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Ioanna Spanou

Mapping Atmosphere

Rehearsals on rural mediterranean landscapes
The agricultural park of Llobregat river is located at the metropolitan area of Barcelona, occupying a surface of 2,938 ha on the alluvial plain of the delta of the Llobregat river, or more precisely what is left of it unoccupied by the major trans-urban road infrastructures, the Barcelona airport and the expansion of the surrounding urban nuclei. Limited at the northeast by the river, and on the south and northwest by a rosary of urban nuclei and urbanizations, this agricultural land has been declared as ‘agricultural park’ at 1998, marking a nodal point to its long history: this territory has been traditionally the major supplier of fruits and vegetables for the city of Barcelona and still is today the major and unfortunately the only agricultural land left in its immediate surroundings. This singular condition exposes the park to major forces for its transformation, not all of them sharing the same objectives: its declaration as a park was clearly promoted by the will of maintaining it as a productive agricultural landscape while developing its values. On the other hand, it is subject of constant speculations, with its surface clearly fragmented, as the necessary infrastructures needed for this metropolis to work find in its surface the necessary ground for their development.

This land is of an undoubted extraordinary cultural value: it reveals the domestication of what used to be an immerse marshland and its transformation to productive land, through the use of Llobregat’s river water for irrigation and energy supply to both Barcelona and its surrounding nuclei but also through the extraction of fresh water from its easily accessible water table. Remains of its past are still observable in the area: sparse wetlands, a parallel to the sea stripe of immobilized dunes through pines plantations, whose origin, artificial or natural is still a theme of open discussion, canalized streams and rivers. The geographical distribution of these elements seems to divide the park into two differentiated landscapes: the central delta, along the river and incorporating part of the municipalities of Sant Boi and Prat, and the western delta, incorporating part of the municipalities of Viladecans, Gavà and Castelldefels. There is no clear definition of the limits between these two landscape units; nonetheless, their differentiation seems to be also subject to the antic social structures (Valverde 1997). This distinction, although not deliberately, has also emerged in the analysis. The Murtra channel functions as a barrier that doesn’t permit the crossing between the two deltas. The analysis, although covering initially the entire area of the agricultural park, focuses mainly in the western delta.

3.3. CASE STUDY II:
the agricultural park of the Llobregat river

The agricultural park of Llobregat river is located at the metropolitan area of Barcelona, occupying a surface of 2,938 ha on the alluvial plain of the delta of the Llobregat river, or more precisely what is left of it unoccupied by the major trans-urban road infrastructures, the Barcelona airport and the expansion of the surrounding urban nuclei. Limited at the northeast by the river, and on the south and northwest by a rosary of urban nuclei and urbanizations, this agricultural land has been declared as ‘agricultural park’ at 1998, marking a nodal point to its long history: this territory has been traditionally the major supplier of fruits and vegetables for the city of Barcelona and still is today the major and unfortunately the only agricultural land left in its immediate surroundings. This singular condition exposes the park to major forces for its transformation, not all of them sharing the same objectives: its declaration as a park was clearly promoted by the will of maintaining it as a productive agricultural landscape while developing its values. On the other hand, it is subject of constant speculations, with its surface clearly fragmented, as the necessary infrastructures needed for this metropolis to work find in its surface the necessary ground for their development.

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Fig. 121: Ortophoto of the park, its relation with the airport and the city of Barcelona.
Fig. 126: Historic map of the delta, dating back to 1889. Available at: http://www.gavamar.com/ES/index1.php?ruta=http://www.gavamar.com/ES/origen.htm

Fig. 127: Series of views of the limits of the park: the forested dunes

Fig. 128: Localization of the forested dunes and sparse wetlands
The cartographic essay of morphological complexity, following the same process as in the previous case study, reveals areas of maximum intensity situated along the archaeological dunes and at the areas of a higher density of hydrographic and plot patterns. The areas of minimum density on the other hand correspond to the core of the agricultural land where the plot and hydrographic pattern seem to share a far more legible, orderly and sharp definition.

Nonetheless, the definition does not permit an accurate distinction between areas of an homogeneous density. The resulting layer reveals limits in shape of edges of a variable depth conceived as frontiers of mutual influence between different patterns of atmosphere. This closer observation of the resulting layer indicates a possible conclusion of a considerable methodological interest: areas of an homogeneous density function simultaneously as ‘local’ areas but also as enveloping horizons of the rest of the local areas. They form simultaneously integral entities while forming part, visually, logically and physically part of the rest of the ‘local’ parts. It is also suggested that these frontiers result as a far more prominent element in the resulting cartography, at least more than the ‘interior’ areas which through a more conventional analysis would have been initially identified as landscape ‘units’.

