

# The Value of Landscape Essence

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A new approach to interpreting the landscape is examined by accepting its complexity through inductive reasoning. While attempting to identify the essence of the landscape in the city and municipality of Óbidos, Portugal, several architectural recommendations of Venturi (2004) have been adapted as a framework for understanding this landscape. These will then guide the process of landscape transformation through:

- *incorporating the complexity* of the landscape;
- *valuing the ambiguity* that occurs in the interpretation of the landscape;
- using the concepts of *closed and contained spaces* and the concept of *fluid space*;
- recognising the existence of *interstitial open spaces*;
- using those *elements which are common to the distinct typologies* of space;
- defining the *components that should be respected* and those that can be respected;
- observing *landscape as a whole*, while emphasising the relationship between the parts and the whole; and
- *rejecting simplification* in the landscape transformation process.

Underlying this approach is the belief that the process of transformation must be based on the essence of each landscape. This implies the use of elements and structures of the landscape which are related to ecological, morphological and cultural systems. These elements and structures represent points of reference which should be considered in the process of landscape transformation.

LANDSCAPE IS A FRAGILE ASSET that must be valued in the context of its inevitable transformation. All landscape has an identity value (Council of Europe, 2000) that needs to be recognised, respected and sometimes requalified. Landscape is often seen as a product of human relations with the territory, but also as a space with its own identity. Through understanding signals associated with the essence of a place and through familiarity with the land (Spirn, 1998; Tilley, 1994), it will be easier to establish how to act upon a given landscape.

Recent transformations of the Óbidos landscape bring together a wide range of factors, from accelerated changes in space – simplification, uniformity, and loss of points of reference – to a manifest disrespect for the place, its natural systems and the heritage and culture of a people. Some characteristics of the landscape have been rapidly and progressively replaced by others that have not always preserved its specificity. From a landscape architecture point of view, this evolution of spatialities, contents and meanings may have reduced, or even erased, what might be considered the identity value of landscape.

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*Cultural Systems*

## REFLECTION

The identity of a place may be determined by its geographical location, general spatial configuration and the way it articulates with the surroundings (Norberg-Schulz, 1997). Thus the landscape's identity is defined by the relationship between things, materials and spaces. Aspects such as the respect for the characteristics of the territory – the physical support – and the ways in which it is appropriated by humans (Corajoud, 1982; Pedrolí, 2000) should also be considered. The recognition of a landscape's identity must be supported by a reaction to the sensitivity of those who influenced the gradual process of landscape transformation. The complex concept of a landscape's identity is approached in this study through the perspective of external users of the landscape, who attempt to interpret the vast archive of information the landscape has to offer.<sup>1</sup>

### *Study objectives*

This study aims to take a new approach to interpreting landscape by accepting its complexity through inductive reasoning, but not without recognising the inherent limitations when putting forward a perspective that draws on objective, subjective, scientific and intuitive knowledge, and the cognitive limitations in putting such an approach into practice.<sup>2</sup> Without denying the qualities of the linear, deductive knowledge associated with the modernist movement, this study seeks a more intuitive and diachronic perspective.

The main recommendations laid out in Venturi's work *Complexity and Contradiction in Architecture* (2004) are transposed here into the space of the landscape. The intention is to identify the essence of the landscape by using those recommendations as guidelines to achieve an understanding, which will then guide the process of landscape transformation. The landscape of Óbidos, Portugal, was chosen as a case study, because it was the object of a study on the definition of landscape units requested by the Municipality of Óbidos to the University of Évora (Abreu, 2008).

### *Methods of interpretation*

The methodology integrates several sources of objective and subjective data. It attempted to recognise the genuine complexity of a landscape that includes various transdisciplinary phenomena and multidimensional compositions present in the idea of complexity (Magalhães, 2001; Morin, 2001; Venturi, 2004). The nature of this study demanded the integration of morphologic, ecological, historic-cultural and aesthetic components, as well as the inclusion of temporal, spatial and functional dimensions. Collected documents and results from fieldwork formed a base of knowledge for the analysis, which was carried out from the effects to the cause and from the particular to the general and vice versa.

### *The complexity of the landscape*

Accepting the complexity of the landscape requires examining every element and space. This includes the fragmented, the contradictory and the improvised spaces, as well as the tensions that arise among them. It requires revealing the hierarchy between elements and spaces with different meanings and values (Venturi, 2004).

