner to Dufrenne's (1973)<sup>58</sup> proposal on the two-fold distinction between structure and sense, we might conclude that **character refers to the structure as defined by the objective properties of the environment, while atmosphere refers to their sense, as emerging from the bodily perception and evaluation of these specific properties.**

These two distinctions, between mood and atmosphere, and character and atmosphere are complementary and enclose a specific approach on atmosphere, in form of resume of the persistences detected to the consulted references to atmosphere: Atmosphere functions at the threshold of a holistic embodied experience involving inter-complementary processes operating simultaneously in the physical, cognitive, imaginative and emotional realm: the sense of atmosphere is associated not only with the interface between perception and cognition but also with the interface between perception and feeling.

Nonetheless, bibliographic references still do not reveal how this threshold is defined and this is the point where the principal theoretical gap for a more "structural" approach to atmosphere is to be found. The fact that atmosphere refers to the sense of the "objects", and not to their structure as character does, does not necessarily means that atmosphere is necessarily "structure-less".

[58] Dufrenne, makes an important distinction between two categories of reflection in aesthetic discourse that results suggestive for the understanding of atmosphere: The first of these comprises "the sort of reflection which treats of the structure of the aesthetic object" –an approach in which the perceiver "detach[es himself] from the work by substituting an analytical perception for the perception of the whole". Dufrenne, contrasts this structural discourse with a second type of reflection which considers the "sense" of the aesthetic object, constituting an approach in which the perceiver "gains intimacy" with the artwork as opposed to "decomposing" it.



[59] These methods could be classified in three categories, based on their "working" methodology:

- Aesthetic/ formal models, redacted by a team of experts that identify the "objective" qualities of a landscape.
- Public participation methods, conducted through interviews
- "Holistic" quantitative methods

The main hypothesis of the aesthetic/formal models is that the aesthetic value is intrinsic to the formal properties of the landscape. These properties are defined as basic shapes, lines, colors and textures and their interrelationships. The relationships between these elements are cataloged to rank each area in terms of variety, unity, integrity. An example of an aesthetic model formal the visual management system, developed by the USDA Forest Service. It aims to evaluating scenic resources and scenic quality assumes that is directly related to the diversity and variety of landscapes (Daniel and Vining, 1983). This system (VMS) uses character classification (such as mountains, hills and plateaus), the classification of the variety (form, line, color and texture) and the sensitivity (referring to the relative importance of landscape as visual appeal or leisure)

In the models based on public participation, the value of the landscape is classified based on the preference of a group of observers. The questionnaire is the most used in these models. Except of questionnaires, one can provide incentives visual evaluation, such as photographs of the landscapes in question. There are several difficulties in carrying out this type of analysis. Several studies provide evidence that the results are dramatically influenced by the personality of the observer, as the duration of observation, their socio-economic profile, the type of the physical features of the landscape, the dynamics of their components and complexity (Amir and Gidalizon, 1990). Its psychological basis is uncertain, the validity of the quantitative or semi-quantitative is questionable, to be representative of the views of society require extensive studies (Crofts and Cooke 1974). It can distinguish two broad categories: psychological models and phenomenological models. The psychological approach has been used in many studies where they make dimensional analysis of the preferences of the people for different landscapes. These studies have shown that the variables proposed by Kaplan & Kaplan, complexity, mystery, readability and consistency are important variables for predicting human landscape preferences, (Buhyoff et al., 1994). The psychological model refers to feelings and perceptions of the people who live, visit or watch the scenery. A landscape of high quality evokes positive feelings, such as security, relaxation, warmth, joy. A landscape of low quality is associated with stress, fear, insecurity, sadness or other negative feelings (Daniel and Vining, 1983). With no immediate correlation with landscape elements that cause reactions evaluated by the method, this type of methods are quite insufficient from the perspective of a more practical projective (Daniel and Vining, 1983). Phenomenological models give even greater emphasis to subjective interpretations. The perception is interpreted as the meeting intimate between a person and the landscape. (Daniel and Vining, 1983). A fairly constant criticism towards phenomenological models is that they sacrifice rigor to reach high levels of sensitivity, while no systematic relationships being established psychological reactions and landscape elements.

Holistic methods combine two approaches: the "objective" descriptive inventories and public participation models. They are normally oriented towards the definition of landscape guidelines that guide the management of landscape transformation through planning. (Arthur et al., 1977). These studies attempt to determine the resonance between landscape elements and their perceptual evaluations (Daniel and Vining, 1983), combining the physical elements (eg topography, water and vegetation) with the psychological reactions (preference assessments, aesthetic value etc.). This method has proved to be quite sensitive to subtle variations in the landscape, as long as you accept that the respondent public aesthetic evaluations are an appropriate measure for the landscape quality (Daniel and Vining, 1983).

An example that might explain the holistic model, from the perspective of the intervention in or the geographical identification of significant areas in the landscape according to the study of the public "preferences", is the research conducted by Gregory Brown and Christopher Raymond (2007, pp.89 -111).

Their research attempts to map areas significant for the affective attachment of citizens with a landscape, with the aim of serving as a basis for planning decisions. The analysis is based on the public participation results. Nonetheless, instead of using typical questionnaires or photographs, the researchers provided a group of residents and visitors with landscape maps of the region in study (Otway region, Australia). The participants should "map" on these maps the "special" places, according to their recreational, aesthetic, ecological etc value. This value was classified on a scale of 5 to 50, from the least to most significant. The interviewed also located their "personal" special places along with ideas on the possible, or desirable, development of these places. The results were processed and "translated" into geographical data, ultimately producing a map of density of the significant places in the landscape. The maps do not provide a set of criteria on land use. However, they can provide an index of the potential risk associated with land use change. These maps can graphically demonstrate the potential consequences of introducing a change in land use in terms of the "identity" of the place as perceived by the citizens. Regardless of its interest, this proposal continues being an alternative to the typical tools for public participation, mainly used in the fields of geography and environmental psychology. Although its result can serve as criteria for planning decisions, the method doesn't provide an identification of the "objective" attributes of the landscape or even the morphological variables "responsible" of shaping this special "attachment" to this landscape. As discussed by the researchers themselves, the method is not necessarily applicable elsewhere.

## 1.2. Tangent approaches from cartography

### Mapping the intangible: the terrain of sense

*The past two decades have seen revolutionary shifts in our ability to navigate, inhabit, and define the spatial realm. The data flows that condition much of our lives now regularly include Global Positioning System (GPS) readings and satellite images of a quality once reserved for a few militaries and intelligence agencies, and powerful geographic information system (GIS) software is now commonplace. These new technologies have raised fundamental questions about the intersection between physical space and its representation, virtual space and its realization.* ([http://www.zonebooks.org/titles/KURG\\_CLO.html](http://www.zonebooks.org/titles/KURG_CLO.html))

Mapping in this information age, is conceived "as a means to make the complex accessible, the hidden visible, the unmappable mappable . . . . Mapping has become a way of making sense of things." (Abrams, Hall 2006, Introduction).

In this context, evidence of intents of making mappable the unmappable also incorporate the approach to the "intangible" values linked to the sense of place, from various points of view, depending on the specific field from which the intangible is conceptualized: environmental psychology, preference studies, urban geography and architecture offer differentiated approaches to the cartography of the sense of place through a series of variables as scenic quality, place attachment, olfactory or acoustic values, which form the central and most recurrent themes of an alternative approach seeking to retrieve the importance and meaning of "subjective", or "collective" perception.

Among them, the scenic, or the aesthetic, has activated during the two last decades a wide spectrum of analysis methods<sup>59</sup> whose two opposite poles are occupied by techniques based on a "subjective" evaluation of the landscape scenic resources by a group of interviewed people and on the other hand by techniques that use the "objective" physical attributes of the landscape as indicators of landscape aesthetic value. They are mainly conducted within the field of environmental psychology fact that inevitably influences both their objective and their methodology. These models are critiqued as being seriously deficient when related to evaluation processes (Daniel and Vining 1983) while various doubts arise if the respondent public aesthetic evaluations are an appropriate measure for the landscape quality (Daniel and Vining 1983).



Fig. 38  
 Jeremy wood, "It is not down in any map; true places never are" Herman Melville, *Moby Dick*  
 Meridians, GPS Drawing 2005, Heavyweight Cotton Print (8.5 x 1.5 metres)  
 S: Abrams J; (ed) Hall P, 2006, *Else/Where: Mapping — New Cartographies of Networks and Territories*, University of Minnesota Design Institute

The cartography of the public evaluations though is not delimited to scenic or aesthetic values. Urban geography offers another insight: most concretely, psychogeography is orientated in the cartography of the city from a social perspective that maps city through the feelings attached to its physical morphology. Drawing highly from the concept of mental maps of Kevin Lynch (1960)<sup>60</sup> and also from the Guide Psychogéographique of Guy Debord (1955), as also its names indicates, psycho-geography emerges from a multidisciplinary collaboration between the psychology and the geography department in the Clark University in United States, with David Stea as a director in a time when Kevin Lynch was still professor of this same university. Stea recognizes the important influence of Lynch and Lynch's work at the MIT.

Although sharing the same name following the book of Guy Debord (1955), there is a structural difference between the two approaches: although the situationists invited people to a constructive derive in the city, psychogeography researchers seem to turn towards more systematic methods of analysis. Today the psychogeography movement is still active, mostly in the United States, mainly represented through the Glowlab team that organizes the Conflux Festival, and Denis Wood, cartographer and student of David Stea: *Conflux is the annual New York City festival for contemporary psychogeography, the investigation of everyday urban life through emerging artistic, technological and social practice. Conflux is understood as an antidote for the cartographic disembodiment prevalent in an age of Geographic Information Systems (GIS). While today's urban planners and map makers typically engage the environment from an office chair and a GIS interface, psychogeographers at Conflux and beyond spill into the streets. Where one practice is built upon a tradition of tools--compass, clinometer, camera, computer and so on--the other measures the city with the intimacy of the body.* As Denis Wood noted at the beginning of his presentation of the Conflux Festival 2006, "**There's another instrument in this room and I am it.**"<sup>61</sup>

The recovery of the interest to the embodied perception of the urban in the European Territory on the other hand could be represented by the International Ambiances Network, as explained in its webpage, is *aiming at structuring and developing the research field of architectural and urban ambiances. It wishes to promote the sensory domain in the questioning and design of lived space. This sensitive approach of the built environment involves all the senses (sound, light, odors, touch, heat, etc.). The International Ambiances Network favors multisensoriality and pluridisciplinarity (human and social sciences; architecture and urban planning; engineering and applied physics). It is open to a wide variety of profiles and includes research activities as well as design, teaching or artistic ones.*

The Ambiances Network, and his attached else/where mapping blog<sup>62</sup>, treats directly atmosphere as a concept encompassing the sense of the city, a sense somehow forgotten from traditional urban design and planning. As aforementioned, its activity, through annual symposiums and congresses is representative of the increasing interest in atmosphere. In a theoretical level, thus, the contribution of the Ambiances Network to the exploration of the potentialities evoked by the concept of atmosphere in urban, social, anthropological studies and architecture is immense. Nonetheless, cartographic explorations of this "other" sense of the city are mainly focusing in the mapping of the senses: As the projects Cartophonies<sup>63</sup>, La ville des sens<sup>64</sup>, Ecouter Paris<sup>65</sup> and Smell and the city<sup>66</sup> exemplify, cartographies certainly propose a sensitive approach to the built environment which involves all the senses.

[60] Kevin Lynch in his book: *The image of the city*, 1960, through a participation modeled case study of the city of Boston among others has proposed the orientational pattern citizens use, constituted by landmarks, nodes, paths, edges and districts, variables still in use in spatial analysis. The book has provoked an enormous interest and has influenced deeply urban analysis. What is more, and commonly in combination to the situationist theory, has activated the movement towards the use of mental maps as an instrument of analysis and diagnosis of the urban, with a special focus on how people navigate in the city, with a parallel interest towards the cartography associated to the social character of urban spaces and the feelings attached by part of the citizens. One example is the mapping of the feelings of security and insecurity that citizens feel depending on which side of the city they are situated, which forms the main objective of the project Metamorphosis (Matei, S., Ball-Rokeach, S. J., Wilson, M., Gibbs, J., & Gutierrez Hoyt, E. 2001), using as case study the city of Los Angeles, and its social transformation due to the introduction of new means of communication, globalization dynamics and the immense diversity of population origins. The resulted mapped grade of security felt by the citizens used as base 215 mental maps produced by the 7 ethnic most representative communities of Los Angeles.

[61] Available at: [http://www.elsewheremapping.com/2006/11/palpate\\_urbanism.html](http://www.elsewheremapping.com/2006/11/palpate_urbanism.html)

[62] <http://www.ambiances.net/elsewhere-online.html>

[63] <http://www.cartophonies.fr/>  
 Un site web créé par Grégoire Chelkoff et le laboratoire CRESSON  
 Le site « Cartophonies » a pour objectif d'explorer l'expérience sonore contemporaine et d'aider à les prendre en compte dans l'avenir et dans les projets de transformation. Il propose d'écouter des fragments sonores situés et datés, commentés et classés, issus de différentes recherches portant sur la ville et sur l'architecture existantes..

[64] <http://www.lavilledessens.net/>  
 Créé par Marc Crunelle, Ce site propose une approche « physique » et perceptive de villes européennes. Odeurs, sons, lumières, touchers...

[65] <http://www.ecouterparis.net/>  
 Créé par L'atelier du Bruit... Des parcours sonores à trouver et à suivre en cliquant sur le plan de Paris pour explorer, jouer, rêver de nouvelles géographies urbaines.

[66] <http://smellandthecity.wordpress.com/University of Manchester>  
 This blog has been developed with a specific focus upon relationships between smell and the city and follows the hosting of an interdisciplinary workshop on this subject at the University of Manchester in March 2012.