A careful insight in the mapping of these interacting frontiers could trace a possible path towards the interpretation of a structural pattern of relations that defines a ‘global’ pattern of atmosphere.
One of the main reasons that frontiers correspond to areas of maximum complexity is the fact that they permit a simultaneous view of differentiated patterns of atmosphere. The visibility studies elaborated along the paths crossing two of the most sharply defined detected frontiers prove this intuition.

Nonetheless, and as shown in the resulting layers, although both frontiers permit a visual control towards multiple atmospheric patterns, and also towards the distant horizons, they differ in the manner they do so.

[127] The use of the visibility studies through which the visual perception can be introduced in the cartography. A generic visibility study provides us with the visual field perceptible from a specific viewpoint. The Arc view software permits a quick and precise elaboration of the visibility studies based on the tridimensional digital terrain model; the detail of the results and the analogy with the perceptible reality in situ depend on the information introduced in the digital terrain model: for example, and apart from the basic layer of topography, vegetated visual barriers, buildings or other elements that might delimit the view have been introduced.
The first one is essentially fragmented, characterized by a strong and variable rhythm oscillating constantly between the view of the involving pattern of the dunes and the agricultural one. The second one refers to a constant and compact visual field of a homogeneous character: the first visual field is always occupied by the agricultural pattern. Rhythm is not the only differentiating factor; also the morphological quality of the visual fields is distinctive:

The first frontier offers partial and elongated viewsheds of an accentuated directionality of the visual flow, while the second one is characterized by a round-shaped compact visual field that offers in one act of view a clear perception of the surrounding pattern as a logical whole.

What is more, the morphology of the limits of the visual fields, where the gaze is fixed and framed is completely distant in each case:

In the first frontier limits are hard to trace, characterized by an ambiguous depth empowered partly from the distinctive qualities of the forested dunes pattern in which we are situated: The undulating topography and the grouping of trees configure a fragmented visual field towards the interior of the ‘forest’, whilst the views towards the agricultural pattern, shorts in duration and elongated are densely compressed, oscillating constantly between the view towards agriculture, distant horizons and the involving forest.

In the second frontier on the contrary, views are prolonged towards invariable perceptual horizons.

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In the second frontier on the contrary, views are prolonged towards invariable perceptual horizons.
The difference of the morphological configuration of the frontiers is structural at this point. In the first frontier the two adjacent atmospheric patterns intermingle whilst in the second one they share a more confronted relation. Nonetheless, a simple diagram of the morphologies of the two frontiers would suffice in order to explain their structural difference: in the first case the diagram detects a complex edge with parts of each pattern penetrating the other, while the second one refers to a line. The morphological complexity of the first one is obviously higher to the second one. A parallelism could also be conducted with the definition of frontiers, their complexity and value, as defined by landscape ecology (Forman 1995), recognized in the study of the urban (Alexander 2003) but also in the analysis of the landscape image as visual organizational structures for their landscapes of reference, as visual planes that contribute to difference, that is to the enrichment of the visual image (Goula 2007:275).

What can the analysis of landscape from the point of view of the atmosphere add to this recognition of frontiers as points of significant complexity and value?

Atmosphere differs between the two frontiers not because their morphological configuration is simply different. The intensity of atmosphere essentially varies depending on our ‘standing in specific points of view’ in and through these frontiers. Frontiers thus although of similar maximum complexities, form areas of differentiated atmospheric intensity not based on the multiplicity of information they provide but essentially based on the manner that the affordances and the spatial patterns of containment of the pattern that supports perception situates the body in space:
In the first frontier movement is supported in the outskirts of the forested dunes, whose specific configuration of smooth topographic elevations and depressions beneath the strong verticality of the pines, planted in varied densities offering a semi natural effect of forest in a sequence of intermingled clearings and dense masses, situate the body towards the agricultural pattern and the distant horizons in an dense orchestrated rhythm. Dense perceptual information thus is available all along the movement through the frontier, relations are perceived as complex not only towards the agricultural pattern, but through a dense spatial situation and a dense synchronic view to the agricultural pattern as delimited by the dunes pattern and the distant horizon.

In the second frontier nonetheless the situation, as far as the embodied experience is concerned, is different. The configuration of the pattern as experienced through its adjacent path is at least less intense or more subject to visual rather than embodied criteria. Perceptual attention is more likely placed on the gaze towards the surrounding pattern, difficult to be conceived as involving the body. We see agriculture, we perceive its geometry and its structure through the irrigation channels, we move through it but although the presence of water is indirectly evoked through the dense presence of reedbeds, it is impossible to identify it as a clear point of reference: the relation with the channel is punctual, momentary and although intense it hardly informs the embodied memory of the place as a distinguished element. A certain paradox then arises: this frontier results as a product of the cartographical essay, nonetheless its effects to embodied perception do not function as a frontier.