Therefore, recognising the complexity of the landscape leads to an understanding of its spatiality, content and meaning.

Among the recommendations put forward by Venturi, the following are critical to this study:

- *Value the ambiguity* that occurs in the interpretation of landscape. Understand not only what an image seems to be, but also what it really is. Landscape is perceived as form, matter and structure. The complex and contradictory relations between these are the origin of ambiguity.
- Use concepts such as *closed and contained space* as a means to control chaos in landscape and use the concept of fluid space, as the tie that assures continuity between spaces.
- Recognise the existence of *intermediary spaces* as articulation or transition between dominant spaces – and sometimes residual spaces – that are full of restrictions, contrasts and tensions where changes may occur.
- Use the common, vital, though ordinary *elements associated with each space typologies*, always respecting the systems which determine them.
- Define the *components which need to be respected*, those which are unchangeable, and those which can undergo limited adaptation.
- See the *landscape as a whole* according to its own characteristics and context.
- Reject simplification through reduction in the transformation process of the landscape. Instead, aim to *value the genuine complexity* in order to preserve the landscape's identity.

## CASE STUDY: GENERAL CHARACTERISTICS OF THE ÓBIDOS LANDSCAPE

The Óbidos landscape (Figure 1), located north of Lisbon, has a narrow coastline and encompasses a valuable agricultural landscape with a strong cultural and historic influence. The coastal platform (Figure 2) is crossed by wide and fertile valleys and a coastal lagoon. The land relief from the shoreline to the interior displays an expressive and dynamic morphology. The historic town of Óbidos lies on a hillside, in a position of dominance over the main valley (Figure 3). The lagoon is the main symbol of the landscape of the municipality of Óbidos. The historic part of the town is located within the city walls and the more recent expansion stretches over the immediate surrounds, particularly on the lower slopes.

Since ancient times, the transformations of this landscape were based on a combination of agriculture and forestry. In recent decades other morphologic cultural components have appeared, such as roads, scattered urbanised areas, new functions (commerce, services and industries), abandoned agricultural areas, eucalyptus forests and intensive agriculture, mainly in climate-controlled areas such as greenhouses. These new human impositions determined new fluxes and trades in a significant phenomenon of transition, including the recent proliferation