Fig. 39  
Simon Elvins, *Silent London*, *Blind embossed etching*  
735x500mm - Edition of 10  
Available at the personal web-page of the artist  
[http://www.simonelvins.com/silent\\_london.html](http://www.simonelvins.com/silent_london.html)



Fig. 40  
Mark Bradford, *Boreas*, 2007, 102 x 144 in. (259.1 x 365.8 cm)  
Mixed media collage on canvas

*Known for his expansive multi-layered collaged paintings incorporating materials found in the urban environment, Mark Bradford's work addresses spontaneous systems and networks that materialise within cities, such as alternative economic exchange, itinerant communities, and other socio-political pathways.*

[http://whitecube.com/artists/mark\\_bradford/](http://whitecube.com/artists/mark_bradford/)



Fig. 41

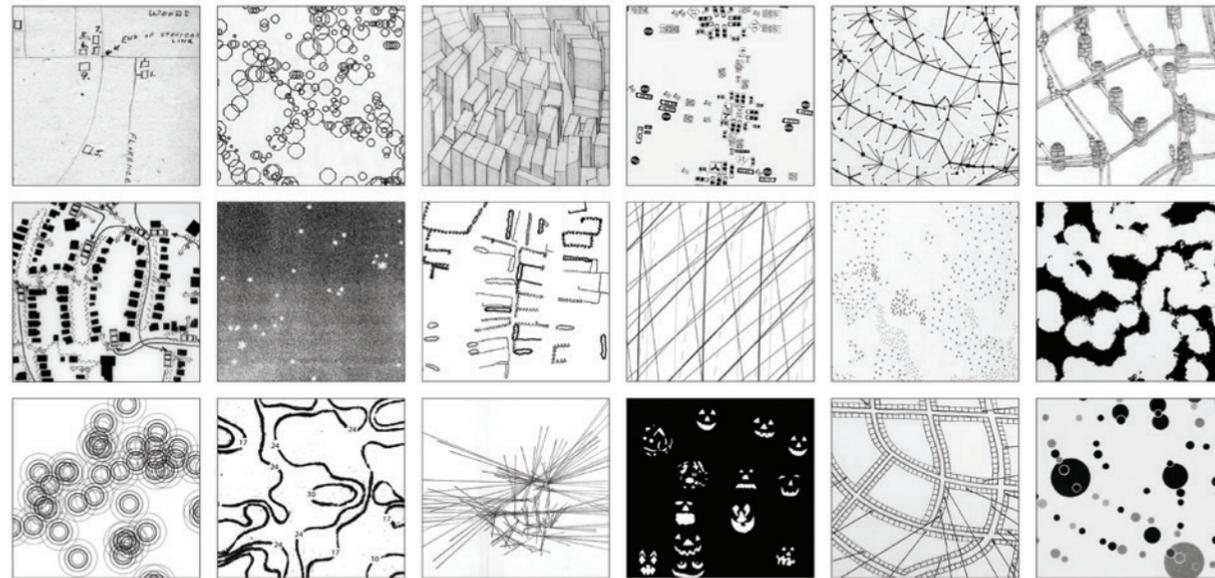
Denis Wood, *Boylan Heights maps*

*These maps are completely unnecessary. The world didn't ask for them. They aid no navigation or civic-minded purpose. They're just for pleasure. They laugh at the stupid Google map I consult five times a day on my phone. They laugh at what a square that map is. At its small-mindedness. They know it's a sad, workaholic salaryman.*

*Their mission is more novelistic. Which I also love. What they chart isn't Boylan Heights exactly but Wood's feelings about Boylan Heights, his curiosity about it, and his sense of wonder at all the things about the place that are overlooked and unnamed.*

Denis Wood, 2010, *Everything Sings, Maps for a Narrative Atlas*, Siglio Press

Image and text available at: [http://www.thisamericanlife.org/sites/default/files/Everything\\_Sings\\_Excerpt\\_and\\_Intro.pdf](http://www.thisamericanlife.org/sites/default/files/Everything_Sings_Excerpt_and_Intro.pdf)



A proposed alternative to a denser representation of atmosphere, as also proposed in the ambiances.net could be its simulation, as proposed in the presentation of the bilateral workshop between the School of Architecture of Nantes and the Polytechnic of Milan held at Nantes on 2013 June 13-14th, though still forming an open argument of a considerable methodological interest<sup>67</sup>:

*We live in ambiances or atmospheres, rather than in pure physical environments. Therefore the quality of urban design is strongly related to the quality of its atmospheres, that is the sensory configurations of space and the way they set up our social lives. How to go from static appraisals of physical environment, to dynamic sensory atmospheres? How to fulfill the gap between comfort (mainly the lack of discomfort) and ambiances? How to consider the "human factor" in the environmental simulation? Can we simulate an ambiance, or predict the conditions for a specific atmosphere? Is Virtual Reality a good means to design ambiances in an urban project?<sup>68</sup>*

Environmental psychology focuses its effort in mapping these special places of high scenic value or representing identity places recognized by the degree of place-attachment of the citizens, psycho-geography in mapping the localization of feelings, or how the urban environment makes us feel while studies on ambiances/atmospheres in mapping "other" senses beyond vision. Efforts of mapping the "intangible" are mainly oriented towards the visual, complementary senses and essentially feelings, while geographical informational systems aid towards mapping their specific geolocalization. The "intangible" thus is only indirectly related to the embodied, through either a disintegration of the holistic embodied experience in senses or through the effects it produces in orientating our identification or emotional disposition towards space in form of special areas. The question then arises, if and how does landscape architecture specifically contributes to the cartography of the intangible?

[67] For more in atmosphere and virtual reality look: Charitos D, Spanou I, 2003, Towards defining the "atmosphere" and spatial meaning of virtual environments, In Roy Ascott, *Engineering Nature: Art Consciousness in the Post-Biological Era*, (ed) Intellect Books, Bristol, UK: (2006). Originally presented at the Consciousness Reframed Conference, 2003 pp. 145-152, illus.

[68] Information available at: <http://www.ambiances.net/workshops/nantes-2013-simulation-of-ambient-environment.html>

Fig. 42 Landscape archetypal patterns as point of departure for the configuration of virtual reality experiences.

Char Davies, *Osmose*, 1995  
 Digital images captured during immersive performance of the virtual environment *osmose*

*Immersion in Osmose begins with the donning of the head-mounted display and motion-tracking vest. The first virtual space encountered is a three-dimensional Cartesian Grid which functions as an orientation space. With the immersant's first breaths, the grid gives way to a clearing in a forest. There are a dozen world-spaces in Osmose, most based on metaphorical aspects of nature. These include Clearing, Forest, Tree, Leaf, Cloud, Pond, Subterranean Earth, and Abyss. There is also a substratum, Code, which contains much of the actual software used to create the work, and a superstratum, Text, a space consisting of quotes from the artist and excerpts of relevant texts on technology, the body and nature. Code and Text function as conceptual parentheses around the worlds within.*

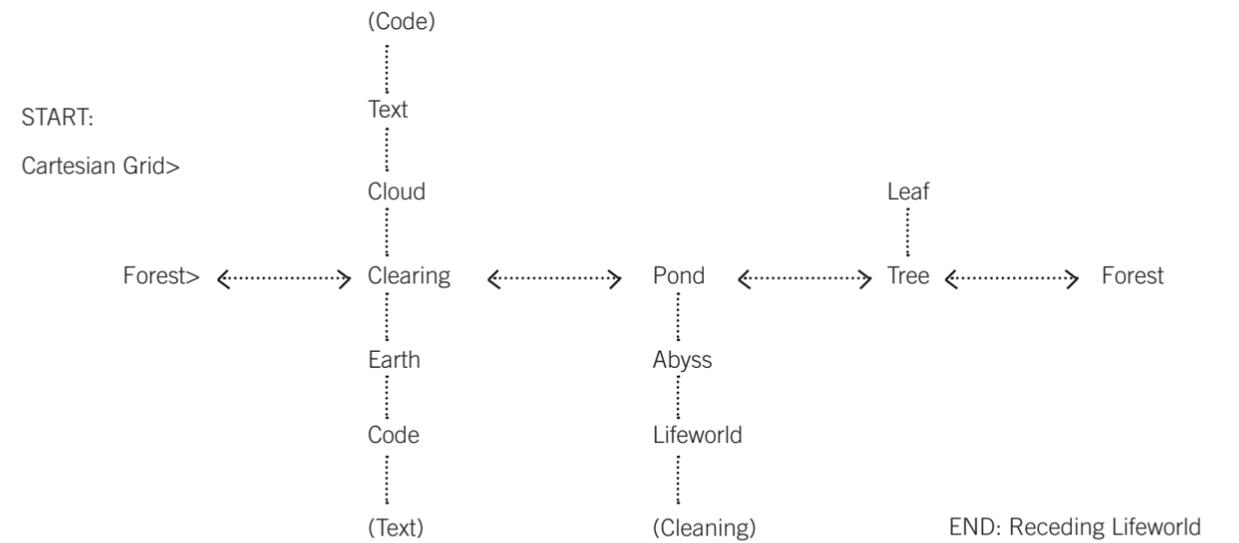
*Through use of their own breath and balance, immersants are able to journey anywhere within these worlds as well as hover in the ambiguous transition areas in between. After fifteen minutes of immersion, the LifeWorld appears and slowly but irretrievably recedes, bringing the session to an end.*

*In Osmose, Char Davies challenges conventional approaches to virtual reality. In contrast to the hard-edged realism of most 3D-computer graphics, the visual aesthetic of Osmose is semi-representational/semi-abstract and translucent, consisting of semi-transparent textures and flowing particles. Figure/ground relationships are spatially ambiguous, and transitions between worlds are subtle and slow. This mode of representation serves to 'evoke' rather than illustrate and is derived from Davies' previous work as a painter. The sounds within Osmose are spatially multi-dimensional and have been designed to respond to changes in the immersant's location, direction and speed: the source of their complexity is a sampling of a male and female voice.*

Image and text available at: <http://www.immersence.com/>

Fig. 43

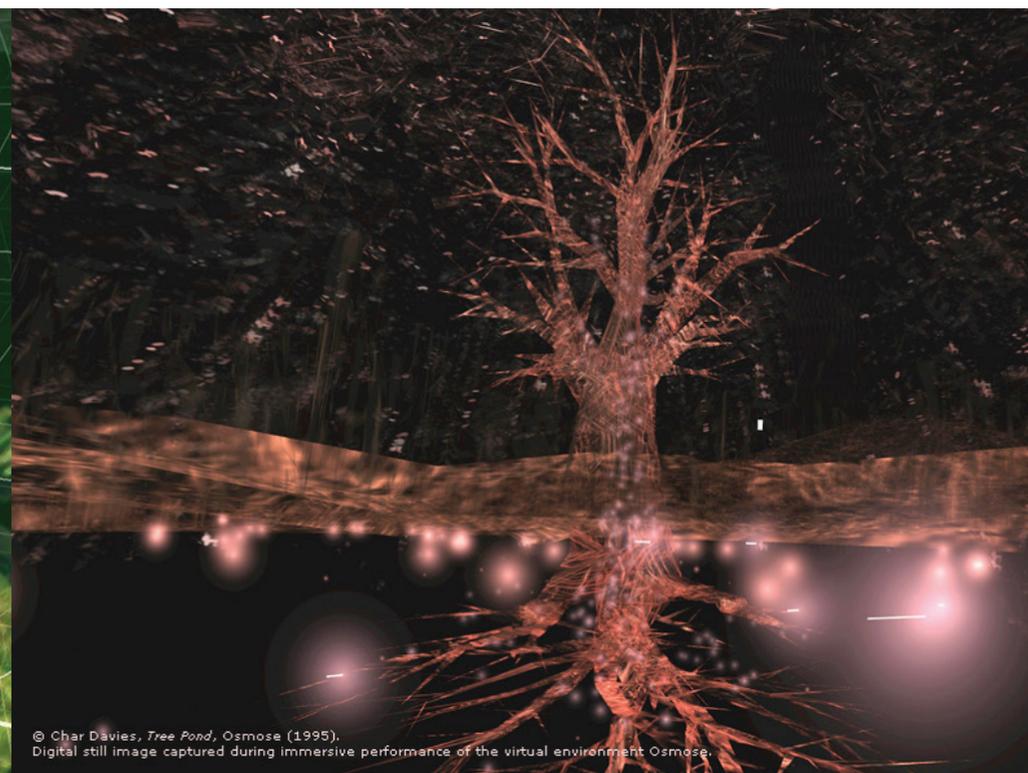
Char Davies, *Osmose*, 1995  
 Spatial structure of *osmose*



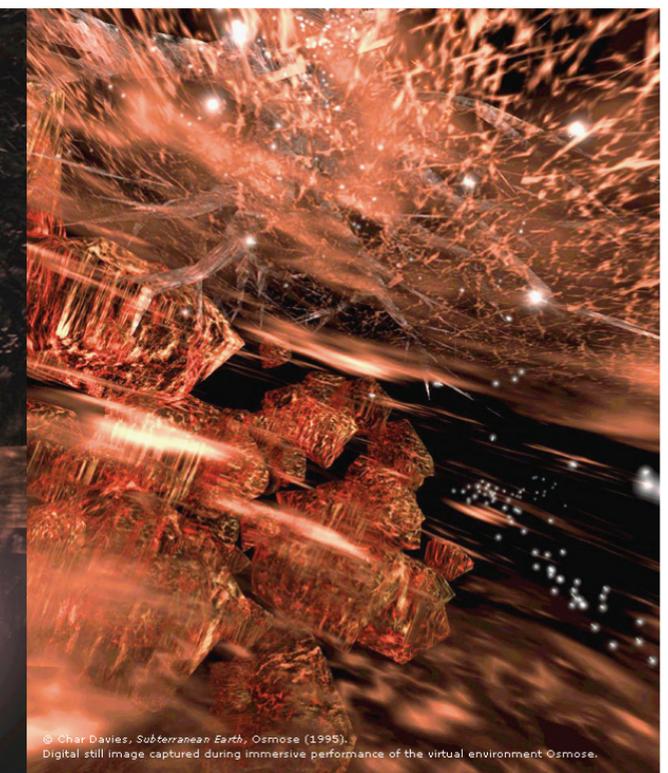
Forest Grid



Tree Pond



Subterranean Earth



## Mapping the character: the structure

[69] Es la Convención Europea del Paisaje (CEP) (Conseil de l'Europe, 2000) la que asume plenamente el sentido territorial de la cuestión paisajística, es decir, la idea innovadora desde el punto de vista jurídico y político, de que todo territorio es paisaje, de que cada territorio se manifiesta en la especificidad de su paisaje, independientemente de su calidad y del aprecio que merezca. Rafael Mata: UN CONCEPTO DE PAISAJE PARA LA GESTIÓN SOSTENIBLE DEL TERRITORIO, Capítulo del libro *El paisaje y la gestión del territorio criterios paisajísticos en la ordenación del territorio y el urbanismo*

[70] One of the applications of LCA is reflected in European Landscape Character Assessment Initiative (ELCAI) project, in which after a review of the existing examples of landscape character cataloging in different countries of the European Union, ELCAI researchers aimed to develop a method of shared “international” cataloging of the existing landscape typologies in the European territory.