Its objective qualities as compared with that of the dunes pattern are essentially different. Information is presented to us at one glance. The legibility offered in this particular pattern towards the surrounding landscape is clearly contrasted with the complexity of the dunes pattern. And this structural difference has a direct effect on the intensity perceived through the embodied experience of the frontier.

[128] Boundaries, and especially thick boundaries with substance, can play a role in helping the goodness of a center, or in strengthening a center. This happens because, if two systems are interacting, the boundary condition is often turbulent or a source of possible confusion. When the boundary zone itself has dimension, it can then take on an “in between” structure, which mitigates or smoothes out the potential interacting processes in the inner and outer zones. Familiar examples are to be seen in the very thick boundary around a living cell (which contains so much vital functionality), in the edge ecology between a forest and a lake, or in the corona of the sun which mitigates the interactions of the sun’s interior and the processes taking place further out in the near vacuum beyond. The boundary plays a huge role in the effect and behavior of any system made of other systems, since the system will literally be riddled with such boundary layers and boundary zones. Although one cannot say that every center must have a boundary of this kind, it is certainly one of the ways in which a living center gets its stability and strength, and capacity to interact with other systems. Not surprisingly, then, a transformation which gives a given entity such a boundary zone—not a very difficult kind of transformation to induce mechanically as part of any developmental process—is likely to create a niche for desirable effects. The transformation which preserves and enhances structure, by introducing boundaries, is likely to bring with it a variety of positive effects. (Alexander 2003)
Intensity thus arises when frontiers do not to merely construct a visual narrative of the landscape but configure a dense spatial meaning where patterns as differentiated structures of relations are crossed. In the process of identification of the intensity of the atmospheric patterns, their spatial embodied experience becomes an equal agent of these patterns, interacting and constructing relations with the rest of the elements that constitute their structure.

The comparison between the two frontiers points toward the definition of the concept of intensity as depending on the manner that basic affordances (in this case visual and physical accessibility) and spatial patterns of containment situate the body in space. As we have seen, there is a critical difference between the two frontiers: in the first one, the body is situated within an atmospheric pattern of maximum complexity whilst it shares a rhythm of visual and physical contact with the adjacent one. In the second one, although the body is situated also within a pattern of high coherence the contact with the adjacent and more complex one has no rhythm, the relation is more likely defined as constant backdrop. The atmospheric qualities of the first frontier are denser because they invoke the body into a net of complex spatial information. Information walking through these pine forested dunes is evoked, not presented as is in the case of the second frontier. We are situated in a complex situation, forming part of it, whilst we have a rhythmic contact with the “exterior”.

We could thus suppose that partially the intensity of the atmosphere depends on the intensification of the bodily interaction with atmospheric patterns of the landscape. This intensification relies in the fact that occurs an extension of the typical affordances offered by both patterns crossed at the frontier: the spatio-temporal experiences are experienced as enveloping the body within a field of apparent influences and what is more, influences whose cause comes out from distinct and somehow contrasted landscapes: dunes and agriculture on the one hand, agriculture and the water channel on the other. Now, the less visual and more “embodied” is the experience the more intense is the atmosphere and what is more, it seems that the denser is the spatial schema of containment more intense is the atmosphere experienced.

The morphology of the atmospheric pattern becomes crucial at this point as it configures the specificity of the spatial patterns of containment: we are not only located in or out, we are not simply contained, but we are situated in a very specific manner based on the analogies of our “body” with those of the space enveloping us. Atmosphere inserts us thus to a very precise mode of experience and arises from the manner that the spatial embodied experience is supported by the configuration of the involving pattern. The sense emerging from this configuration contributes to the creation of a definite atmosphere, through the precise way in which it affects the embodied perception of the frontier.