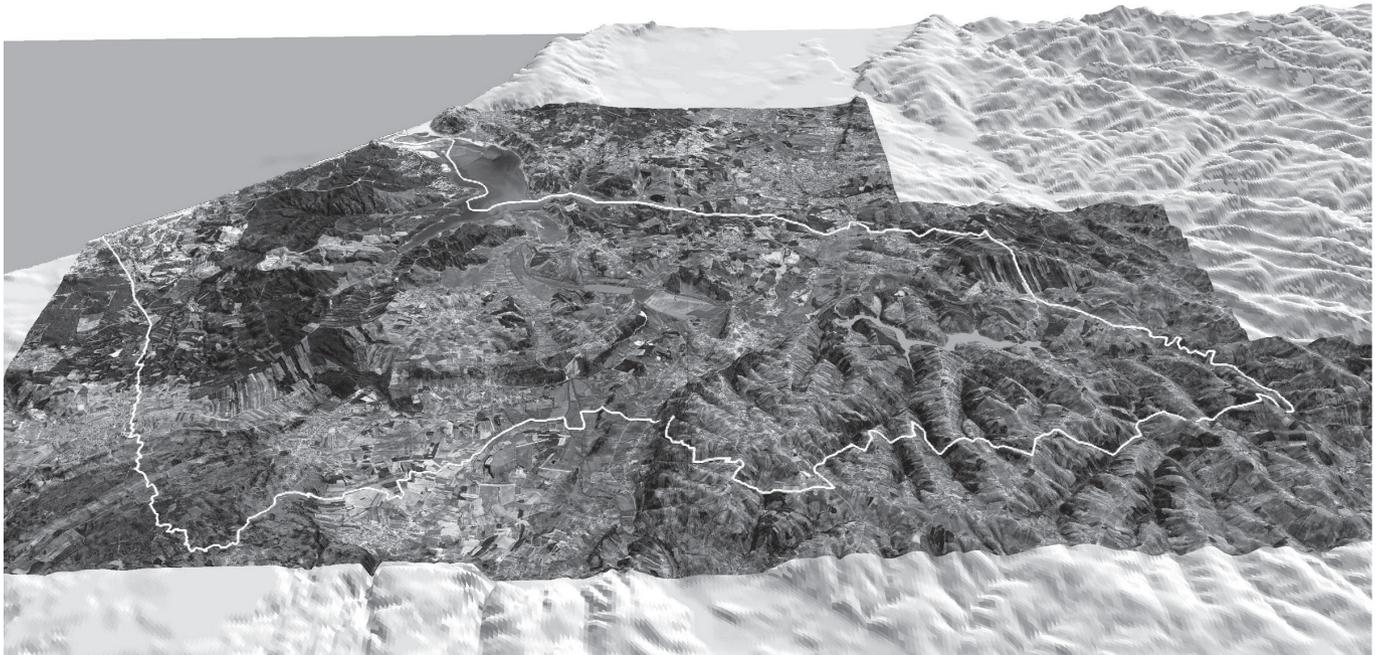


Figure 1: Administrative area of the Óbidos landscape (top).

Figure 2: The coastal platform and the shoreline of Óbidos.



of tourist resorts and secondary residences. This situation is the result of the territory's proximity to the coast and the metropolitan area of the capital (Lisbon), a relationship that surely contributes to the emblematic character of the town of Óbidos. The extensive pine and eucalyptus forests mainly occupy large properties, probably because of the poor soil quality. Agriculture is found on small and medium-sized properties, which are intensively irrigated when located on the plains of the most fertile valleys. Inland, where the soil allows, agriculture extensively occupies the territory with emphasis on irrigated orchards and annual rain-fed foodcrops.

Nowadays, Óbidos has been developing a 'curious' dynamic that can be likened to a 'museum of events' that is usually out of context and frequently goes beyond



Figure 3: The historic centre of the town of Óbidos and surroundings.

the logistic capacities of the area. This is a problem of contents, specialities and meanings which exceed the ecological, historic-cultural and aesthetic limits of the landscape that are connected to the patrimonial specificities and the memory of a people.

After providing a general characterisation of the Óbidos landscape, and bearing in mind the recommendations put forward by Venturi, it is important to identify the essence of the landscape to understand and interpret it, and to find meanings in the existing complexities and contradictions.

Several outstanding characteristics of this landscape are testimony to a constructive alliance between people and the place. These characteristics stood out from a broad set of landscape features that were defined in the first field-trip-based study on the town of Óbidos in 2008.

*Scale:* What can be observed of the familiarity of elements and dimensions and the relationships established with the rest of the space. The landscape's spatial subtlety has its origins in the urban and rural structures and elements whose meanings and dimensions adjust to those that are more commonly references to people.

*Articulation:* The result of sequential organisation and a break of the elements, structures, volumes and spaces which are distinctively manifested. Articulation is the morphology that arises from the land relief, from the surface of the soil with vegetation, from the presence of water and agrosystems together with other erected cultural elements. It is the dynamic associated with multiple and diverse morphologic, ecological and aesthetic articulations.

*Readability:* The easy interpretation of space, meaning the space is not chaotic. Readability is the idea of clarity, simplicity and variety within a unified whole. It may be seen in the way that various morphologic, natural and cultural components (geology, soil, vegetation, water, climate and microclimate, constructions, buildings and other visual domains) relate to each other, always directing our focus toward the greater ensemble that they form.

*Dominance:* Present in elements, spaces or ensembles that act as a point, plane or focal volume. Dominance is expressed through visual attraction. It is revealed in association with forms of relief (vast calcareous concavities

and open valleys in which horizontality dominates), with the planes of water (bay, sea and artificial lake) and with the presence of some urban elements or assemblies.

*Light:* A unique atmosphere that results from the influence of the high humidity of the air upon light, and from the geographical and morphologic situation, which is one reason behind the moderate climate. The light contributes to a landscape where the contrasts of form and colour fade, where the variation in the tones is remarkable and the temporal dimension soft. Sky and earth blend together into one and sharp outlines seem to cease to exist. Everything flows and unifies.

After a more objective analysis of the systems and phenomena associated with the natural and cultural elements of the landscape, it became evident that these were also the most peculiar features of the area. There is no doubt that these characteristics played a pivotal role in the development of the landscape. These are specificities that integrate spatial, ecological, historic-cultural and aesthetic components and which reflect an assimilation of contexts and singularities of the territory.