One important issue to consider is that the scale of work proposed is referring to the entire surface of the European Union. Maps are drawn in a scale of 1:1,000,000. The implications of the scale are evident, as also the constraints imposed by the availability of cartographic layers. The finally selected are: Climate, based on stratification of Europe in environmental areas, Altimetry as a digital terrain model of a resolution of 1 km., Land use, scale 1:1,000,000, transformed into raster format of a 1 km resolution, CORINE land cover database) 1:1,000,000 scale raster format of a 1 km resolution.

The tools required for carrying out the method are the abovementioned cartographic layers and the right GIS software. From that point, the software applies automatically the homogeneity criterion:

The types of landscape classification are based on the detection of homogeneous areas in the resulting image segmentation of the four layers in a single database, of a raster format RGB (red -green-blue ) with a 1 km resolution. After the initial segmentation, the landscape units are classified as individual segments according to their attributes. In addition to the thematic classes of each layer, classified in 8 types of climate, 5 ranges of altimetry, 4 types of land use and 10 land cover classes, 3 additional classes have been added to the urban landscape, marine and continental water. Theoretically there could result 1603 ((8 \* 5 \* 4 \* 10) + 3) combinations of landscapes, but only 375 of them are types of scenery to be found in Europe. Each type is characterized by a code of 5 digits, consisting of a capital letter and a combination of 4 lowercases. The letter represents the area environmentally sensitive while the rest represent the variables considered. The result of this process is a map of the European landscape types, called LANMAP2, basically consisting of an ArcView shape file of 14,000 units, of which more than 12,000 are over 2,500 hectares.

Each one of the landscape types are represented by a limit, a fill color and code. In order to affront the problems of representation, as it is practically impossible to use 375 different colors and that the plane is still readable, it has been opted for the use of a range of color assigned to each one of the environmental areas.

Interestingly, the transformation of the shape vector to raster format in order to cope with the complexity and amount of information is due not so much to the multiplicity of the databases but to the immensity of the analyzed territory. The raster divides the territory into squares (pixels) of a size adapted to the scale of the available map databases on a scale decided by the researcher. The conversion of the shape format to a raster format inevitably impoverishes the analogy between the real landscape and the represented one.

In this case the pixel dimension is determined of a 1x1 km size (meaning that each pixel has a dimension of 1 kmx1 km), lacking any kind of precise definition. Nonetheless, considering that the main objective of this project is to catalog the landscape typologies present in the entire European territory, and not to divide the surface of the survey area in areas of certain characteristics that make them different from adjacent areas, the homogeneity criterion seems valid: The study aims to identify landscape types not landscape units: this difference is crucial.

Moreover, the aim of the study is a descriptive cataloging: the automatic classification of landscape types processed by a software limits the intervention of the researcher to the minimum possible. It could be actually characterized as an “objective process”, as the decisions taken by the researcher are limited down to the selection and preparation of the cartographic databases and posing the main question for the software to answer...

It is evident, judging from the scale and cartographic layers applied, that the identification of the character is reduced to minimal information regarding the generic features of the territory. Climate, altimetry and land cover make reference to the physical attributes to the territory, and although land use offers us with an image of how people use this physical base, it is quite improbable that ELCAI map offers us a close view of the specificities of each landscape classified.

The European Landscape Convention, signed in 2000 in Florence has marked a triggering point in landscape architecture as a discipline and in landscape analysis as a specific methodological process. Landscape through ELC is officially recognized for representing the specificity of the territory<sup>69</sup>.

Landscape is defined as “*an area as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*”, (Council of Europe 2000) while landscape character is defined as “*a distinct, recognizable and consistent pattern of elements, be it natural (soil, landform) and/or human (for example settlement and development) in the landscape that makes one landscape different from another, rather than better or worse*”.

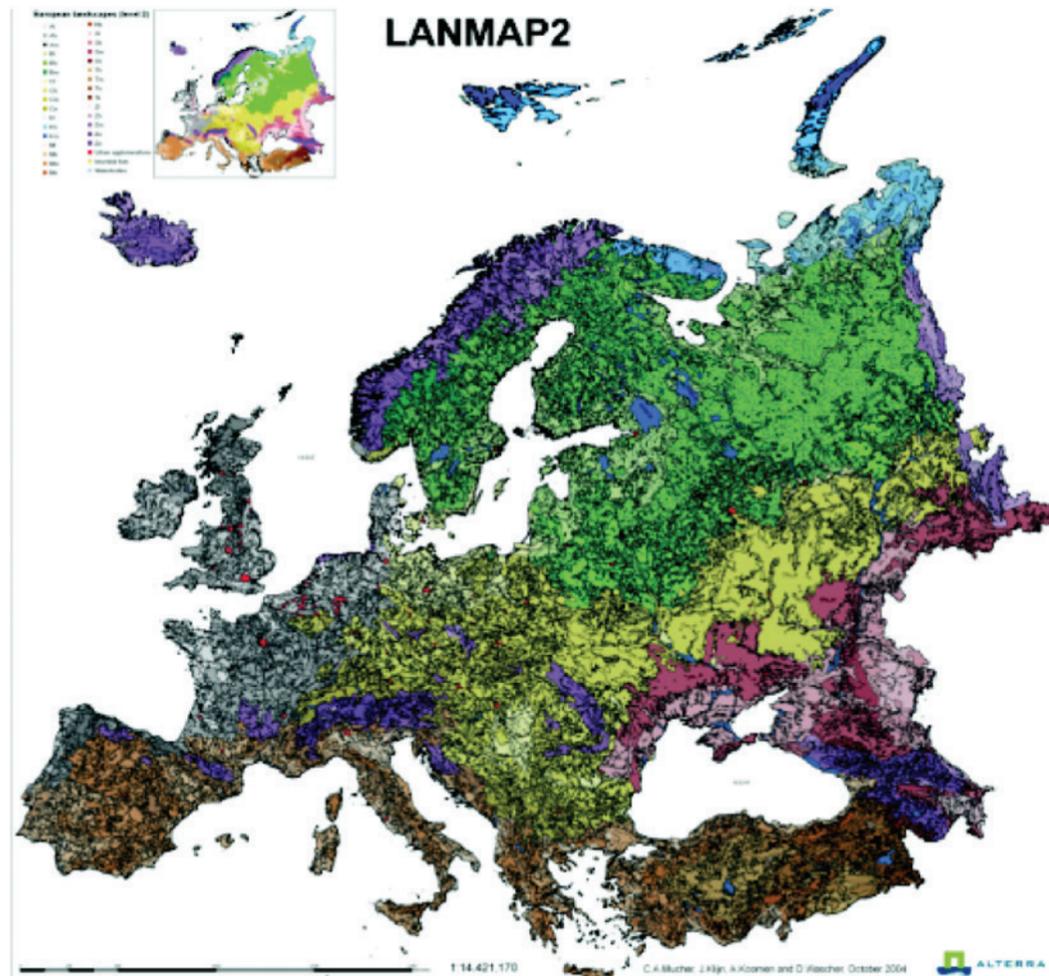
The specificity thus of the territory is defined by its character which can be identified through a consistent pattern of elements that make one landscape different from another. It is indirectly concluded thus that character refers to a physical spatial pattern, to a structure that can be decoded to elements.

Questions of value in terms of good or bad are ostracized from the definition of landscape character. Although, it might be suggested that the simple act of highlighting certain elements and not others as those capable of representing the distinctiveness of a landscape is inevitably selective and selection presupposes judgment, it seems that landscape structural properties, as proposed by ELC, are meant to approach the differences between landscapes and not their comparison in terms of value.

The application of the European Landscape Convention differs in time of application and in methodology from country to country. One of its first applications has been in United Kingdom named Landscape Character Assessment: LCA integrates landscape character analysis with the biodiversity and historical analysis, the environmental qualities assessment and the socio- economic functions, such as leisure and tourism. LCA also makes a clear distinction between the characterization and evaluation of the landscape character, focusing almost thoroughly to the documentation than the distribution of value to the documented elements.

Through this system a descriptive analysis of the different areas, categorized as character types<sup>70</sup> is achieved, covering the whole territory and named principally according to their characteristic elements.

Fig. 44  
 Mucher et al 2005, European landscape typology map.



Similarly as in all thematic maps, as use of soil or land cover, in the resulting layer of character types, labels refer potentially to transpatial landscape patterns. In my opinion, this has an effect, contradictory to the proper essence of the definition of landscape as accorded in the ELC, for the conceptualization of landscape specificity and the resulting cartography, as the delimitation of the landscape does not refer to unique geographical localizations, but to their structural geographical elements that characterize landscape but do not represent its specificity in terms of their differences with other landscapes.

A revised conception of the landscape specificity and in parallel a more intentional approach to landscape analysis as key to planning is offered by the Landscape Catalogues of Catalonia: In 2005, the Law of Landscape of Catalonia has been approved in the mark of the European Landscape Convention. This law guarantees the European landscape Convention's application in the Catalonian territory and defined the Landscape Catalogue as its principal instrument. The Landscape Catalogues, are documents of a descriptive and prospective character, applicable to the regional ambits of Catalonia and aim to the identification of its landscapes, identifying the values and the state of their conservation, while proposing landscape qualities objectives to be fulfilled and incorporated in the regional planning.

The catalogues, redacted by university experts under the coordination of the Landscape Observatory of Catalonia, are complemented with public participation processes, involving the principal agents that act on the territory and questionnaires referring to all wishing to participate, available on a web, designed especially for this purpose. The methodology to follow for the redaction of all catalogues is specified in the Catalogue Prototype<sup>71</sup>, a document redacted by the Landscape Observatory that defines the conceptual and methodological context and the basic procedure for the elaboration of the Landscape catalogues. In the Catalogue Prototype, the landscape character as defined in ELC:

*...el conjunt d'elements que contribueixen a fer que aquest paisatge sigui diferent d'un altre, però no pas millor o pitjor. Aquest matís és molt important, perquè deixa ja clar, d'entrada, que els catàlegs no atendran només aquells paisatges que tenen uns valors escènics, harmònics o, fins i tot, ecològics excepcionals, sinó que inclouran tota mena de paisatges, fins a cobrir l'últim racó del territori.* (Prototipus del Cataleg 2006: 28)

The methodology is divided in three phases: Identification, Evaluation and Landscape quality objectives which finally guide the elaboration of the specific landscape guidelines to be incorporated in regional planning. This fact implies that the scale of work is 1:50.000, the typical scale of regional planning in Catalonia.

Landscape analysis, begins thus with the landscape identification whose main objective of the landscape identification is the classification of the territory in landscape units<sup>72</sup>. The idea of the unit is structurally different from that of landscape type, as proposed by LCA: in the case of the landscape catalogues, landscape is understood not only based on its morphology but also on the particular processes and relations, social, economic and cultural, established in the specific area. The consequent evaluation and the landscape objectives refer to each and every one of the landscape units, considering the specific dynamics influencing the territory of each unit<sup>73</sup>.