The materiality of the limits that structure the perceptual fields is in this point critical. It seems that at least in the case of the first frontier the limits are experienced as thresholds, of a specific materiality sense that permits qualities as semi-transparency empowered by the overlapping of sequential layers of varied transparencies that emphasize the sense of profundity seem to provoke a specific atmospheric mode. Effects produced by light, as in the case of the first frontier intensify the sense produced by the penetrating light in a clearing with a specific effect: the body is contained in space as emphatically present. Qualities as semi-transparency or the augmented sense of profundity, increase the perceived complexity, relations are constantly suggested and a perceptual attention is needed as legibility is often hindered and the distinction between figure-ground is often difficult to trace.
A gradual intensity of atmosphere then arises at this particular situation, when meaning is evoked rather than presented. The idea of evoking rather than defining “closed” meanings seems thus central in this discussion. We find at this point a possible association with the concept of involvement in terms of complexity and mystery as defined by Kaplan. Nonetheless, the complexity is not based on the quantity of the information perceived but on the sense expressed through the materiality. Mystery on the other hand is triggered by the multiplicity of the associations evoked from the materiality applied as also from the spatial configuration of space as related to the body of the observer and to the context of the site. A specific sense of involvement might thus be activated as a product of an augmented complexity of the spatial embodied experience.
Fig. 145: View along the path of the forested dunes towards the interior

Fig. 146: View of the interior
Frontiers and interiors: their relation with atmosphere

Frontiers function potentially as perceptual attractors, condensing within them an augmented amount and richness of information. If we were to adapt the definition of metaphor as proposed by Lakoff and Johnson (Lakoff, Johnson 1999), atmosphere seems to emerge in means of a spatial metaphor, through the cross mapping between initially separate domains of meaning:

Metaphor conceptualized as a matter of projections and mappings across different domains in the actual structuring of our experience (and not just in our reflection on already existing structures) (Lakoff, Johnson 1999), and its essence as understanding and experiencing one kind of thing in terms of another, helps us conceive three separate domains of meaning, emerging in shape of three differentiated forms in the frontiers analyzed: the first corresponds to the pattern that supports our “point of view”, the visually and physically reachable patterns from this particular point of view and the site’s enveloping distant horizons.

This constant crossing between different although adjacent or visually connected domains of meaning permit multiple associations to be evoked through the precise manner that the body is contained in space. Eventually multiple metaphors are suggested through a constant oscillation of meaning between all three spatial domains. What is more, the crossing between patterns expands their sense. In the case of the first frontier, the forested dunes are metaphorically projected to the realm of a “wild” nature, as experimented through a specific experiential mode: through a domesticated nature, agriculture. And agriculture exemplifies a “domesticated” place accessible through a “seemingly” wild environment. What is more, they are both situated in a very specific common context, as it is defined by the enveloping distant horizon.

This crossing evokes multiple metaphorical associations through the precise manner that the body is contained in space. It is at this point when the spatial metaphor between the three differentiated domains of meaning, might reach its maximum effect: atmosphere seems to be more intense when this crossing permits the expansion of the typical affordances and spatial sense, simultaneously of the site, of its context and of the distant horizons: these multiple associations function as generators of a constant variability of the perceptual sense, revealing something of the specificity of this landscape. It is no longer a patchwork of differentiated moments of atmosphere; it is thus a collage formed through these moments able of communicating a very specific meaning.

Somewhere the application of an external model manages to reverse the spatial meaning of the primary existing pattern of the site… I am referring to the project of the atrium of CCCB in the center of Barcelona, where the glass façade of one of the four limits of the atrium is extended over the height of the other three delimiting walls, permitting the reflection and re-presentation of the skyline of Barcelona in the interior of the atrium. In this manner, and through the use of the mirror, the original spatial meaning of this interior atrium, as in any atrium, to absolutely isolate from the exterior is completely altered. Spatial meaning is thus not only expanded but simultaneously emphasized and presented “anew and again”. With one gesture of design the meaning is instantaneously confirmed and tensed. Perception is twofold alerted, first through the contact with the manipulation of the original pattern and secondly with its revised interpretation…
The sense of the atmosphere constructed in these frontiers is not depending on the possible metaphorical associations made possible through the spatial synchrony between contrasted moments of atmosphere. In the case of the first frontier for example, we don’t feel the atmosphere because we understand that space works as referring to a domesticated forest. We feel the atmosphere as being in a domesticated forest. Atmosphere is constructed and maintained through the precise manner that the pattern language situates the body in space while permitting a constant folding and unfolding of the perception from the local point of view to the “external” references of the site, literal and metaphorical.
We approach the concept of liminality drawing upon Erika Fischer Lichte (2008) and her theoretical approach to the art of performance:

... atmosphere contributes considerably to the bringing forth of spatially. Because of and through the atmosphere, which the space and the things seem to emanate – including the smells which they give off and the sounds they let ring out –, the things and the space appear to the subject who enters it as present in an even emotinal sense. Not only that they present themselves in their so-called primary and secondary qualities, moreover, in the atmosphere, they even invade the body of the perceiving subject – what, most of all, is to be experienced with light, smells and sounds. For the spectator is not confronted with the atmosphere, is not distanced from it; rather he is surrounded by it, he immerses into it. (Fischer Lichte 2008:6)

