Any analysis of urban development will certainly show that the city has undergone numerous transformations, not only from conceptual and ideological perspectives but also in morphologic terms determined by different cultural and social contexts. This does not constitute in itself a negative factor; it is simply a distinct reality, determined by the rhythms of technological, economic, social and demographic changes. The extensive growth of urbanisation has raised new questions about the diversity of the urban interstitial void spaces, mainly because of their apparent inability to appropriate a recognisable typology or their lack of an attributed name. In the last decades, the open space, usually called ‘green’ space, has played a subordinate role in the construction of the urban space. The indifference to its qualitative definition tends to reduce these spaces to just another index. Together with high and persistent deficits of environmental infrastructures, there came new attempts to understand the urban condition of the interstitial void spaces and the value of landscape quality. All things considered, it is imperative to proceed to an appropriate and intentional reconstruction of these spaces as a vital condition for its defence, which can be guaranteed by understanding and utilising it.

Although society continues to associate the idea of the city with its traditional concept, for more than two centuries the city has moved beyond its walls in a dispersion to indefinite limits. The city is no longer defined as an individualised centre nor does it correspond to a harmonious and coherent group of elements.

Clearly determined by the evolution of models of industrial organisation since the eighteenth century, today the urban landscape is an amalgam of spaces whose different configurations show the temporary accumulation of different urban histories. According to Cristophe Girot (2006) ‘the urban landscape is the multifaceted mirror of our epoch’. Inevitably, in its endless process of centrifugal expansion, the contemporary metropolis leaves behind the obsolete product of failed urban models which no longer correspond to production and consumption needs. The city has been almost exclusively transformed into an object of economic and political speculation (Portas, et al, 2003). Such speculation has created a type of city that is not related to any specific culture or geography.

The continuous construction of spaces has given the city multiple and complex forms whose boundaries are not precise any more. Even in mid-size Portuguese cities, it has become almost impossible to identify spatial and social configurations, and it has also become almost impossible to accurately or absolutely determine them. The unpredictability of the formal, social and spatial development, as well...
as the difficulties in clearly identifying the elements of the traditional continuum – such as the city, the periphery and the countryside – have introduced new descriptive concepts and vocabulary which attempt to consensualise the description, from metropolis to city-region, from historic city – self-contained or compact – to exploding or dispersed city, from generic city to ‘exopolis’. This lexical instability is inherent and necessary and highlights the mutability of the new city as well as the spatial and temporal extension of its morphology (Taborda cited in Guedes and Jacinto, 2006).

The impracticality and disjunction of the city’s matrix, as far as its physical, ecological and social structures are concerned, have created interstitial, empty, vulnerable and discontinuous spaces which today can be recognised and integrated as real potential for promoting the development of the city.

In the discourse on urban form, the empty space is almost always associated with the non-built landscape which, in the model of the city as an ‘image’, constitutes the system of spaces of public use comprised of more or less defined typologies: streets, avenues, squares, gardens, etc. In the exploding and fragmented city, this formal and mental scheme loses its definition. According to Alvaro Domingues (2006), the new plans of the arterial road infrastructure draw corridors and barriers producing ruptures of scale and use that break the conventional urban relationship between the built fabric and the street. The continuity, fluidity and mobility of people are broken. The perception of the city as a whole gets lost.

Urban voids are defined as residual spaces of the traditional or historical city with its well-defined perimeter, or as marginal spaces in the dispersed city composed of the metropolitan surroundings (Rodeia, 2007). The first case includes urban areas whose evidence of emptiness is due to an absence of appropriation, mainly when confronted with the socio-urban matrix of the city of which it is a part. They are areas that, for some reason, have ceased serving a purpose, thus existing residually – latently or expectantly – in their urban inconsequence. The second case, more complex and diverse, includes metropolitan areas whose evidence of emptiness is due not so much to an absence of appropriation, but of persistence or conflict caused by urban expansion. They are, among others, areas that have maintained a landscape where it is still possible to recognise their ancestral sense, or they are areas that, for any other reason, have not been occupied yet, although it is no longer possible to recognise any meaning. These are usually anonymous or fragmented areas, either because they were physically urbanised but not built, or because they have appeared under the impact of new infrastructures and/or large equipment. They are marginal – resistant or devastated – in their metropolitan inconsequence.