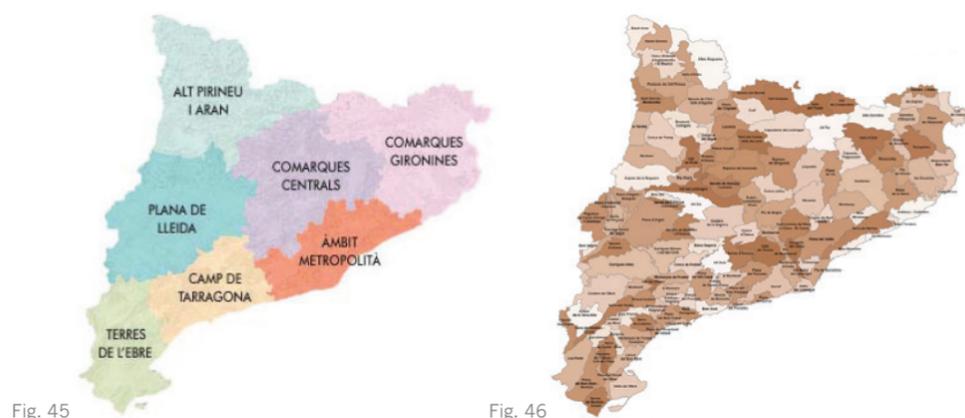
[71] Pel seu caràcter innovador i per la seva transcendència en la planificació territorial a Catalunya, l'Observatori del Paisatge ha preparat aquest Prototipus de catàleg de paisatge, que estableix unes bases metodològiques i uns criteris comuns per a l'elaboració dels set catàlegs d'una manera coherent i coordinada. Aquest document, confegit d'una manera semblant a les guidelines d'origen anglosaxó, ha estat posat la consideració de més de setanta institucions, grups de recerca i experts en paisatge per tal d'obtenir el màxim consens sobre els continguts. (Prototipus del Cataleg 2006, p.7)

[72] Això vol dir, per tant, que la unitat de paisatge en els catàlegs de paisatge no ha de ser només el resultat de la delimitació sobre un mapa d'una porció del territori amb una morfologia i unes cobertes del sòl semblants i, per tant, fruit d'una combinació d'elements merament estructurals. La unitat de paisatge, tal com es planteja en els catàlegs, considera també les relacions particulars (socials, econòmiques, culturals) que s'han establert entre un territori i els seus habitants i que configuren part de la identitat de les persones que hi viuen. En aquest sentit, cada unitat de paisatge serà única, singular, diferent de la resta que li són veïnes i de les d'altres racons del país, atenent a criteris estructurals, funcionals i històrics diversos. Tot plegat no implica desconèixer ni menysprear aquells possibles elements afins entre dues o més unitats de paisatge, ni tampoc oblidar l'existència de paisatges en xarxa, que, sense ser constituïts d'unitats de paisatge, poden ajudar l'observador a entendre millor l'especificitat paisatgística de l'àmbit territorial. En aquest sentit, es proposa un concepte operatiu d'unitat de paisatge, entesa com una part del territori caracteritzada per una combinació específica de components paisatgístics de naturalesa ambiental, cultural i estètica i de dinàmiques clarament recognoscibles que li confereixen una idiosincrasia diferenciada de la resta del territori. (Prototipus del Cataleg, p.31)

[73] As far as the cartographic databases are concerned, in the Catalonian territory there is an immense spectrum of databases available.

Fig. 45: Catalonia is divided in 7 territorial units. A Landscape Catalogue has been redacted for each  
S: Prototipus de Cataleg de Paisatge, 2005

Fig. 46: 135 landscape units defined by 7 Landscape Catalogues corresponding to the 7 territorial units  
Available at [http://www.catpaisatge.net/cat/catalegs\\_mapa.php](http://www.catpaisatge.net/cat/catalegs_mapa.php)



[74] El paisatge és molt més que un conjunt de components naturals o que el resultat d'uns factors històrics i socioeconòmics que han afaïçonat el territori. El paisatge és, en gran part, un element vivencial, és a dir, que està configurat a partir de la suma d'experiències viscudes al llarg dels anys, amb els sentiments de pertinença i identitat que això comporta. La relació social i econòmica ancestral establerta entre diferents poblacions d'un territori, o entre un poble i un riu proper, l'ús de determinades tècniques i pràctiques de gestió dels cultius, els noms dels llocs, l'existència d'un dialecte parlat en un petit territori o el reconeixement especial de determinats paisatges (per la seva importància durant la infància o pel seu ús quotidià) són, entre altres, alguns factors -sovint intangibles- que ens identifiquen amb un determinat paisatge. Vet aquí el que entenem per "sentit de lloc" i el valor que hi donem. El "sentit de lloc" d'un indret difícilment pot ser copsat només des del laboratori. Les visions obtingudes en el treball de camp aportaran apreciacions i valoracions -coincidents o complementàries- que contribuiran a caracteritzar el paisatge i la seva diversitat. Les observacions obtingudes per aquesta via seran documentades, contrastades i confrontades amb les dades objectives procedents de l'anàlisi d'altres fonts d'informació (fotografia aèria, fotografia terrestre, cartografia, bibliografia...). (Prototipus del Catàleg, p.38)

[75] Fase 1. Identificació i caracterització. És la primera fase del procés d'elaboració dels catàlegs, en què s'identifiquen les àrees del territori que tenen un caràcter semblant (prenent com a base l'estudi dels elements naturals, culturals i visuals que configuren el paisatge, així com els més perceptuals i simbòlics que també el defineixen), es classifiquen les àrees identificades -que prenen el nom d'unitats de paisatge-, es cartografien i se'n descriu el caràcter, tot inventariant de manera com més exhaustiva millor els valors paisatgístics de cada unitat de paisatge -recollint els valors atribuïts per a la població- i descrivint la dinàmica general del paisatge i els factors naturals i socioeconòmics que han intervingut -i intervenen- en la seva evolució i transformació. (Prototipus del Catàleg, p.27)

[76] Visibility studies calculate the visual field perceived through a specific point of view or along a path of movement, based on a three dimensional model terrain.

[77] La visió del paisatge està fortament condicionada per l'existència d'uns certs punts d'observació i de recorreguts visuals (fites topogràfiques, nuclis urbans, vies de comunicació...). La determinació dels punts d'observació més importants -en virtut del seu abast visual o de la seva freqüentació humana- i el cartografiat de les conques visuals (conjunt de punts connectats visualment amb un determinat punt d'observació) són requeriments imprescindibles en la delimitació de les unitats de paisatge, ja que permeten determinar la mesura en què cada sector contribueix a la percepció del paisatge. (Prototipus del Cataleg, p.36) Així, caldrà distingir entre les conques visuals més observades de la resta. Per fer-ho, s'estudiaran els factors següents:  
- Les vistes des dels principals eixos viaris (carreteres, autovies, autopistes), tenint presents les intensitats diàries mitjanes de vehicles (IMD) com a indicadors de freqüència, així com els eixos ferroviaris.  
- Les vistes des dels principals punts i miradors (ermites, platges, fites topogràfiques) i els principals senders de gran recorregut (GR). Prèviament a la definició de les conques visuals, caldrà identificar aquests punts.  
- El potencial d'observació des dels nuclis de població i els seus entorns, tenint present la població potencial.  
- Les vistes des del mar. Aquest és un element rellevant per als catàlegs de les comarques de Girona, la regió metropolitana de Barcelona, el Camp de Tarragona i les Terres de l'Ebre, ja que molts dels seus municipis litorals desenvolupen activitats turístiques nàutiques que fan indispensable l'anàlisi de quines són les zones més accessibles visualment des del mar.  
La intervisibilitat (grau de visibilitat recíproca entre una sèrie de punts d'observació) és una altra variable que completa l'anàlisi dels p (Prototipus del Catàleg, p.47)

[78] The interest of the Landscape Observatory towards the mapping of the "intangible" is also reflected in the Seminar: Retos en la Cartografía del Paisaje: Dinámicas Territoriales y Valores Intangibles, held at Tortosa on the 29- 30 of September, 2011: En este contexto el seminario intentará responder diversas cuestiones, como por ejemplo: ¿cómo debemos cartografiar -si es posible- los valores intangibles del paisaje?, ¿pueden representarse o simbolizarse aquellos valores que corresponden a la percepción sensorial —no sólo visual— y a la experiencia emocional que un sujeto tiene de un paisaje determinado?, ¿cómo plasmar, por ejemplo, las cambiantes y rapidísimas dinámicas propias de un territorio?, ¿cómo identificar y explicar a través de la cartografía las nuevas identidades paisajísticas que emergen en determinados territorios?, ¿cómo se pueden cartografiar las aspiraciones de una población para un determinado paisaje?

The seven landscape variables that serve for the landscape units' identification are:

- Physiographic factors, especially the relief.
- The land cover.
- The historical dimension of the landscape.
- The structure of the landscape, analyzed from the perspective of the landscape ecology.
- The visual structure of the landscape, as defined by a thorough analysis based on visibility studies.
- The immediate dynamics that influence the territory.
- The **sense of place**.

The approach to the sense of place is linked to the intangible values of the territory, difficult to capture only from the laboratory and is to be documented in the Catalogues in form of the documentation obtained through the field work, contrasted and confronted with other "objective" sources of information<sup>74</sup>.

On the other hand, the evaluation<sup>75</sup> of the landscape character is based on the inventory of its distinctive landscape values. The character is decoded in a series of thematic layers that could be classified in two major categories: those referring to the recognized values, ecological, historic, and religious or to others as the aesthetic, symbolic, spiritual or identity.

The scenic is over more approached from the visual perception of the people<sup>76</sup> through an exhaustive series of visibility<sup>77</sup> studies.

The Landscape Catalogue Prototype recognizes the existence of another set of values, called perceptive<sup>78</sup>. These form a series of variables, defined as sensory, perceptual and visual, often intangible and difficult to map due to their "emotional" and "subjective" nature. Nonetheless, the Landscape Catalogue Prototype leaves open the window for investigation on these values, although admits that the process of their mapping is far beyond the purposes of the Landscape Catalogues. We might suppose that the identification of the atmosphere of landscape might be included in this list of perceptive "subjective" values, difficult to identify and what is more to "translate" into cartographies. Still, in a paradoxical way, the Landscape Catalogue assumes the fact that it is possible to identify the "aesthetic", and thus assigning it with objectivity:

Aesthetic values, as defined in the prototype, relate to the ability of a landscape to convey a certain sense of beauty, based on the meaning and cultural appreciation that has taken throughout history, as well as the intrinsic value in terms of color, diversity, form, proportion, scale, texture and the unity of the elements that constitute the landscape.

The proposed are:

- Landscape interfaces where harmonic combinations are produced (such as agriculture-nature ,coast-sea, built space-environment, rock-forest).
- Presence of water as an element that adds value to landscape.
- Sharp patterns, ie, areas clearly recognizable respect to their surrounding environment (such as concentric structures, dry-land slopes, "complete" valleys).
- Scenic backgrounds (hills, mountains lines, horizons).
- Monumental sites (singular monuments in urban environments, grouped buildings).
- Other aesthetic singularities (rows of trees along roads and paths, neat accesses to nuclei).

*A més dels anteriors, convindria identificar d'altres valors que podríem classificar com a perceptius. Corresponen a la percepció sensorial -no només visual- i emocional que un subjecte té d'un paisatge determinat (paisatge segur, terrorífic, tranquil, sorollós, salvatge, remot). Aquests valors són fàcils de descriure però molt difícils d'identificar, per la gran subjectivitat que comporten, i no es consideraran prioritaris en l'elaboració dels catàlegs, però sí de gran interès. (Prototipus del Catàleg, p.46)*

Although the definition of the suggested variables belonging to the aesthetic is very open to interpretation, we clearly distinguish the idea of the pattern which seems to reflect the definition of the landscape in ELC as a distinct, recognizable and consistent pattern of elements. In the concept of pattern we identify the influence of Christopher Alexander and thus indirectly the influence of spatial analysis coming from the core of architecture and planning. What is more, in the field of landscape architecture, Alexander's approach to the spatial environment through the idea of patterns was crossed with the definition of the concept now inspired by landscape ecology, linked to the distributional or mosaic structure of landscape elements and the processes that underline them (Forman 1995, Bell 2004).

As defined by Alexander, a pattern is a tool for approaching the complexity enveloping the construction of space and what is more for connecting its "objective" or "scientific" value with its aesthetic, and thus perhaps "subjective" essence: pattern is essentially proposed as a discursive structure, able of describing the wholeness perceived in the environment (Alexander 1977, 1979). As proposed by Alexander, the wholeness is that global structure which pays attention to, and captures, the relative strength of different parts of the system, paying attention both to the way they are nested in one another, and how the pattern of strength varies with the nesting. What is more, each pattern describes a problem which occurs over and over again in our environment, and then describes the core of the solution to that problem, in such a way that you can use this solution a million times over, without ever doing it the same way twice (Alexander 1977, 1979).

The extrapolation of the concept of **pattern** in landscape architecture<sup>79</sup>, represented partially in the theoretical discourse of Simon Bell<sup>80</sup> (2004) offers in my opinion an interesting approach to form through process: it potentiates the interpretation of the forms of the landscape as signs<sup>81</sup> of its intrinsic processes and also the idea that it is possible to translate the forms of the landscape into forms of geometry<sup>82</sup>.

[79] As mentioned, the idea of the pattern is explored in the framework of the work developed in CRPPb as a basic tool of landscape analysis.

[80] "What are patterns? Patterns are everywhere, and it is by recognizing them that we can orientate ourselves, try to make sense of the world and predict the way certain actions might occur"; "[...] we tend to look for patterns which seem to make sense in the knowledge that we have about the world"; "[...] pattern recognition is important to help us understand and relate to the world around us"; "[...] How we perceive and understand patterns also depends very much on what we are looking for and why." p.13 "One of the starting points for an understanding of patterns is the numerical relationships which we underlie them." "...we can also describe patterns by the processes that give rise to them and to the functions they perform." P.17 Simon Bell (1980)

[81] Landscapes shapes can be read as signs. According to linguistic theory, the same signs can be understood differently, and accordingly, also represented or treated differently. The snaking shape of a riverbed, i.e the interface of water and dry land, can be read as an expression of the constantly changing resistance in the structure of the earth in the waterscape. In contrast to this, it can be seen as analogous to a calligraphic character, which takes on a specific shape through the pressure of the author's hand, and it may even exhibit intentional molding of the humans....Formal characteristics of the landscape delineate geogenic and anthropogenic creative powers.They cannot always be attributed unambiguously to nature or fashioning by humans. But the predominant powers can generally be recognized and classified, and illustrated differentially in drawings from which, finally, the shapes of the landscape can be interpreted as signs. (Oswald; Baccini, 2003:74)

[82] The syntax of imagery can be broken down by geometry. This translates the objects from one kind of perception to another: from concrete physical presence to photographic portrayal and from abstract notation to material object. As we know from experience, these processes can never convey all features of the object to be communicated. It is often difficult to determine whether these differences proceed from the possibilities of rendering, which are always limited, or from actual perception....Identifying and designing the characteristics of territorial shapes require a kind of perception that completes and differentiates features, especially those that are not directly visible. (Oswald; Baccini, 2003:73)

[83] These two ideas are directly exemplified in the Netzstadt method (Oswald F; Baccini P, 2003), a transdisciplinary method oscillating between the morphological and physiological analysis.