## POINTS OF REFERENCE

According to Alfaiate (2000), the particularities of the landscape are expressed in the presence of elements and structures which can be used as points of reference. In the Óbidos landscape, the elements of reference are:

- The lines and/or planes that are predominantly constituted by natural material. They are responsible for the development of patterns with varied proportions. Their structure depends on the geographical situation, the natural morphologic factors (geology, water, climate and vegetation) as well as the cultural boundaries (the limit of the property, the location of groups of buildings and the accessibility determined by both factors).
- The traditional agrosystems that are established in regular mosaics of full and empty spaces of various sizes. Variations in the vertical dimensions appear related to the type of cultures found. The characteristics of the pattern are mainly determined by the geomorphologic situation, the productive or protective activity and the structure of the agricultural property. Moreover, the pattern determines a dense system of accessibilities and the development of supplementary typologies of space (estates, farms and small urban nuclei).
- The constant presence of water in the atmosphere as a permanent mist, in the water planes (sea, lagoon or artificial lake), in the linear structures (watercourses), and that which is implicitly present in the low-lying and more humid locations or in the characteristic vegetation of riparian areas.

These elements or structures may be in themselves catalysts of the dynamic and revelation of the landscape once they are used in this study as references to understand and interpret the landscape.

## INTERPRETING THE LANDSCAPE

Having defined a set of references adapted from Venturi's recommendations, an interpretation of the identity of the Óbidos landscape can now be offered.<sup>3</sup> The landscape presents spaces that are easily interpreted because they have readability and harmony of scale. Nevertheless, the relationships between elements and structures in some spaces are sometimes contradictory. There are recent situations in which the scale and aptitudes of the landscape have broken. These breakdowns cause changes which compromise the specificity of the landscape. Changes in the topography, use of the soil, presence of vegetation, water systems, microclimate, presence of buildings and in the effect on the visual domain generally represent a negative integration with the landscape. They are usually the result of expansion or fragmentation of road infrastructures, telecommunication networks, wind power installations, quarries, waste disposal sites in residual areas, new irrigation geometries, abandoned agricultural areas, extensive areas of holiday resorts, proliferation of greenhouses and exploitation of the eucalyptus monoculture. Many of these arbitrary transformations put the precious natural and cultural heritage at risk. Therefore, it is imperative to define the *elements that need to be respected* and not be altered, and those which can be adapted if appropriately integrated in the whole.

The elements that must be respected because they define the identity of the Óbidos landscape and because it is vital to protect elements of natural (ecologic) and/or cultural value include:

- the richer natural systems, which are generally associated with the coastal platform (such as the bay and the main valleys), due to their exceptional and multiple attributes;
- the mosaic formed by the traditional agrosystems (Figure 4), which clearly show a coherent adaptation to the landscape and have their origin in a historic subdivision of the property that is directly related to the soil quality and the influence of the local agrarian Cistercian monks; and
- the urban assembly, which forms the town of Óbidos, because it attempts to integrate the old with recent expansion, and respects the natural and cultural bases that make Óbidos a remarkable place.



Figure 4: Pattern within the agrosystem.

Figure 5: The horizontality of the main valley.



It is vital to respect and value the visual and/or symbolic power associated with some elements, structures or groups. Distinctive characteristics include the articulation, or interruption, of volumes that are distinct entities, as well as the open interstitial spaces of articulation and transition between dominant areas. Specifically, this refers to the imposing presence, either isolated or in groups, of some land relief, water and some groups of houses and architectural elements. The wide and flat convexities that are characteristic of limestone relief and the impressively open valleys emphasise horizontality (Figure 5).

Another expressive example of strong visual power is the group formed by the coastal platform, together with the vertical, or oblique, planes of articulation with the beach. There are some other spaces in which the dominance is manifestly negative. Spaces created by the presence of extracting industries and some urban settlements that disrespect the landscape stand out as negative examples. The presence of water, whether in the humidity of the atmosphere, in the low-lying areas or in the water planes, is one of the most attractive and expressive symbolic features of the area (Figure 6).