However, according to Gregotti (cited in Byrne, 2006), the history of the city has demonstrated that urban voids have almost always been a space of experimentation and recreation, where their resilience transforms them into a space of difference and permanence, establishing the priority and continuity of their reconstruction processes.
Portuguese cities now need a strategy of intervention in their peripheries which may connect the city with the rural surroundings, integrating built and ecological structures and expecting that fragmentation and discontinuity should not be seen as something negative. This also occurred in the 1980s with the historic centres.

This strategy should consist of an intervention in these spaces by implementing a continuous structured fabric (Nunes, 2002). Such fabric should include a systemic perspective of the landscape, implicit in landscape architecture for quite some time already, from the first systems of public parks designed in the early nineteenth century by Olmsted, to the concept of *continuum naturale* by Caldeira Cabral in the mid twentieth century, which is the basis for the development of any work involving the concepts of green corridor, ecological structure, green structure, systems of open spaces and green plans. These are essential concepts, as they make it possible for fundamental ecological processes to take place in the city’s process of sustainable growth and development (Magalhães, 2001). This landscape structure should acknowledge the processes and flows of the several systems which make up the landscape, while being developed with the holistic perspective necessary to understand the landscape, which includes ecological, aesthetic, social, economic and cultural components.

At present, the need to establish an identity for new spaces occurs simultaneously with the attempt to restore an ecological sense of nature to the city. Some landscape architects are aiming to provide the ‘forgotten’ areas of the city with ecological features that might be of use to future generations. Such concern shared by theorists and practitioners may indicate that this built an ecological discontinuity caused by urban interstices that could be considered a new ‘projectual’ approach.

The demand for urban requalification has led to studies that examine the problem of urban interstitial spaces. Authors with different backgrounds have investigated and published critical studies about the importance of city voids, including Telles (2003), Donadieu (2006), Sabaté (2000), Galofaro (2003), Geuze (2007) and Corner (2006) among others. These authors consider these spaces as subject matter endowed with potential and value for the creation of aesthetically and ecologically viable new spaces. Moreover, they also defend the importance of a perspective of landscape systems in the approach to urban interstitial voids.

**INTERSTITIAL URBAN SPACES**

Any analysis of the contemporary city shows that in the last decades something was born which was not necessarily the city we were used to. Some authors have defined this as ‘non-city’ or ‘urban chaos’, a general disorder which is impossible to comprehend except for certain fragments of order randomly juxtaposed in the territory. Some of these fragments had been built by the planners themselves, some by speculators, while others were the result of spontaneous interventions (Portas, et al, 2003).

From the city’s historical point of view, it was believed necessary that order be restored. It was imperative to intervene, to re-qualify, to raise quality. At this
point it was also noticed that, once again, there were empty spaces in the periphery which were not being used and could lend themselves to large-scale operations of territorial surgery. Architects, urbanists and other professionals would work on these areas, trying to bring order into the chaos of the periphery, to reattach and recompose the fragments, to stitch and fill the voids with new forms of order often extracted from the quality of the historical city. Even today many professionals approach the chaos of the periphery with these same intentions and operative modes. With the downfall of positivist certainties, the debate on the contemporary city developed other categories of interpretation. Attempts were made to understand what effectively happened and why. A first step was to realise that this system of disintegration extended far beyond the limits of what had been thought of as the city, forming a true territorial system, the ‘dispersed city’, a system of low-density suburban settlement that extended beyond the traditional borders and formed discontinuous fabrics. By observing this new territory, which had been scattered in all directions in various local versions, it became increasingly evident that along with the new objects of anonymous building development, there was something else which, after being a mere backdrop for quite a long time, was becoming the protagonist of the urban landscape: the interstitial urban space (Figure 1).