Scale of work and essential cartographic databases: The method proposes to work in variable scales: starting with the regional one, passing to the scale of the municipality and reaching the project's local scale. The basic databases essentials for reading the landscape forms are: Orthophotos, aerial and panoramic photos, antique postal cards, personal sketches, diagrams and notes

The methodology is structured in 5 phases:

-The first phase consists of understanding the project's area as a component of a net of a wider urban structure, with the objective of characterizing the nature of the interaction of the system with its "exterior" world.

-The second phase consists of the analysis through morphological criteria, followed by the analysis of physiologic criteria of the wider perimeter of the intervention area, in order to define the significant nodes and flows that influence in the projects' area. The nodes are defined morphologically through the overlap of the urban settlements and the corresponding infrastructures in the regional scale. This superposition suggests locations of maximum density of anthropogenic goods. The high density is a prerequisite for the determination of the significant nodes to study and presupposes that the density of construction implies an analogous density between people and human activities. The step from the regional scale to the urban scale signifies a more detailed analysis of the proper node:

- In continuation the first diagnosis of the node is elaborated, based on five criteria of urban quality: identity, diversity, flexibility, self-sufficiency and resource efficiency. The objective of the diagnosis is, firstly to reach a point of departure for the evaluation of the optimum conditions to be established through design and secondly a possible script for the transformation's process.

The diagnosis is followed by a public participation process, through which a series of development objectives is defined.

-In the final phase, the process of the site's reconstruction is designed.

Tools: The morphological interpretation in continuation is based on the analysis of the following basic concepts:

the contour/frontier: defining what is interior of an area, contrasted with its "exterior".

the field: localized inside the contour and defining what "belongs" to the project's area.

the size

the structure: *Structure is a collective concept. It signifies discovered or constructed relationships between such entities as persons, things, thoughts, institutions, territories and places. (p.97)...Connecting is the most important morphological characteristic of structures. They are depicted geometrically, with lines defining their beginning and end points, their branches and intersections. Lines can symbolically display the flows of people, goods and information, with points representing their location. Two basic patterns of structure are proposed: tree and grid: These are sufficient to generate countless variations and new combinations to connection points.*

the figure: *figures exhibit two main characteristics: the idea of shape of one or more focal points within a selected field, and the density of the elements that constitute it.*

the hierarchy: *meaning the order or ranking and refers to the standing of several people or things with regard to each other. Objects in a hierarchical defined position are important points of reference in a territory. (p97)*

*Morphologically territories can be regarded as hybrid constructs, which are assembled from attributes resulting from natural history and cultural history. The decisive attributes in an initial approach to the architecture of the territory are (p80):*

Coherence: refers to the grade to which an event occurring in a specific location influences its adjacent zones and even quite distant ones.

Boundaries and thresholds: *are tools and signs of the power exercised to determine, subdivide, arrange or secure territories, at the same time isolating territories and binding them to each other. (p84).*

Scale: **through our feeling for the dimensions of our own bodies and our ability to evoke images of experience from memory, territories obtain a certain scale or magnitude.** (p84).

Functions: the symbolic relation between the agent (ourselves) and the surface of the earth is manifested in the fact that a sole territory is charged with a variety of tasks and functions in order to satisfy the human needs. The tasks are thus the specific areas chosen for completing with a specific action. The change of functions provokes a change in the form of the territory, leaving behind sediments that might play a positive or negative role in the development of the following tasks in the specific territory.

Urban granulation: *a sculptural-plastic attribute of the territory, product of the human perception and work (p90). From the study of the aerial images, it is known how towns and landscapes can be recognized on the basis of granulation or the shift in ground textures resulting from the geographically uneven distribution and arrangement of material objects....In designs for large-scale construction the first question posed is whether the volume to be built or the area to be subdivided into types of territory should be processed into small, large or mixed granulation...*

Urban resistance: *the relationship between the power of existing and the power of change... The resistance that arises upon any change to the shape of the given territory is a factor that determines whether the territory can be redesigned at all...(p90).*

The tools of morphological analysis incorporate perception as a constant filter in their definition. For example, the scale is defined according to the body scale and its memory. In a similar manner, the tasks are conceptualized not merely as land uses but as the functions assigned by a society to a specific landscape, varying through history, while the hierarchy is defined according to the priority order of the elements as they contribute to the sense of orientation of the citizens. Netzstadt method offers us some suggestive examples as far as the resulting cartography is concerned:

As it is shown in Fig.48, an abstract representation of the basic concepts of morphological analysis is initially proposed, in form of sketches -diagrams. In continuation, these diagrams are "translated" into the site's specific geographical dimensions. In my opinion, it is the crossing between the two that suggests additional meaning for both. If the second series is referring to a localized identification of the morphological analysis tools, the first one is referring to a free graphic interpretation of the same criteria.

We could imagine that this first line of sketches corresponds to the general impression produced by the effects of the forms of the territory to the observer/designer. The overlapping of the sketches wouldn't lead to a legible result, in contrast to a possible overlapping of the "localized" cartographies of the same concepts represented in the sketches. This observation suggests that each and every one of the sketches could function as a "complete" image of the landscape, while each one of their cartographic translation in specific geographical scaled dimensions only offers us a partial approach. The sketches make reference to a mental representation of the concepts in study, a kind of mental maps interpreting space, where distances and sizes are distorted according to the importance attributed to them by the designer.

These two basic ideas have influenced both spatial analysis oriented to the urban<sup>83</sup> as also to the landscape analysis. The work of Rosa Barba (the founder of the Centre of Landscape Research and Design of Barcelona and one of main figures to introduce landscape studies in the School of Architecture of Barcelona) exemplifies this influence in the field of landscape architecture, and more specifically in the evolution of landscape architecture as a proper field in the Catalanian territory, emerging essentially from the fields of architecture and urbanism and with a clear evocation of merging with landscape ecology and more proper to the notion of landscape architecture as the shaping of landscape in the scale of the region than that of the garden, the two poles of what seems to define the overall spectrum of landscape architecture (Spirn 2000).

Fig. 47 Illustration of the attributes of urban systems

S: Oswald F; Baccini P, 2003, *Netzstadt: Designing the Urban*, Birkhauser, Basel, p. 82-83

Fig. 48 Illustration of basic morphological concepts

S: Oswald F; Baccini P, 2003, *Netzstadt: Designing the Urban*, Birkhauser, Basel, p. 98-99

Fig. 47

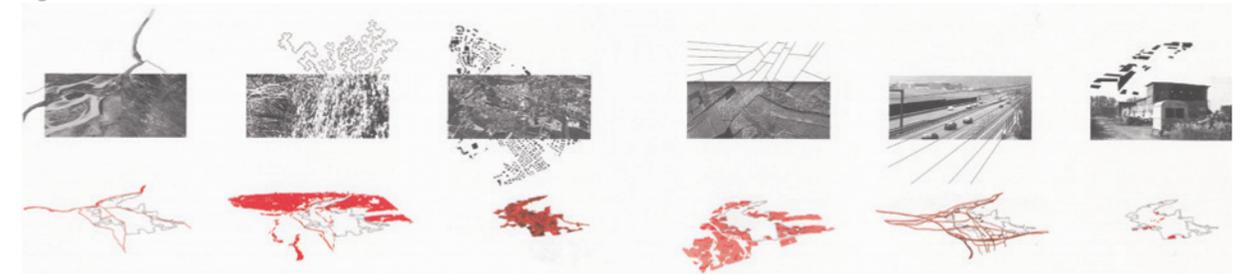


Fig. 48

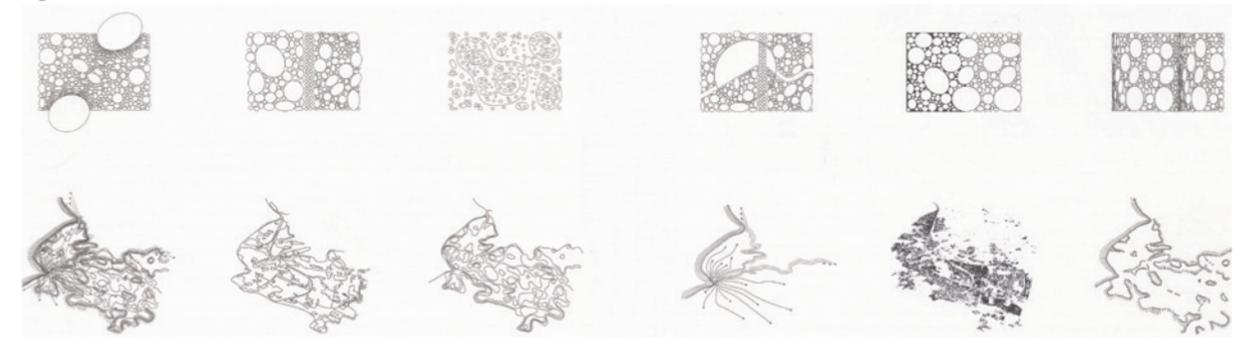


Fig. 49 Example for the landscape patterns cartography: *Map 8.2: Aesthetic Values, Patterns*, CRPPb, 2010  
 Available at [http://www.catpaisatge.net/fitxers/catalegs/CG/Memoria1/Cartografia\\_general](http://www.catpaisatge.net/fitxers/catalegs/CG/Memoria1/Cartografia_general)

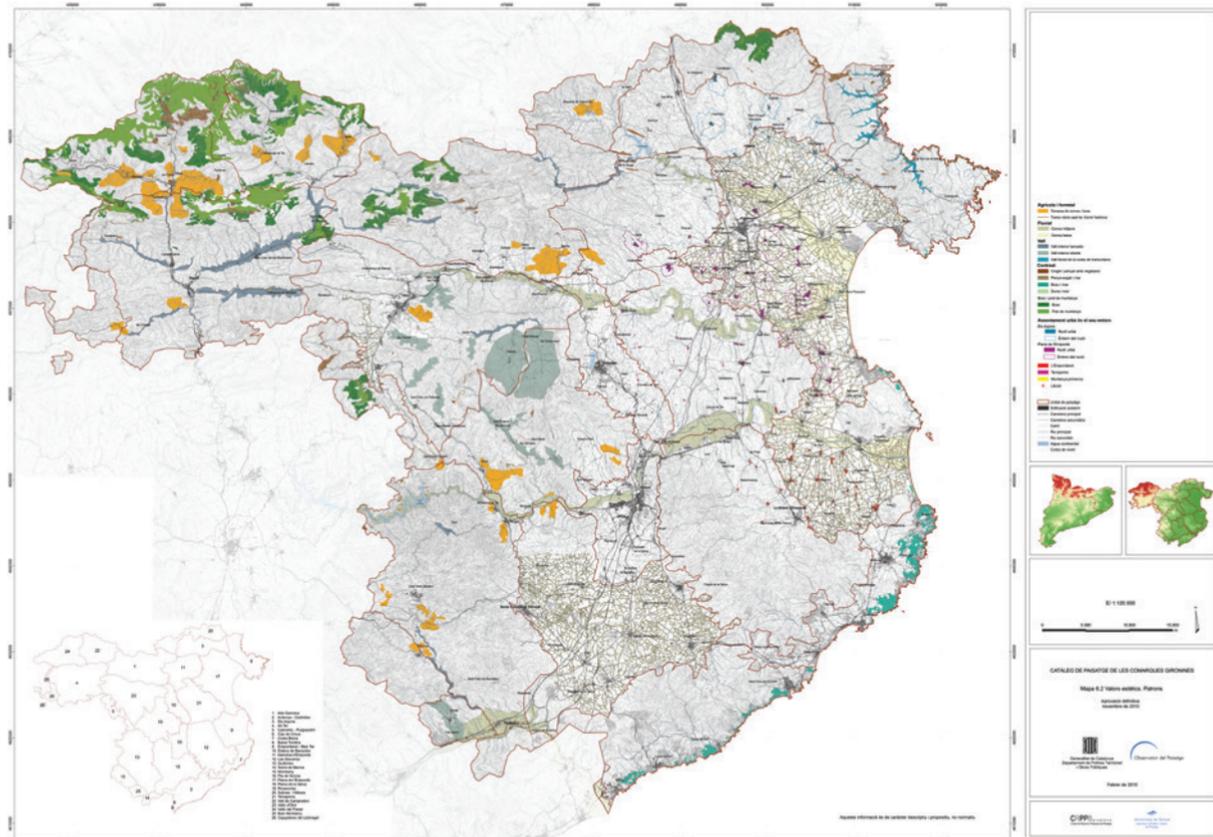
Fig. 50, p. 114-115:

*Map 6.1.: Aesthetic Values, Patterns, Morphological elements and singularities*: Landscape Catalogue of Lerida region, CRPPb, 2008

Fig. 51, p. 116-117:

*Map 8.: Impacts*: Landscape Catalogue of Lerida region, CRPPb, 2008

Available at: [http://www.catpaisatge.net/cat/catalegs\\_presentats\\_L.php](http://www.catpaisatge.net/cat/catalegs_presentats_L.php)



This approach to landscape analysis through the elements that configure the specificity of the landscape in shape of spatial patterns that have a recognizable, visible internal form and logic in a local scale but also highlighting the importance of their interrelation in a wider scale, is evident in the Landscape Catalogues in which the Centre of Landscape Research and Design of Barcelona<sup>84</sup> has participated (Landscape Catalogue of Lerida, 2008 and Landscape Catalogue of Girona, 2010).