Furthermore, the urban clusters stand out as dominant places due to their volume, white colour and texture, and by the way of life, the functionality and the economic centrality that they represent. This same visual strength can be observed in some elements, structures or spaces which lie within a more complex space of transition, in which a functional, formal, aesthetic and ecological confrontation occurs (Figure 7). On the one hand, these are spaces full of restrictions, while on the other hand, they are places where change happens more easily. Frequently, such changes exceed the capacities of the space and adulterate its complex singularity.

The concepts of *closed and contained spaces* and *fluid space* are linked to the idea of an organising structure which guides the interpretation process. This structure may then identify some possible changes to the landscape. This means looking at spaces or sets with a coherence of their own. In *Study of the Landscapes of Óbidos* (Abreu, 2008), these elements were designated 'units of landscape'. In other words, the units are internally coherent areas that integrate natural and cultural attributes in a spatial and temporal perspective, which sets them apart from the surrounding spaces. When applying the concept of units of landscape, the university study concluded that the limits between two or more coherent units are rarely clear. It



Figure 6: The Óbidos bay.



Figure 7: The transition area next to the town of Óbidos.

also concluded that those units usually lie within another area, called a ‘unit of transition’. This term relates to the concept of fluid space, where the attributes overlap and the structural continuities of the landscape are established.

Applying a more detailed interpretation, closed and contained spaces can be observed in the already mentioned traditional mosaic of cultures and may be distinguished by their spatiality and cultural specificity. The agrosystems based on annual rain-fed cultures, and on orchards and vineyards, draw mosaics filled with full and empty spaces in clear cohesion. These extensive and continuous structures cover the irregular parts of the territory showing great variation in colour and texture. The dead or living hedges, which delimit the properties, shelter the fields from the strong sea winds and act as structures of articulation between different fields. Therefore, they form an important protection which is also ecological and functional because they accommodate a network of routes, water circulation and shelter for animals. The agrosystems reflect and enhance the characteristics of the geographical place, the historic-cultural factors and its physiography, while also taking an active role in the morphologic dynamic of the landscape. The seasonal variability increases due to the crops produced and the techniques used. Those who built and adapted this at times inaccessible territory created a landscape in which contrasts of light and darkness the concavities and convexities of the limestone relief and the notion of perspective are evident. However, the concentrations of these agrosystems and market demands have contributed to soil, water and air pollution.

Another category of closed and contained spaces corresponds to the holiday houses which aggressively occupy the territory. Even though these spaces are the result of spatial compositions, they lack articulation with their surroundings. The result is a feeling of disorientation due to the lack of references and adaptation

to the landscape. Although they are only inhabited during summer, they are isolated from the local inhabitants and represent a permanent imposition. Such an imposition is associated with formal, functional, ecological and aesthetic problems as well as social issues.

The distinctive elements associated with the *different typologies of space* traditional in this landscape also depend on their spatial, functional, ecological or historic-cultural characteristics. These elements arise from natural features (geology, soil, natural drainage, vegetation, climate), but also from cultural factors (property dimensions, agricultural practices and building elements). They are vital memories in most of the space typologies. They have been maintained for a long time and, having their value recognised, they have become marks of identity. These distinctive elements include the hedges for protection against salt-laden winds, canals for the draining of water into the plain, systems for removal and channelling water from the agricultural systems and the windmills scattered on top of the hills. All these elements are determined by the physiographic conditions of the place and have become indispensable for inhabiting the territory.

In the urban spaces, other elements and structures connected to the historical development of the town of Óbidos can be observed. The Roman village, the castle and the historic centre, which are both within the city walls, and the aqueduct and the roads, which link the exterior to the interior, are among other open urban spaces. The religious buildings within and outside the city walls (such as churches and chapels), and the farms (for production or leisure and tourist activities), which lie next to the town, and the low-lying and more fertile areas, reflect the cultural, social, economic and political changes of the societies who once lived there. From this historical occupation of the territory, we can identify what has been respected or valued, especially concerning the architectural patrimony in open areas. This can probably be justified by the fact that an object is more easily considered cultural heritage than a spatial unit. After all, spatial units represent the true authenticity of the objects that have been kept safe.