These spaces were called ‘urban voids’, ‘interstitial spaces’, ‘empty spaces’, ‘land-between’, ‘brownfields’, ‘in-between’ and ‘terrains vagues’, among other things. ‘Urban voids’ seems to be the most common definition for this kind of space.

Figure 1: Aerial view of Évora, a mid-sized Portuguese city, in 2006, showing the vast interstitial spaces caused by the recent city expansion (Domingues (2006), p 31).
Eduard Bru (2001) institutionalises the existence of the void as a paradigm of the contemporary city, and thus, an essence of projectual process. Pablo Failla (2002) also states that ‘in the void, size is recognised, distances are apprehended, and the shape of the place and of what is being built is understood’. ‘Urban voids’ was also the term used by the organising committee of the 2007 Lisbon Architecture Triennale to define run down places, obsolete or marginal, which are found from the stable urban fabric to the peripheries. According to José Mateus (2007), ‘urban voids’, ‘brownfields’, ‘terrains vague’ or ‘common spaces’ are usual labels for these places. The Spanish architect Ignasi de Solà Morales (2002) accurately defined the space as ‘an area with unclear boundaries, no present use, vague, of difficult comprehension in the citizens’ collective perception, usually representing a fracture in the urban fabric’.

‘Terrains vagues’ is the French expression for urban voids. This expression generally refers to non-built space and obsolete constructions, but above all, to their vague character; they are not defined or codified. This seems an adequate term, well suited to the indefinite character, or even character defined in multiple ways, of these landscapes, which are sometimes seen as reminders, the ‘urban amnesias’, to quote from Careri (2002), which are not waiting to be filled with something but which are living spaces to be filled with meanings. The emptiness expressed in Careri’s ‘transurbance’ is related to Françoise Choay’s ‘espacements’ (Choay, 2003) coinciding in the scale, space and time ruptures that characterise the contemporary urban condition (Figure 2).

The urban interstices located among natural tensions – social, economical, spatial and temporal – are seen as problematic, especially in the peripheries, mainly because of their lack of functionality, typology and an attributed name. However, these spaces of urban articulation might be fundamental to the future of our cities. According to Careri (2002), they constitute a complex system of public spaces that can be crossed without any need for borders. They also represent the last place where it is possible to get lost within the city, where we can feel beyond surveillance

Figure 2: Remaining space in Portimão, a mid-sized Portuguese city.
and control, spontaneous parks that are neither the environmentalist’s recreation of a false rustic nature nor the consumer-oriented exploitation of free time. They are the only possible places for relaxation. When one penetrates the system of interstitial spaces and starts to explore it, one realises that what has been called ‘empty’ is not so empty after all. Instead, it contains a wide range of uses: places where the inhabitants of the peripheries grow vegetables, walk the dog, have a picnic, and stride along on shortcuts from one urban structure to another. This is where their children go in search of free spaces for socialising (Figure 3).

Solà-Morales (2002) refers to the real potential of these spaces: ‘It is also an available area, full of expectations, strong in urban memory, with original potential: the space of possibility, of future.’ This leads to the idea of the memory of some of these places, sometimes of great importance in the collective imagination, making us face them way beyond a merely pragmatic viewpoint. Their value resides not only in their availability as territories for physical or infrastructural transformation, or their strategic location in the city, but also in the successive acts that occur. Sometimes, the memory of these places makes them unrepeatable. Hence the fascination they provoke, and their consequent power.

The possibility of reconstructing on cultural, social, economic and political levels could have its genesis in the interstitial urban spaces. They should be the present expression of the landscape continuum. In these spaces, projects of diverse geometries should be conceived, though an infrastructure connecting them would be essential. From a methodological point of view, an ecological component might function as that infrastructure (Portas, et al, 2003). The requalification of these spaces could be founded on a project which reinvented the interstices that have emerged as fragments, independent of immediately adjacent spaces, and based on strategies that assure the continuity of the landscape systems through the integration of ecological and built infrastructures.