In these Catalogues, patterns acquire a decisive role in the characterization of the aesthetic values of the landscape, interpreted mainly as visual values, while their evaluation goes beyond their classification in positive or negative: patterns are considered as one of the most significant configurators of the landscape image of the territory, and the main vehicle towards the interpretation of its specificity.

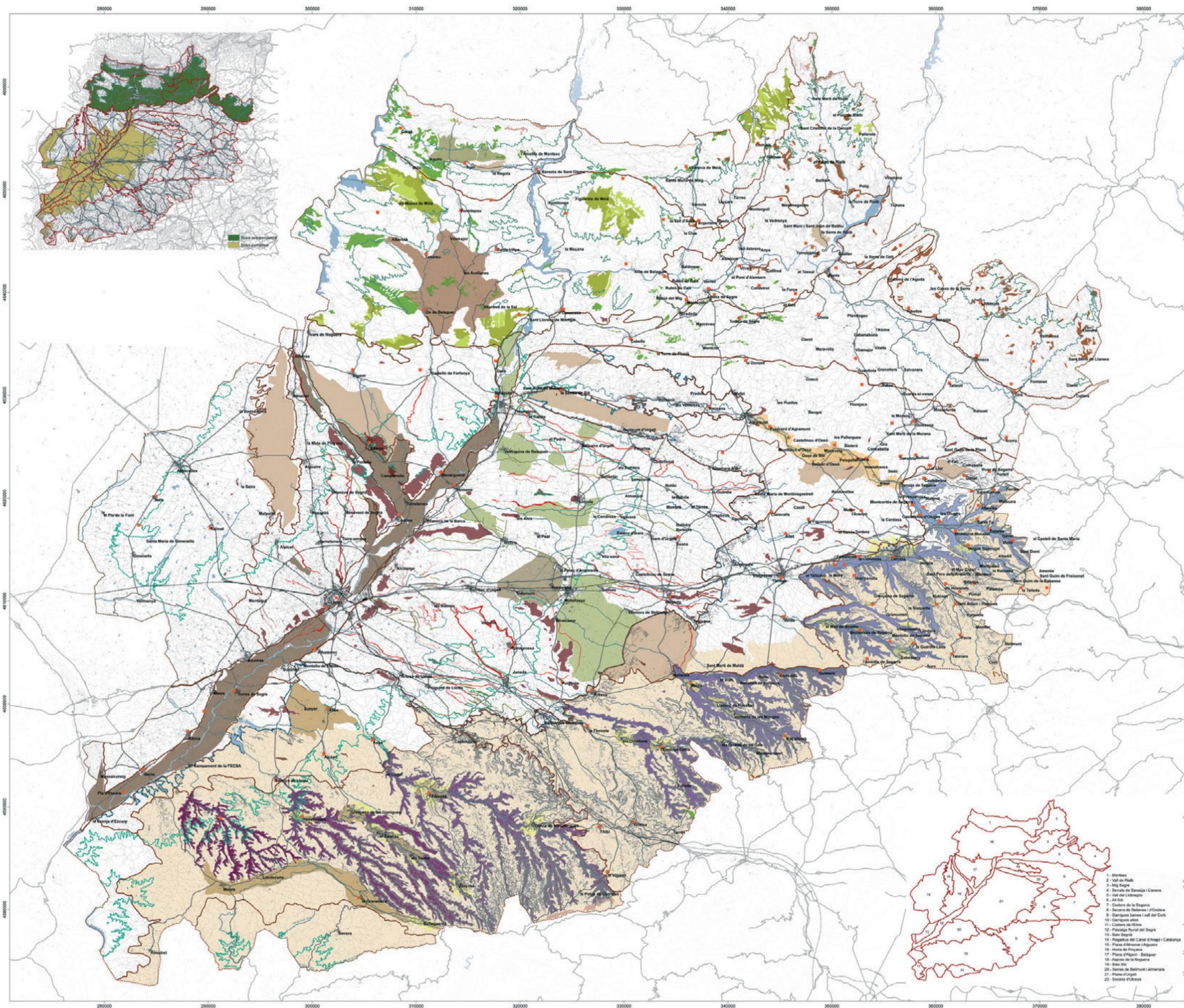
The cartography<sup>85</sup> places a special emphasis to the analysis of the landscape image in terms of patterns and their cartographic representation, complementary to the series of more conventional variables, as a vehicle for the interpretation but also the construction of value, closely related with the identity of place.

As already mentioned I am highly influenced by this approach: This experience, in combination with the above selective overview of techniques of approaching the "intangible" as the sense of the territory, or the landscape "character" as representing its structure, suggest certain reflections on some common agreements that seem to underline landscape analysis methods, especially when they are specifically oriented for planning and design.

[84] The study: "Estudi de les condicions paisatgístiques de set comarques de Girona", CRPPb, 2003, anterior to the development of the Landscape Catalogues has formed one of the methodological bases for the definition of the Landscape Catalogues Prototype. As explained by Maria Goula (2007:246): *El encargo fue hecho por la Secretaría de Política Territorial de la Generalitat de Catalunya al Centre de Recerca i Projectes de Paisatge, Barcelona (CRPPb) y al arquitecto A. Fernández de la Reguera con el objetivo de definir los paisajes de excelencia de dichas comarcas. Para cada comarca se realizaron lecturas superpuestas de un rango amplio de temas y escalas, trabajando básicamente con los Sistemas de Información Geográfica (SIG). El trabajo se desarrolló a partir de la cartografía 1:5000, interpretando el resto de cartografías de otras escalas y los ortofotomapas a escala 1:25.000. Esta opción es un rasgo diferencial en este tipo de trabajos que se entregan a escalas geográficas. Las directrices fundamentales de este trabajo han sido: la exploración de la imagen desde los estudios de visibilidad; los elementos y patrones singulares visibles y la definición de los horizontes permanentes; el cuestionamiento de los límites claros y estables; y la fragilidad visual. Se empezó por una lectura genérica, transgrediendo casi siempre los límites administrativos. Los primeros resultados fueron interesantes, pero previsibles, sobre los puntos de tensión de los territorios, las grandes continuidades montañosas, los embudos, la fragilidad de los límites de los espacios protegidos, la fragmentación por infraestructuras. La delimitación de áreas de excelencia no fue el objetivo primordial del trabajo. Se han tratado unas 35 variables aproximadamente, desde las mas convencionales (y, de hecho, básicas) hasta algunas específicas y sintéticas que se consideraron significativas. Las variables se agrupan en dos grandes temas: los potenciales y las fragilidades. No se entienden como valores positivos y negativos, sino como los resultados de múltiples cruces entre variables que reflejan las características registradas de estos paisajes... Este trabajo es una de las referencias básicas para la elaboración del Prototipo para los Catálogos de Paisaje de Cataluña.*

[85] *Los objetivos del desarrollo de la línea de investigación sobre la imagen han sido (desde el principio de la fundación del CRPPb, ..., por un lado, profundizar en los instrumentos de la intervención en el entorno, de la gestión territorial y del planeamiento, integrando estudios de la imagen con el resto de variables convencionales de los sistemas territoriales, urbanísticos y ambientales, y, por otro lado, ahondar en los procesos de la construcción de la identidad de los sitios, tan difícil de medir, objetivar o valorar a la hora de la proyectación o de la gestión, puesto que los factores visuales están altamente implicados, tanto en la percepción como en su interpretación. (Goula, 2007:9)*

Fig. 50



**Patrons**

**Patrons agroforestals de l'estructura lineal de valls**

- Riu Sió
- Riu d'Ondara
- Cercavins
- Riu Corb
- Torrent de la Feresa
- Riu Set
- Vall Major
- Vall de Carraixak

**Patrons d'assentaments urbans i els seus paisatges**

- Patró d'assentaments urbans de les estructures lineals
- Patró lineal d'assentaments urbans de la vall del Sió

**Patrons agrícoles significatius**

- Fruteres-conreus herbacis de regadiu
- Fruteres de regadiu
- Conreus herbacis de regadiu
- Conreus herbacis de secà
- Conreus d'oliveres
- Conreus herbacis de secà i oliveres
- Conreus herbacis de secà i garigues

**Patrons amb contrast**

**Patrons de prats i boscos**

- Bosc
- Prat natural

**Patrons de boscos mols perennifolis i caducifolis**

- Bosc mitjà de carrasca i roures
- Bosc mitjà de roures valencians i pins

**Elements configuradors del paisatge agrícola**

- Terrassa
- Línia de canvi de relleu
- Banqueta arbrada
- Canal principal

**Elements morfològics i singularitats**

- Estructura morfològica lineal de valls
- Tossal que estructura la trama agrícola
- Cingle
- Bota

**Elements històrics i/o culturals**

- Zona d'alta densitat de murs de pedra seca
- Castell

**Unitat de paisatge**

- Agua continental
- Riu
- Carroiera
- Ferrocarril
- Cami
- Cotxa de nivell
- Estació existent

European Datum 1950  
Plus 31m  
E/ 1:120.000

0 5.000 10.000 15.000 m

**CATÀLEG DE PAISATGE DE TERRES DE LLEIDA**

Mapa 6.1 Valors estètics. Patrons, elements morfològics i singularitats

Generalitat de Catalunya  
Departament de Política Territorial i Obres Públiques

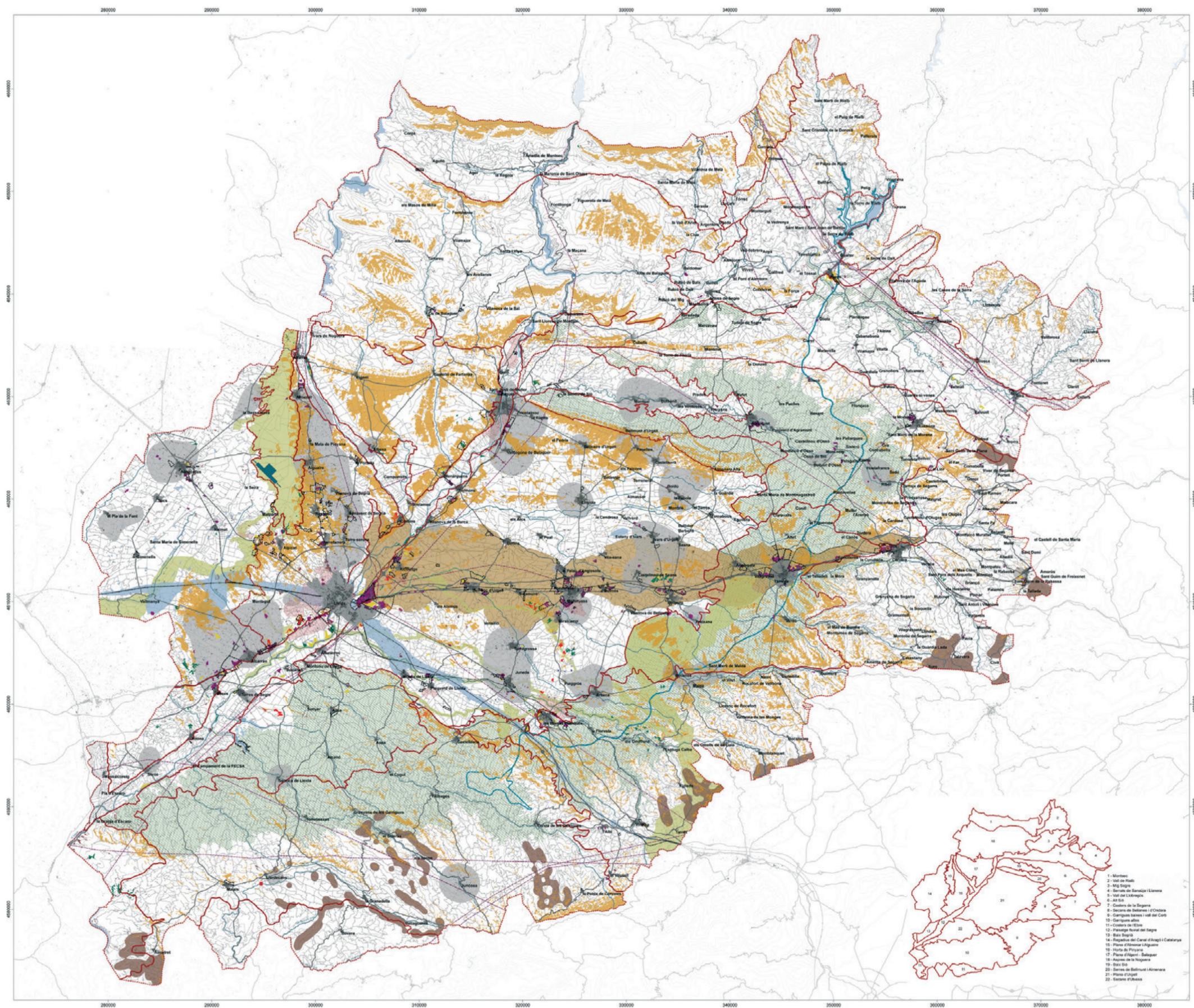
Observatori del Paisatge

Agost de 2008

1. Móra  
2. Vall de Ribó  
3. Mig Segre  
4. Serra de Santjaume i Llerena  
5. Vall del Llobregat  
6. Anís  
7. Cadena de la Segarra  
8. Serra de Dolors i l'Ondara  
9. Camps baixos i vall del Corb  
10. Camps alts  
11. Cadena de l'Ebre  
12. Paisatge rural del Segre  
13. Baix Segre  
14. Regadiu del Canal d'Arroja i Catalunya  
15. Pla de l'Alfama i l'Alguero  
16. Serra de Prades  
17. Pla de l'Alp i Balaguer  
18. Serra de la Nequera  
19. Baix Sió  
20. Serra de Santmunt i Alenars  
21. Pla de l'Urgel  
22. Serra d'Ulls