According Fischer Lichte this emotinal sense of presence, is defined by an oscillation of the perception between focusing on the phenomenons as self-referential and on the associations which it might trigger. This continuous shifting between the attention at the phenomenons and the associations triggered is not the only oscillation occurring. The attention at the phenomenons as self-referential intercalates with moments that the observer’s attention is focused on the performance as a symbolic form. At the moment that the attention shifts from one mode to other a discontinuity occurs, leading the spectator into a suspended sense of instability or in other words into a state of liminality.

Such an oscillation of the perception between focusing on the phenomenon as self-referential and on the associations, which it might trigger, (will) call the order of presence. From it I distinguish quite another kind of perception and meaning production, namely the order of representation. To perceive the actor’s body in its bodily being-in-the-world says the foundation for the order of presence. To perceive it as a sign for a dramatic figure or another symbolic order establishes the order of representation. It demands to relate any perceived element to the dramatic figure or the symbolic order, respectively. While the first order produces meaning as the phenomenal being of the perceived – what does not exclude that such a meaning is able to evoke other meanings that are not directly linked to the perceived phenomenas like in a chain of associations – the second order brings forth meanings which, in their sum total, constitute the dramatic figure or another symbolic order. During a performance, our perception oscillates between both orders of perception. The moment it shifts from one to the other, a rupture comes up, a discontinuity happens. A state of instability comes into being. It places the perceiving subject between the two orders, transfers him into a state between and between, into a state of liminality. (Fischer Lichte 2008:9)

This state of liminality and constant shift between the two orders of perception draws the attention of the perceiving subject to the process of perception as well as to its particular dynamics. In the moment of shift, the process of perception itself becomes conscious, this way, conscious and in itself object of perception. (Fischer Lichte 2008:10) According Fischer Lichte, this provokes transformations of the body’s physiological, affective, energetic and motor states, but also actually in it realized changes of status like those from the status of a spectator to that of an actor or the building up of a community between actors and spectators or only among the spectators. (Fischer Lichte 2008:12)

Performance as event drives us to think on the possibility of the concept of liminality for the conceptualization of atmosphere.

It could be suggested that a certain sense of liminality is eventually produced as the phenomena are conceived simultaneously as self-referential and related to the multiple references evoked by the spatial embodied experience. The spatial configuration of the pattern retains the perceptual attention to a conscious here and now through the mode in which it contains the body in terms of the affordances, the rhythm of the visual field and the sense derived from its particular morphology. But it simultaneously undertakes the task of evoking multiple associations through the precise manner that its sense exemplifies the mapping across the atmosphere felt in differentiated experiential moments.

On the other hand, the feeling of mystery also arouses due to the multiplicity of metaphorical associations that this frontier potentiates, activating the emergence of meaning not as a closed entity but as open-ended interpretations triggered by the embodied experience.

We could assume that this embodied complexity and sensed mystery involve the body beyond the first stage of pre-reflecive state of consciousness into a conscious ‘here and now’. This is where potentially another level of atmosphere emerges, this of conceiving the global structure of atmosphere reflexively. Although along the frontier the crossing between atmospheric patterns is perceived mainly at the level of the sign, these signs are reflexively interpreted as forming part of a new conceivable dense whole, whose specificity is defined through a particular mode of experience as defined in the frontiers.

Frontiers as metaphorical exemplifications of the “global” pattern of atmosphere.

Frontiers seem to represent the ‘insignia’ of the global pattern of atmosphere, functioning as metaphorical exemplifications of this ‘global’ pattern, containing something of its essence, putting forward and accentuating some of its structural characteristics, while they approach to its ‘total’ image depending on the degree of analogy or metaphor that their description pretends to achieve: as a metaphor both frontiers and their integral patterns talk about domesticated natures. Nonetheless, the specificity is revealed when metaphor approaches analogy: frontiers offer an insight on how nature has been domesticated and more deeply on how this domestication has acquired so variable forms in the landscape and most importantly how these are specifically interwoven and bodily experienced in space.

If the cartography of the atmosphere in the case of the first case study draws mainly from a selective incorporation of theoretical references that try to illuminate the structural hues that activate atmosphere, in the second case study the observation of the resulting cartographic essays enhance a possible expansion of the variables of landscape analysis in a more synthetic and theoretical level. Although the importance of frontiers in landscape analysis as areas of dense meaning has already been acknowledged (Goula 2007), my proposal affirms their significance and expands the interest in frontiers as the primary tool for the identification and the cartographic interpretation of the embodied meaning in the landscape.
Interiors

The following question then arises: If frontiers function as metaphorical exemplifications of the global structure of atmosphere, what do the ‘interior’ atmospheres, formed by areas of a more or less homogeneous complexity, stand for?