Corner’s proposal to the Lisbon Architecture Triennale (Figure 4), ‘TOPO–Life: Building a new eco-civic infrastructure on Lisbon’s topography’, may be considered an example. This new landscape project reflects the local topography, ecological systems and social/civic adjacencies linking two riverfronts (the Tagus River and the Trancão River). Surrounding the airport area, the new project is a productive,
infrastructural working landscape, an ecological machine for air, water, recycling, agriculture and energy, as well as a leisure project, providing space for sports, recreation and civic amenities. This project is adjusted to local edge conditions presently characterised by isolated residential pockets, traffic infrastructures and residual spaces.

‘TOPO–Life’ will revitalise the perception and identity of these places by reconnecting them to Lisbon. Together with other significant projects in the Lisbon region, such as the Monsanto Park, the city’s downtown area since the eighteenth century, the harbour, the university and the Expo Fairgrounds, ‘TOPO–Life’ represents another layer in the history of the city. Becoming one of Portugal’s main objectives in the production of renewable energy, ecological imperatives and civic ambitions, ‘TOPO–Life’ is a flexible eco-civic network which links, heals and creates new environments.

**LANDSCAPE AS A STRUCTURE**

The evidence of the importance of the interstitial spaces in the city and the need for urban requalification of the peripheries has led to reflection on the part of landscape designers and authors of the most diverse backgrounds. It has also led to the production of reference books, critical studies and texts on the relevance of such themes. As a theoretical support, it is important to refer to the authors who consider these spaces as work material that offers great potential and value for the creation of new, aesthetically and ecologically viable spaces. In other words, it is crucial to refer to the authors who reflect on the adequate instruments to act upon these spaces as urban resources once they are malleable, flexible spaces whose adaptability and capacity for transformation and articulation with the diverse systems that constitute the city and its design are a reality that is not possible in the stiffness of the built fabric. In recent years, some studies have been carried out on the importance of the landscape in the urban space and on the ecological systems and their fundamental aesthetic questions.

According to Galofaro (2003), the landscape is a construction material as well as a place where the natural and the artificial give rise to a new materiality. Landscape is no longer synonymous with environment, but the perceptible aspect of a
relationship. Thus, it relies on a collective form of subjectivity. Landscape ceases to be a passive entity, but something active, continuously changing and suggesting novel extensions and reinventions of the territory.

Some landscape architects have been working from these perspectives, coming up with landscape designs for these areas, which give them a real appropriation of the space and a decisive function in the ecological structure of the city. According to these architects, the landscape has now assumed a tactical role in new urban projects. In this sense, interstitial urban spaces are an ongoing media of exchange, embedded and evolved within the imaginative and material practices of different societies at different times. Accordingly, the relationship established between landscape and architecture is one of change. Not only does architecture seek a new spatial quality in pursuit of a different relationship with nature, but also landscape architects try to absorb urban design within a new practice of landscape urbanism (Waldheim, 2006). In this area, the works of Corner and West 8, among others, are emblematic as they support a diversity of uses and interpretation beyond time.

Geuze (2007) believes that when designing for an indeterminate future, new urban consumers may find and create their own meaning in the environments they explore. Inside the landscape, nature and city engage in a dialogue, exchanging elements that contaminate and isolate fragments of the landscape. The work of West 8 directly explores these spaces, transforming them into points of contact among different landscapes, true borderlines that slowly modify themselves through an optimistic recognition of the contemporary city as a place of interchange and growth. Landscape architecture is not a complex composition of opposing elements but an expression of simplicity and clarity. In this process, landscape architecture becomes the art of composing spaces, capturing natural elements, integrating them into empty spaces and protecting them from the chaotic movement of urban environmental characteristics.