Approaching the identity references of the landscape required seeing the *landscape as a whole*, moving away from the detail to identify a hierarchy of values and meanings within a broader context. In this process, it was crucial to understand the various systems and their interrelation. This challenge was even greater when ethical questions arose from the built and natural legacy of several generations, which the present society has now appropriated. If on the one hand, it is our moral duty to pass landscape on to the next generations, on the other hand, it is essential to understand how people interrelate, and how they relate to the territory, and their new ways of life, and the repercussions this has on the landscape. The idea of 'global landscape' which is discussed nowadays – a structure in which movement and transformation happen continuously, and the traditional distinction between the urban areas and the countryside no longer exists (Telles, 1992; 1994) – leads us towards other spaces, other meanings and other images which naturally differ from nostalgic references and from the fascination that still prevails about the

picturesque patrimony. As mentioned before, it is important to ponder the truly essential components of identity that should be respected and valued and those that can be adapted.

## THE TRANSFORMATION PROCESS OF THE ÓBIDOS LANDSCAPE

In the present context, the aptitudes of this landscape transcend traditional agriculture, the small urban centres and the natural areas in the more sensitive locations. The inclusion of new contents and new types of spatialities seems inevitable when considering the landscape's particular characteristics, its centrality and the new demands of society; the current landscape reflects the multifaceted times we live in. Therefore, we can conclude that the dynamics of the landscape should be based on its capacity to absorb contents, types of space and various meanings. According to the holistic perspective that this study proposes, this should include spatial, ecological, historic-cultural and aesthetic elements.

The specificities and characteristics of the landscape, and Venturi's recommendations, should be drawn on during the transformation process. There are several other directives that should be followed, whether in a broad context such as landscape planning, or in more specific situations concerning landscape design.

- Preserve the scale of the landscape through harmonious articulation of new elements and structures with the existing context. The existing spatial and symbolic context must be respected and the natural support qualified and strengthened. Incoherencies found in the landscape include the building of some roads, which divide the landscape, and the installation of wind turbines whose dimension and number obliterates the landscape's scale. Thus strong tensions are created in an otherwise characteristic balance.
- Underline the visual or symbolic power of some landscape-specific elements or structures, whether at a morphologic or a historic-cultural level. The morphology of the landscape, which essentially results from the presence of natural structures (geology, soil, water and vegetation), must be stressed and valued without concealing the natural substratum of the place. The pronounced relief that overlooks the flat wide valleys and the water planes (bay and sea) creates perfect conditions for numerous panoramic views.
- Maintain and/or recreate the traditional pattern of the landscape by merging physical, cultural and aesthetic factors. This pattern is a testimony to how human activities can transform the available natural resources in a balanced way, resulting in a landscape with high cultural and aesthetic value.
- Highlight the historic-cultural context, understood as an ongoing process to be explored by analysing various temporal and spatial contents. This type of analysis should be part of any landscape architecture study, and the analysis must be inclusive otherwise it will yield incomplete conclusions.

- Look for clarity in the definition of multifunctional spaces. Coherence arises from the development of activities, which may be considered part of the landscape's distinctive character, throughout the historic process of organisation of the rural and urban space. These are spaces where users can easily find their way through elements, structures and spaces of reference. In urban spaces it becomes necessary to reinforce the idea of spatial composition that highlights the natural and cultural substratum of the place. It is also necessary to increase the population density in order to counteract the current population dispersion. By contrast, in rural spaces there should be an attempt to minimise functional and spatial disarray. Such disarray results from traditional intensive agricultural practices and the recent expansion of forced cultures. The solution might be found in the increasing offer of support warehouses to certain activities using the public space as the structuring system and the linking element between all these spaces and structures.
- Recognise and respect the presence of the transitional space where the most recent changes took place, as a result of abandoned fields, pressures associated with the main road system and urbanistic policies that implement unsuitable urban perimeters. It is imperative to call for actions that articulate the dominant spaces with the sustainability of the ecosystems and the improvement of quality of urban life.
- Use limits as vital compositional structures, establish gradients and reformulate continuities and/or discontinuities connected to the ecological, morphologic and cultural system. These limits can be functional (the division between different agricultural areas and the separation of private and public areas), as well as administrative or landowning, such as urban and property boundaries.
- Establish open public spaces as the main structure of continuity. This is especially important among heterogeneous urban spaces, traditional stabilised spaces and contemporary fragmented and discontinuous spaces.

The hedges and the lagoon should also be considered valuable identity features in the transformation process.