When we move at a certain distance from the direct influence of the frontiers, patterns seem to acquire a more firm, stable character. Frontiers now function as horizons, shadowed by the presence of the surrounding distant horizons of the predominant geographical elements while the first visual field is prevailed by its principal reference to the principal program it hosts: agriculture. Sensation points towards being in an immense plateau, where orientation depends from the presence of the mountain and the vegetation along the rivers. On the other hand, presence inside the forested dunes seems to be conquered by the intensity of the morphological and material qualities of the pattern, without being able of visually ‘mapping’ this pattern in its context as visual relations as scarce.
The argument so far has placed the emphasis on the manner that patterns are rendered not legible but experienced through the spatial configuration of the embodied experience. Spatial configuration on the other hand has not yet incorporated variables referring to the program realized in each pattern. Nonetheless, now it might be the point where certain reflection on program might be relevant. It seems that atmosphere does not arise from program and overt function. Atmosphere might contribute to "sense". In other words, it contributes to the way in which the program is qualified by the manner in which it has been "constructed" into a site. Where we have a conventional program, agriculture for example, what atmosphere constitutes is an added sense. Where we have no conventional program, as in the forested dunes, there is additional mediation. However might be the case, atmosphere is still subject to the precise manner that patterns situate the body in space and to the specific quality and configuration of the complexity perceived. The argument will be pursued through closer examination of the three existing 'interior' patterns of atmosphere present in this landscape. The first two are mainly agricultural patterns, while the third one refers to the interior landscape of the forested dunes, with the objective of identifying some of the factors that affect their atmospheric intensity.

Fig. 151: Diagram of the three interiors: the forested dunes and the two agricultural patterns
Conventional program: agricultural patterns

By taking a closer look to the labels of the habitats database, we note that both agricultural patterns refer to the same label: no differences are available as to reach any conclusion as far the structural differences of their atmospheric qualities are concerned. This should not be a surprise: layers are thematic, and only refer to one variable of information. They offer partial views and refer to ‘generic’ landscapes. They essentially function as references to a ‘global’ spatial meaning of agriculture land: on the other hand, the cartographic essays of atmosphere refer to their sense, that is to the precise manner that ‘global’ and potentially transpatial meanings are ascribed into space, and thus potentially revealing something of its specificity. It seems thus that in the case of the cartographic identification of atmosphere sense prevails reference: the intensity of the atmosphere depends on a perceptual attention that conceives experience as self-referential without the need of referring to ‘external references’ in order to justify its meaning: although it might refer to a generic label, and even evoke certain symbolic interpretations it does not depend on them.
The analysis of the differentiated agricultural patterns reveals the presence of variable degree of legibility. High legibility is referring to a high degree of order represented by a homogeneous distributional rhythm and orientation of the plot patterns and their distribution in relation to the main irrigation channels. As exemplified by the case of the western pattern, all plots share a similar orientation (160°-190°), an approximately same size, perceivable along the main flows of movement. This tensing of the geometry towards an almost perfectly ordered distributional pattern reaches a maximum degree of legibility and coherence. In parallel, distant horizons, in form of the mountains, rivers and their corresponding vegetation and the surrounding frontiers share definitely the same compactness and steadiness through movement. Atmosphere seems to depend highly on criteria of order and on the specific form of the spatial container: this pattern is elongated, with two clearly identifiable longitudinal limits, the mountain and the forested dunes. It is a pattern of maximum orientation quality, due to the predominant presence of the horizons, although not particularly so in its interior area: the plain of agriculture is always dotted by punctual vegetation in form of singular trees and punctual forested masses that capture the attention although momentarily. The presence of any element that might presuppose the significant presence of structures, far from those corresponding to an intensive agricultural use, hardly can be found. It is a pattern that stretches coherence to a maximum degree, defined thus as a sharp pattern, emerging from a structure of relations formed between elements whose particular configuration makes a constant legible reference to their principal encompassing label that is agriculture.