CRPPB  
Siget  
UdL Lab

Fig. 51



**Fragilitat visual**

- Zona d'alta exposició visual

**Paisatges en transformació en zones d'alta exposició visual**

- Cultiu abandonat
- Activitat extractiva abandonada

**Paisatges amb pressió per la implantació de noves infraestructures**

- Proposta de parc edic
- Proposta de nova central hidroelèctrica
- Nou canal Segarra Garrigues
- Zona de nou regadiu
- Nou aeroport d'Alguaire
- TAV
- Connector ecològic en transformació

**Paisatges amb pressió per la presència d'infraestructures i serveis**

- Àrea d'influència dels eixos de mobilitat Lleida-Cervera
- Zona d'extracció minera
- Zona riu
- Cultiu abandonat prop de zona industrial
- Zona industrial
- Zona d'alta concentració de granges
- Linia d'alta tensió
- Abocador
- Urbanització oliva

**Simbologia general:**

- Unitat de paisatge
- Nucleus Històrics i les seves extensions
- Àrees especialitzades
- Agua continental
- Riu
- Carretera
- Ferrocarril
- Camí
- Corba de nivell
- Edifici existent

Mapa de Catalunya i de Lleida

European Datum 1950  
Fus 31n  
E/ 1:120.000  
0 5.000 10.000 15.000 m

**CATÀLEG DE PAISATGE DE TERRES DE LLEIDA**  
Mapa 8 Impactes

Generalitat de Catalunya  
Departament de Política Territorial i Obres Públiques  
Observatori del Paisatge

Agost de 2008

1 - Montseny  
2 - Vall de Boix  
3 - Mig Segre  
4 - Bardenes de Sant Joan i Lleida  
5 - Vall del Llobregat  
6 - Vall de Cardener  
7 - Costers de la Segarra  
8 - Secans de Balaguer i d'Oriola  
9 - Camps de Segarra i Vall del Cardener  
10 - Camps de l'Alt Segre  
11 - Camps de l'Ebre  
12 - Paisatge Rural del Segre  
13 - Baix Segre  
14 - Paisatge del Canal d'Arrip i Catalunya  
15 - Pla de l'Albanyí i Balaguer  
16 - Àrees de l'Alta Segarra  
17 - Pla de l'Albanyí - Balaguer  
18 - Baix Segre  
19 - Àrees de l'Alta Segarra i l'Alta Segarra  
20 - Pla de l'Albanyí i l'Alta Segarra  
21 - Pla de l'Albanyí  
22 - Àrees de l'Alta Segarra  
23 - Àrees de l'Alta Segarra

CRPPB  
SIGTEL  
LUL LAB

Fig. 52: Landscape attributes in classified layers  
 Image from Mcharg I, 1969, *Design with Nature*  
 Available at: <http://newjerseyurbanism.wordpress.com/2010/09/26/design-with-nature-ian-l-mcharg/>

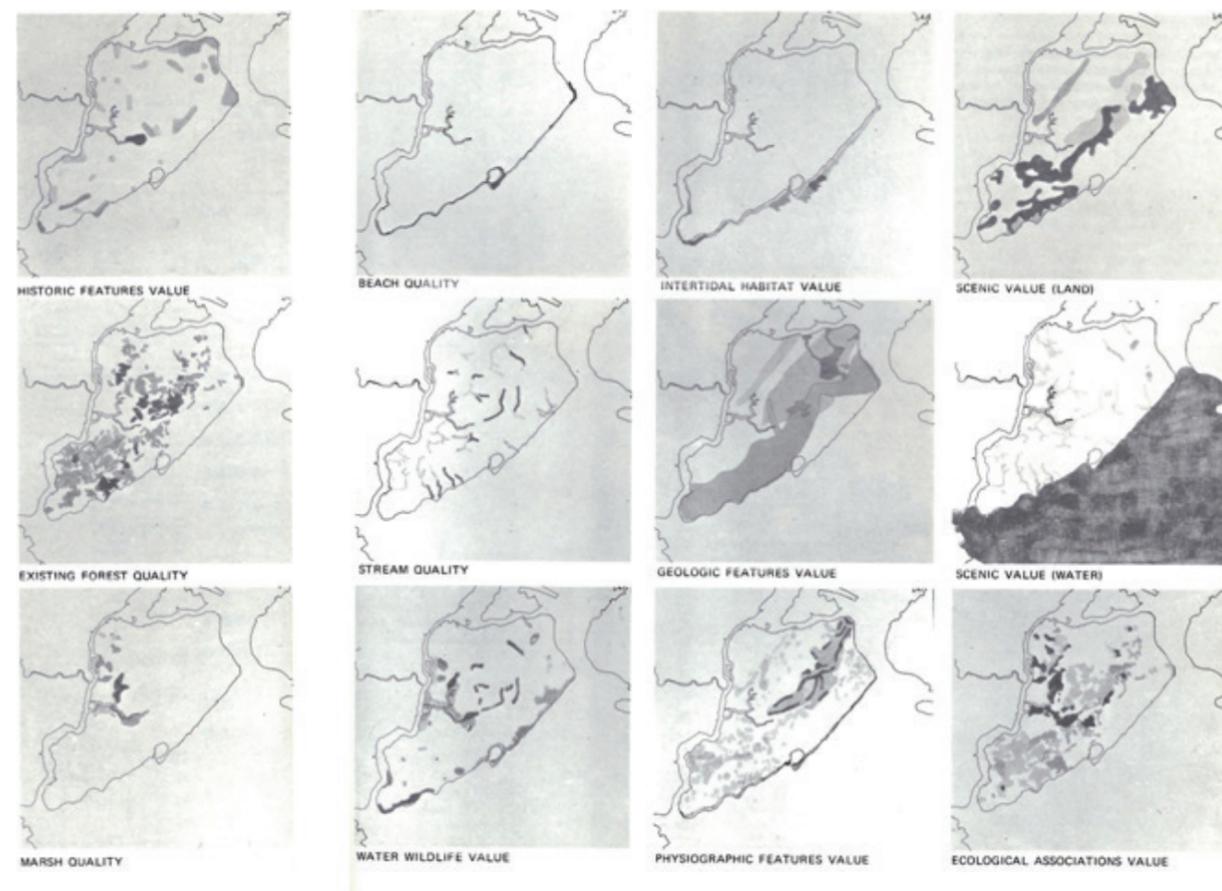
## Some arguments on the cartography of landscape analysis

### The effects of the relation between analysis, planning and design

We could detect several influences in the revised landscape analysis methods, especially those specifically oriented to regional planning: Ecological aesthetics, environmental aesthetics, geography are among them. Nonetheless, methods whose objective is the identification of the potential consequences of introducing a change in land use in terms of the "identity" of the place seem to share a common<sup>86</sup> structure: their evaluation, based mainly in the overlapping of existing values positive and negative, seeks to assess planning as an indicator for the suitability of uses.

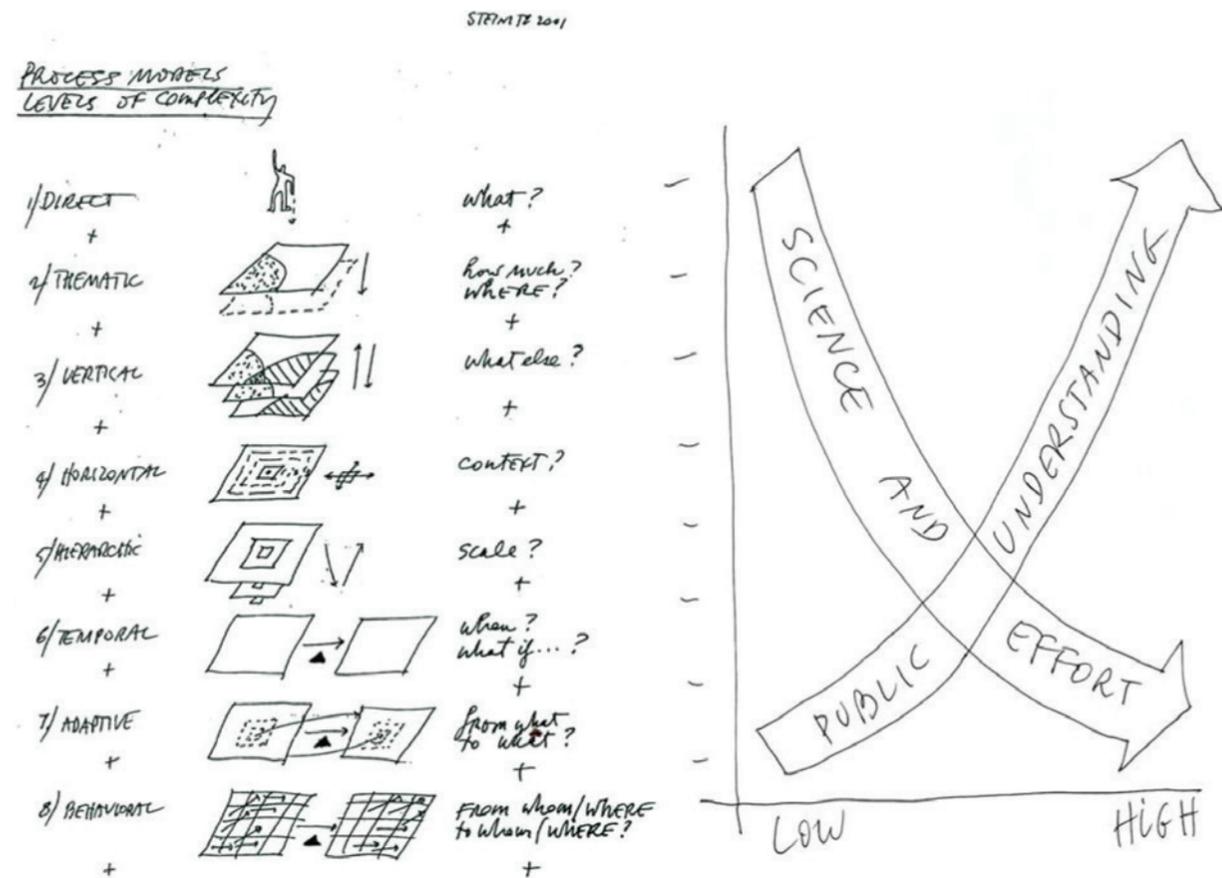
In this key aspect can be detected, in my opinion, Ian McHarg's (2010) enormous contribution in linking theory with practice and a serious intent of approaching analysis to design. Nonetheless, this same point also reflects what seems to me one of the main fragile aspects of the process when it comes to be applied in a more integral and thorough analysis of landscape in terms of its character: the resulting synthetic maps could be easily interpreted as dividing land into the untouchable, the intrinsic suitability for diverse land uses, while the in-between is left in blank, uncharacterized: the reading through variables, although later on overlapped, crossed or processed, leads inevitably to a partial characterization of the landscape, to a vision of analysis as a selective tool revealing what's important, what's valuable or what's fragile and leading eventually to the accommodation of the transformation following criteria of minimizing the impact to these variables diagnosed as the most valuable. What it seems important to me is it to distinguish the consequences of this influence on how landscape analysis is essentially understood nowadays as a tool with a quite sterilized function: to serve as a base for specific planning decisions on where or not it is adequate to locate certain uses, and eventually what gets lost in this process...

If landscape analysis has a finality of course that is to orient spatial design. Nonetheless, when this analysis obeys only to the laws of one potential particular spatial design, that is regional planning, representing one specific scale of spatial organization, it is inevitable that it will be very difficult to function as a method able of responding to questions beyond planning. It becomes a non transposable method as it is essentially reflecting not the specificity of the landscape but essentially its interpretation from a specific point of view also represented cartographically following the traditional tools of representation of the final product of this process: that is systems and areas of differentiated planning policies of a very specific scale.



[86] Landscape analysis methods seem almost inevitably influenced by the methodological approach proposed by Ian McHarg. In *Design with Nature* (Mc Harg 2010), McHarg sets the bases for what seems to me as one of the key feature of his method: landscape analysis must in some way, reach to a diagnosis capable of showing or proposing, through an overlapping of the existing values, "suitability" maps, showing compatibility among diverse land uses and various "natural determinants and records the planner's assessment of potential conflicts and their consequences. (Spirn 2000:107).

Fig. 53:  
 Process models: levels of complexity  
 S: Steinitz C, 2008, "On scale and complexity and the needs for spatial analysis"



On the other hand the dependence of analysis from the laws of planning also affects the conceptualization of scale. Scale matters: It is also true that *many methods, many processes, many ideas which work at one scale, don't work at another scale* (Steinitz 2008). Nonetheless, the scale of the project, the house, the park, the city, the region does not have to be imposed to the scale of the spatial analysis previous to design. There is a widespread tendency to look from large to small (Steinitz 2008). However it might be the case, from large to small or from small to large, whether it is understood in a sequential or non sequential<sup>[87]</sup> order, it seems that spatial analysis understands scale and its dimensions in comparison to the problem it has to solve and not according to the specificity of the landscape nor of the variables investigated. Although a multiple scale approach is perhaps one of the first lessons taught when dealing with landscape analysis, and even though it is conducted through the process of analysis, landscape analysis scale essentially represents one scale accorded to the scale of the project it has to assess: Analysis follows design, or at least the logic, representational and conceptual, of the objective of design. Analysis is thus depending on the nature of its subject, subject which we designers have accepted widely as being the project and not the landscape.