- Systematically use hedges in the construction and structuring of the space, as they are an important element in building this landscape. As mentioned before, they were wisely built and shaped according to the specific characteristics and needs of each place, a solution which should continue to be explored including inventing new uses. The hedge represents an element of biological, economic, cultural and aesthetic utilities, and these multifaceted characteristics allow it to function as an important formal, functional and ecological articulator. Also strive to enrich these structures so as to build real edges of woodland to increase biodiversity, sustainability and variety within the composition.

- Praise the natural and cultural value of the bay of Óbidos. Nowadays, activities of leisure and tourism in the bay add to the more traditional economic activities already provided, thanks to its position, the environment and the natural and cultural values it displays. The lagoon has an important role in regulating the water (natural filter of the impurities) and also contributes to regulating the climate. This multifunctional role should be carefully studied to ensure natural characteristics continue to be valued and taken into account when developing leisure activities.

## FINAL CONSIDERATIONS

Aware of the inherent limitations of any attempt to perceive the landscape, it was necessary to engage in a novel way of examining the Óbidos landscape to better understand its multiple phenomena. In using some aspects common to both analysis and investigation, it was important to be sensitive to what creates the identity of the place, to understand the complexities of the whole and to seek answers to the main coherencies and incoherencies found.

It is equally important to accept that the traces of the past and the potential future can and must be approached simultaneously. The landscape should essentially be examined 'from the inside out', always qualifying and enhancing its natural potential and the historic-cultural particularities of the landscape that have occurred throughout time and that are still present.

Finally, it is imperative to consider that the dynamic nature of the landscape is in the contemporaneity of ephemeral landscape (Qvistrom and Saltzman, 2007). In view of this, it is fundamental to reflect on its essence in order to know how to accept this dynamic without compromising the legacy that has been bequeathed from generation to generation.

## NOTES

- 1 Another approach adopted by some authors, which attempts to identify the perceptions of the different users of the landscapes, was not introduced in this study in order to simplify it. However, it is clear that such an approach would provide supplementary information toward an increasing recognition of the landscape.
- 2 These limitations are intrinsic to a concept of landscape which considers its interpretation and perception from those who observe it; although using the same framework of knowledge, different observers would obtain different results.
- 3 This is one of the many possible interpretations. Changing the research paradigm and the observers would alter the interpretations and conclusions.

## REFERENCES

- Alfaiate, T (2000) *Expressão dos valores do Sítio na Paisagem*, PhD Thesis, Universidade Técnica de Lisboa, Lisbon.
- Cancela d'Abreu, A (coord.) (2008) *Study of the Landscapes of Óbidos*, Portugal: Universidade de Évora.
- Corajoud, M (1982) Le paysage c'est l'endroit où le ciel et la terre se touchent. In *Mort du Paysage? Philosophie et esthétique du paysage*, F Dagognet (ed), Seyssel: Champ Vallon, pp 36–53.
- Council of Europe (2000) European Landscape Convention, *European Treaty Series* no. 176, Florence.
- Magalhães, M (2001) *A Arquitectura Paisagista: Morfologia e complexidade*, Lisbon: Estampa.
- Morin, E (2001) *Introdução ao Pensamento Complexo*, Lisbon: Instituto Piaget.
- Norberg-Schulz, C (1997) *Genius Loci: Paysage, Ambiance, Architecture*, Brussels: Pierre Mardaga.
- Pedroli, B (ed) (2000) *Landscape – Our Home: Essays on the Culture of the European Landscape as a Task*, Stuttgart: Freies Geistesleben.
- Qvistrom, M and Saltzman, K (2007) Ephemeral Landscapes at the Rural-Ur-Ban Fringe. In *European Landscapes and Lifestyles: The Mediterranean and Beyond*, Z Roca et al (ed), Lisbon: Edições Universitárias Lusófonas.
- Spirn, A (1998) *The Language of Landscape*, New Haven and London: Yale University Press.
- Telles, R (1992) *Um novo conceito de paisagem global: tradição, confrontos e futuro*, Jubilação do Professor Ribeiro Telles, Évora: Universidade de Évora.
- (1994) *Um novo conceito de cidade: a paisagem global*, Portugal: Câmara Municipal de Matosinhos.
- Tilley, C (1994) *A Phenomenology of Landscape: Places, Paths and Monuments*, Oxford: Berg Publishers.
- Venturi, R (2004) *Complexidade e Contradição em Arquitectura*, Brasil: Martins Fontes.