On the other hand, higher complexity in the complexity layer refers to a lower immediate legibility of the relation between the pattern and its label: it essentially refers to the tensing of the structural reference of the original pattern, as it is crossed through differentiated materialities. As it is exemplified by the second agricultural pattern, along the eastern side of the Murtra channel, signs of ‘nature’, represented by the vegetation along the irrigation channels, are constantly interweaved in considerable proportions with the agricultural plots. Plots no longer share the same orientation, and hardly the same size. An added complexity is thus perceived as it is harder to trace a certain order among the vegetated channels and the seemingly confusing distribution of the plots. The attention is oriented towards variable and overlapping perceptual modes as they are defined by two equally present references: that is agriculture and ‘nature’.

Fig. 153: Complexity layer and the localization of the two agricultural patterns
Morphological criteria of complexity deriving from nature, represented by a seemingly lack of geometrical order invade the configuration of the agricultural plots and vice versa: natural vegetation is “semi-canalized” along the irrigation channels, influenced by an apparent longitudinal logic derived from the agricultural use. What is more, the vicinity of the surrounding frontier of the crossing channel and the enclaves of abandoned land occupied by semi natural humid habitats accentuate the above sensation. These are hybrid patterns, exemplifying multiple references and more interestingly, their crossing in space but also in time. They reveal something proper to the specificity of space in spatio-temporal terms: A certain historic depth is presented to us, as they insinuate the presence of the antique wetlands, but also their transformation in time through agriculture. This pattern has a particular atmospheric intensity, although less sharp than in the case of the anterior example.

“Interiors” as exemplifications of “archetypal” landscape patterns

This short comparison between these two different agricultural patterns permits to sketch a possible conclusion in terms of the relation between the reference of these patterns, agriculture, and their embodied sense: patterns seem to function as exemplifications of their references. If we were to adapt the terminology of Hillier and Hanson (1984) to uses for which it was not originally intended, atmosphere re-spatializes at the local level descriptions retrieved at the global level that are inherently abstract and potentially transpatial. This re-spatialization is not merely a matter of looking at an overall morphology from a particular point of view. Rather, it is a matter of looking at an overall morphology from within a particular perceptual and experiential motivation.

In the case of interiors hosting a defined and recognizable activity, as agriculture is, it seems that atmosphere might contribute to “sense”: More specifically, what atmosphere constitutes is an added sense to program and function. In other words, it contributes to the way in which the program is qualified by the manner in which it has been “constructed” into a site. This observation leads to the suggestion that interiors function as exemplifications of global and potentially transpatial landscape patterns in a specific spatiotemporal geographical context, evoking through the embodied experience, rather than concretizing potentially transpatial meaning into a concrete situation.
Unconventional program: the forested dunes

The case of the forested dunes is more complex as no direct reference, neither to program or established use can be detected. They are archaeological dunes planted with pines, in order to detain the dunes from moving and eventually occupying the adjacent agricultural terrains. Nowadays these spaces receive an intermittent spontaneous public use, especially on weekends. During the rest of the week, people scarcely use this space, mainly for hiking, taking dogs for a walk, or just crossing it rapidly.

There is something extremely interesting in this place that seems to welcome with such comfort these changes of intensity of use: an impossible mapping of coherence occurs through the multiplicity and the disparity between the different materialities that construct this place. If we accept forest as the primary reference, then its clearings don’t make a logical sense: they are occupied by topographic depressions covered by dense vegetation.

Clearings in this forest are not accessible. On the contrary, accessibility is easier underneath the forested masses of pines, as their substratum is configured by sandy undulations, not permitting the expected development of shrubs that hinder movement. What is more, dunes refer to the sea, that although known that it is to be found in a close distance, urbanization has formed a strong barrier making it almost impossible to detect neither the physical nor the logical proximity of the coast to this site. References remote in spatio-temporal terms are crossed into this unique pattern. Similarly to the case of the complex agricultural pattern, the crossing of systems that seemingly refer to clearly differentiated references or labels, as the dunes, the forest and the agriculture is, reveal the specificity of this landscape not only in terms of its actual spatial configuration but also in terms of its historic depth: dunes are vestiges of the past, and as agriculture did with the adjacent wetlands, these dunes have been domesticated through another kind of imported nature: the pines forest.

The intensity of the atmosphere of this resulting pattern is depending on neither of its references, but to this precise mapping of meaning across its multiple references, equally in time as in space.
Drawing once again from the definition of metaphor by Lakoff and Johnson as, as a matter of projections and mappings across different domains in the actual structuring of our experience (and not just in our reflection on already existing structures), we might suppose that atmosphere in this case arises when the projections and mappings across different domains of meaning produce a new metaphor and not simply a reflection on already existing structures.