[87] Deep mapping, inspired by the work of Mike Pearson and Michael Shanks pursues a merge between spatio-temporal scales. "Reflecting eighteenth century antiquarian approaches to place, which included history, folklore, natural history and hearsay, the deep map attempts to record and represent the grain and patina of place through juxtapositions and interpenetrations of the historical and the contemporary, the political and the poetic, the discursive and the sensual; the conflation of oral testimony, anthology, memoir, biography, natural history and everything you might ever want to say about a place ..."  
 Mike Pearson and Michael Shanks, 2001, *Theatre/Archaeology*, Routledge, page 64-65

Fig. 54:  
Reclassification of the habitats database for the development of the cartographic essays

Atributos de reino de transformación										
ID	Shape	AREA	PERIMETER	LLH1	REC1	LLH2	REC2	LLH3	REC3	NOM_LLLEN
0	Polygon	30206,45091	1144,65047	82a	10	0	0	0	0	0
1	Polygon	3007,22823	375,50587	83a	10	0	0	0	0	0
2	Polygon	332771,9797	5346,90352	83a	10	0	0	0	0	0
3	Polygon	862203,91862	80316,22091	82c	10	0	0	0	0	0
4	Polygon	440002,92420	6903,26023	82a	10	0	0	0	0	0
5	Polygon	142529,67201	3071,30364	83a	10	0	0	0	0	0
6	Polygon	75670,6271	2650,09731	34h	6 32u	4	0	0	0	0
7	Polygon	399404,60909	9206,11503	34h	6 32b	4	0	0	0	0
8	Polygon	4848,79878	286,75653	82c	10	0	0	0	0	0
9	Polygon	36618,33830	904,51207	34h	6 32b	4	0	0	0	0
10	Polygon	114136,44630	1679,62008	86a	10	0	0	0	0	0
11	Polygon	89909,07972	1207,17921	86a	8 15a	2	0	0	0	0
12	Polygon	24705,53712	607,67369	82c	10	0	0	0	0	0
13	Polygon	94283,70840	2115,20384	34h	4 87a	3 15a	0	0	0	0
14	Polygon	263013,60504	3641,59540	86a	10	0	0	0	0	0
15	Polygon	138891,18238	2674,22714	87a	10	0	0	0	0	0
16	Polygon	19607929,26880	132632,24208	82c	10	0	0	0	0	0
17	Polygon	137603,2163	1679,60847	34h	7 15a	3	0	0	0	0
18	Polygon	77937,63125	1675,92013	82c	10	0	0	0	0	0
19	Polygon	189394,26366	2643,90432	34h	6 32u	2 32b	0	0	0	0
20	Polygon	1348396,746373	102630,26323	82c	10	0	0	0	0	0
21	Polygon	355902,20426	4586,82062	83a	10	0	0	0	0	0
22	Polygon	2601,01427	240,02492	83a	10	0	0	0	0	0
23	Polygon	635209,16573	25770,59892	53a	8 53a	2	0	0	0	0
24	Polygon	168460,20862	2614,26825	87a	10	0	0	0	0	0
25	Polygon	4036,14574	129,80703	82c	10	0	0	0	0	0
26	Polygon	121314,71135	1796,99901	87a	10	0	0	0	0	0
27	Polygon	220291,8034	2628,14481	82c	10	0	0	0	0	0
28	Polygon	86955,30833	3216,86095	34h	5 32u	3 45f	0	0	0	0
29	Polygon	60902,84815	1300,84021	86a	6 15a	2	0	0	0	0
30	Polygon	710903,41094	7440,18243	86a	10	0	0	0	0	0
31	Polygon	28158,12730	884,32643	45f	10	0	0	0	0	0
32	Polygon	250356,28221	3787,46430	32u	5 34h	3 82a	0	0	0	0
33	Polygon	18123,33806	1802,61871	87a	10	0	0	0	0	0
34	Polygon	394805,70874	12918,50970	34h	6 32u	4	0	0	0	0
35	Polygon	129818,21843	2256,26081	83a	10	0	0	0	0	0
36	Polygon	136483,4349	4674,81296	32u	5 34h	3 32b	0	0	0	0
37	Polygon	82083,82576	7336,26023	82c	7 32a	3	0	0	0	0
38	Polygon	91031,00590	2460,00064	34h	6 32u	4	0	0	0	0
39	Polygon	42878,10378	967,2381	87a	10	0	0	0	0	0
40	Polygon	90810,27283	2630,81633	45f	4 32b	3 32u	0	0	0	0
41	Polygon	62694,03088	13472,68447	32b	4 32b	4 34h	0	0	0	0
42	Polygon	26922,07302	717,86969	32u	5 34h	5	0	0	0	0
43	Polygon	26862,24862	814,84465	87a	10	0	0	0	0	0
44	Polygon	96991,32953	3481,86293	32u	10	0	0	0	0	0
45	Polygon	4172,26104	3603,84093	34h	10	0	0	0	0	0
46	Polygon	121142,87108	3060,82485	32u	5 34h	3 32b	0	0	0	0
47	Polygon	107935,73744	1625,14855	34h	6 32u	2 82a	0	0	0	0
48	Polygon	1036661,66315	87478,23090	82c	10	0	0	0	0	0
49	Polygon	29020,70117	6642,20170	45f	5 32u	3 34h	0	0	0	0
50	Polygon	6026,14256	1050,83393	82c	10	0	0	0	0	0
51	Polygon	109005,07918	1418,84228	86a	10	0	0	0	0	0
52	Polygon	38350,27265	6308,01065	83a	5 32u	3 34h	0	0	0	0
53	Polygon	46602,88016	1143,16129	86a	8 15a	2	0	0	0	0
54	Polygon	75479,67914	987,71718	86a	10	0	0	0	0	0

## The tool as a guarantee of "objectivity"

All landscape analysis methodologies consulted pursue a maximum objectivity. Partially, the use of mainly existing cartographic databases and of geographical information systems software guarantee this "maximum" objectivity. Nonetheless, the limit to this degree of objectivity might be traced if we consider the "objective" possibilities offered up to this day equally from the available cartographic databases and the existing software: It is the researcher that chooses the appropriate databases for the software to process. The software doesn't provide with no specific function capable of responding automatically to dense functions as for example: automatic landscape character analysis. It is the researcher that makes the questions, while the software takes charge of providing with the answers in an efficient manner. It is true that technology permits the process of an immense quantity of information that would require an unsustainable amount of time, if it were to be processed with the traditional method of observation and calculation. The benefits of the new technology are many, but we also maintain the doubt that the alleged objectivity of automatic processing is supported by the underlying subjectivity of the researcher's expertise.

However might be the case, I would like to distinguish some critical points favoring the use of the geographical information systems: Firstly the fact that they enhance the sharing of information, translating the objective properties of the environment, its physical attributes into measures of variable values. Over more permit the distancing between interpretation and representation: Geographical systems files are above all databases that might acquire infinite representations in terms of their graphical output. And last but not least, they require a process that obliges the rationalization of the researcher's intuitions especially when it comes to decisions that involve values not included in the existing official thematic maps: although the researcher recognizes, either by observation or by his discipline baggage, the value of a concrete element, or of a pattern, GIS technologies, not sharing the same philosophy with typical vectorial software used in the architectural practice that permit direct drawing, guide the analysis not to the instant delimitation of the limits containing the element or the pattern but to the concretization of the parameters that configure it. Following this process the highlight of an element includes the reasons that lead to distinguish it from the rest, the measures of its value beyond its form. I am aware that perhaps this last point is linked to my personal profile, being initially an architect. Nonetheless, I find this point as a central example on how landscape analysis using GIS technologies potentially changes the point of view on the relation between form and information.

Fig. 55:

Janice Caswell, *Port Mungo*, 2006

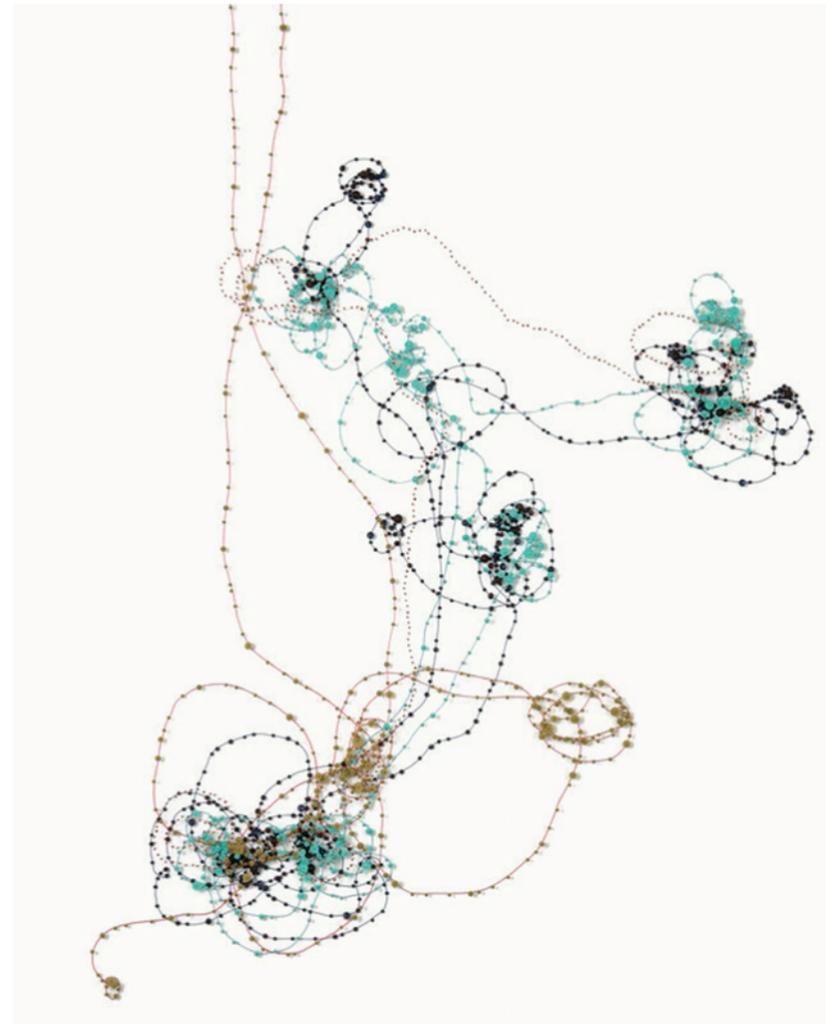
Ink, paper, pins, beads, enamel on paper, mounted on aluminum-backed archival foam board. 31 x 39

Available at the personal web-page of the artist

<http://janicecaswell.com/work/works-on-paper-mapping/>

*Mapping Series:*

*This work traces the edges of recalled experience to understand how we organize memories. These mental maps use a pared-down, coded language through which points, lines and fields of color define spaces and retell personal narratives. Because memory is a flawed system, gaps arise in the process of recollecting; the mind constantly recreates the past even as I work to locate and secure it.*  
Janice Caswell (<http://janicecaswell.com/statement-2/>)



## On the essence of cartography: analogy or metaphor

In this same context of maximum objectivity pursued, a question emerges related with the intrinsic nature of the cartographic products. Especially when it comes to the identification of essentially perceptive attributes, cartography seems to have two prevailing possibilities of development<sup>88</sup>:

- Seek the major analogy possible to the represented geographical space: This presupposes dependence between space and its cartography. It is normally represented through the mapping of discreet elements whose form and interrelation in space functions as the spatial analogy of the value they correspond to.
- Or function as a metaphor of the investigated phenomenon: This perspective habilitates the cartographic product as an instrument of interpretation, and although a certain correspondence between space and its cartography might be pursued, this last can incorporate parameters that although are not characterized by a strict analogy with the geographical elements, they can express dynamics, processes, interpretations, feelings, senses and phenomena, that in a certain manner function as metaphors of the experience of the landscape.

The above might appear a very generic classification. It is of no doubt that the conceptualization of cartography based on a binomial distinction between metaphor and analogy might lead to sterile conclusions. Nonetheless, it is one that in a personal level has helped me orient both the cartographic and accordingly the theoretical exploration of atmosphere. If mapping atmosphere has **the objective of interpreting what is activating atmosphere and not to represent its effects**, then the cartography should function as an analogy of the geographical space. Nonetheless, if we were to accept metaphor as a structural tool for the configuration of new meaning, *as a matter of projections and mappings across different domains of meaning* (Lakoff, Johnson 1980), where one domain in this case is embodied experience and the other corresponds to its two-dimensional cartographic identification, then cartography in its essence constructs a metaphor<sup>89</sup>. A metaphor through which we potentially gain access to spatial meaning...

[88] Roger M. Downs in his article: "Maps and metaphors" (Professional Geographer, 33(3), 1981, pp. 287-293) arguments on cartography in terms of the differences between the concept of metaphor and analogy:

(1) A metaphor is based on the claim that concept A is B, whereas an analogy claims that A is like B.

(2) The claim of relationship is implicit and unarticulated in a metaphor, whereas the claim must be explicit in an analogy.

(3) Given the implicit claim of relationship in a metaphor, the "consumer" (or user) of the metaphor is permitted free rein of the imagination with respect to the meaning of the "is" in the statement that A is B. Such free rein permits connotations, associations, figurative interpretations, etc. In contrast, the "producer" of an analogy must specify the set of particular ways in which A is like B. The freedom of imagination is removed by a clearly specified set of claims of relationship. There is a "text" to an analogy. Perhaps these contrasts can be captured as the distinctions between expression and explanation, between image and model, between implicit and explicit understanding.

[89] "Maps are arguments, just like a piece of written journalism is an argument." "We need to learn how to agree and disagree with those arguments, to challenge the interpretations made of images that are anything but objective or self-evident. For every image, we should be able to inquire about its technology, its location data, its ownership, its legibility, and its source." Quotes by Laura Kurgan in Johnson Sara, 2013, How Map is Like an Op-Ed, published in <http://www.theatlanticcities.com/technology/2013/04/how-map-op-ed/5143/>

**FRAME: APPROACHES FROM CARTOGRAPHY**