Where we have no conventional function, an additional mediation is thus needed. The analysis suggests that these “interiors”, functioning as exceptions, potentially function in a parallel manner with frontiers, as they are not dominated by direct reference neither to program nor to function. Atmosphere in these cases arises in form of a new spatial metaphor, constructed through the mapping of meaning across its multiple references; nonetheless, their particular atmospheric emphasis depends still on the precise manner that these are evoked and interrelated through the embodied experience.

Fig. 157: Collage: impressions for the interior of the forested dunes
A WORKING DEFINITION:

ATMOSPHERE AS METAPHORICAL EXEMPLIFICATION

THREE LEVELS FOR ATMOSPHERE

LANDSCAPE UNIT

activators

POTENTIALITIES OF ACTION: ACCESSIBILITY/VISIBILITY

GEOMETRY: ORIENTATION OF THE GAZE

CONTAINMENT

VISUAL COMPLEXITY AND COHERENCE

RHYTHM IN SPACE

RHYTHM IN TIME

a cartographical interpretation of ATMOSPHERE(S)

NARRATIVE

VIRTUAL SYNCHRONY

LOCAL AND GLOBAL

FROM DISCREET TO DENSE MAPPING

MY NEIGHBORHOOD

INTERIORS

AS EXEMPLIFICATIONS OF THEIR REFERENCES

FRONTIERS

AS METAPHORICAL EXEMPLIFICATIONS OF THE GLOBAL PATTERN OF ATMOSPHERE

FRONTIERS AND INTERIORS

COMPLEXITY AS AN INDICATOR OF INTENSITY

COMPLEXITY

A PROPOSAL FOR MAPPING COMPLEXITY EXPERIENCED

A FILTER FOR ATMOSPHERE

A FILTER FOR INTERVENTION

FILTERS:

VISUAL FIELDS

DENSITY

ORIENTATION

RECLASSIFICATION OF THE HABITATS

TOOLS:

GIS

PHOTOS

TOOL

GIS

PHOTOS

DIAGRAMS

DATA

MINIMUM ORTOPHOTOS

TOPOGRAPHIC HABITATS

CASE STUDIES

ORDINARY PERSONAL

CARTOGRAPHICAL INTERPRETATIONS
DIAGRAMMATIC DISPLAY OF THE CONCEPTS AND ARGUMENTS IN REGARD TO ATMOSPHERE
A working definition: 

1. Atmosphere as a spatially situated pattern
2. Atmosphere as a symbolic-stylized pattern
3. Atmosphere as a metaphor
4. Atmosphere as a tool for landscape design

Cartographic interpretations and arguments

- Points of departure
- State of art

- Atmosphere as a metaphor
  - Atmosphere as a tool for landscape design
  - Atmosphere as a tool for landscape design analysis

- Cartographic interpretations
  - Atmospheric structure: 
    - Potentialities of action
    - Approach: choosing design strategies
    - Concept: spatial structuring
    - Content: formal configuration
  - Atmospheric interpretation: 
    - Subject: material configuration
    - Process: synthesis of the elements
    - Context: morphological complexity

- Atmospheric representations of properties
  - Potentiality of action
  - Approach: choosing design strategies
  - Concept: formal configuration
  - Content: synthesis of the elements

- Atmosphere as a tool for landscape design
  - Potentialities of action
  - Approach: choosing design strategies
  - Concept: formal configuration
  - Content: synthesis of the elements

- Atmospheric representations of properties
  - Potentiality of action
  - Approach: choosing design strategies
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  - Content: synthesis of the elements

- Atmosphere as a tool for landscape design analysis
  - Potentialities of action
  - Approach: choosing design strategies
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- Atmospheric representations of properties
  - Potentiality of action
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- Points of departure
- State of art

- A working definition
  - Three levels for considerations
  - Cartographic interpretations and arguments

- Atmosphere as a metaphor
  - Atmosphere as a tool for landscape design
  - Atmosphere as a tool for landscape design analysis

- Cartographic interpretations
  - Atmospheric structure: 
    - Potentialities of action
    - Approach: choosing design strategies
    - Concept: formal configuration
    - Content: synthesis of the elements
  - Atmospheric interpretation: 
    - Subject: material configuration
    - Process: synthesis of the elements
    - Context: morphological complexity

- Atmospheric representations of properties
  - Potentiality of action
  - Approach: choosing design strategies
  - Concept: formal configuration
  - Content: synthesis of the elements

- Atmosphere as a tool for landscape design
  - Potentialities of action
  - Approach: choosing design strategies
  - Concept: formal configuration
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- Atmospheric representations of properties
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- Atmosphere as a tool for landscape design analysis
  - Potentialities of action
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- Atmospheric representations of properties
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- Points of departure
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