Corner’s work, as could be seen in his proposal to the Lisbon Architecture Triennale, or even in his proposal to the Fresh Kills Park Project, is quite emblematic as far as landscape urbanism is concerned. Besides the strong ecological and infrastructural trend in the discourse of landscape urbanism, reference should also be made to urban agriculture. The works of Ribeiro Telles and Pierre Donadieu have long considered urban agriculture in all its potential – ecological, cultural, social, economic and aesthetic – as a legitimate new way to approach the composition of interstitial spaces. These authors recommend that cities should have agricultural spaces within their edges and in the peripheries. Such spaces would serve to control microclimates and the water cycle, the ecological balance and the physical stability (Donadieu, 2006). Moreover, they are culturally, socially, recreationally and economically relevant (Telles, 2003). As shown in Corner’s proposal for the Lisbon Architecture Triennale, these agricultural spaces allow for the articulation of interstices through a broader productive agenda based on ecological and civic equipments, creating new development opportunities, namely in the production of renewable energies, ecological imperatives and civic ambitions.
The most recent edition of *Europan 9* explored the theme of ‘European urbanity, sustainable city and new public spaces’. It is the biggest architecture competition in Europe, aimed at professionals under the age of 40. The winning project intended to define the occupation of an urban multi-family typology in the periphery (Poio, beside Pontevedra, Galiza, in Spain) that still features agricultural parcelling. The task was to introduce a built network and establish new relationships with the territory, maintaining the need to get in touch with the soil and its supplementary use for small-scale subsistence agriculture. The solution was found in the tension between an idea of ‘rural landscape’ and the concept of community use of ‘urban crops’ (Figure 5). This is a model of territoriality which defies the terms ‘city’ and ‘countryside’ and sees urban expansion as something that does not occur in abstract space but rather on its collection of superimposed features which gives it a landscape reality. This proposal seems to agree with the ideas put forth by Telles and Donadieu about the existence of a relationship between the city and the countryside.

The system of parks in Barcelona’s metropolitan area (Parque Agrario del Baix Llobregat) can also be seen as an urban structure through which ecological transactions occur. This system follows a model based on a global and systemic outlook on the landscape integrating the several structures which shape it, and so may even be considered a model for future urban expansions (Sabaté, 2000). The parks that constitute this system filled old interstitial agrarian voids, renovating the urban system through a plan of connections with the surrounding urban areas, allowing the presence of ecological and productive structures in the city. This model also considers the problem of food consumption and the flow of wastes. The only way to reduce the distance between the places of production and consumption, or production and recycling, is through the coexistence of agricultural activity and green industries within the urban system. This example is used as a model of a successful and productive urban space which enables both productive values and ecological and cultural resources to be preserved. At the same time it encourages economic development and the environmental and social functions of an agricultural area, aiming at agriculture which is sustainable and harmonious with the surrounding landscape (Figure 6).
CONCLUSION

Contemporary Portuguese cities present a reality that is not much different from most European cities: a chaotic periphery, in constant transformation, without urban quality, resulting from a growth induced by the consumer society. The city displays a temporarily and socially fragmented space that is not necessarily created by spontaneous or arbitrary processes. Many times it is the result of the presence of interstitial voids in large scales and quantities, particularly in the peripheries of the urban network. These spaces may occur in diverse contexts and situations; some will be the result of specific programmatic conditions, while others will be left as residual spaces. They remain in the urban fabric as islands, existing as interstices where waiting and indifference prevail (Sola-Morales, 2002). However, according to Careri (2002), although they constitute different spaces from those traditionally considered public spaces – squares, avenues, gardens, parks – they make up a huge portion of the non-built territory which is used and experienced in different ways. Moreover, they represent a fundamental part of the urban system where their diverse and temporary uses indicate their potential.

Some professionals started to develop new approaches when designing for these spaces. They did not consider them just as intervention sites, where an undetermined variety of objects are located, but as areas which are built and where complex materials are handled.

Through the analysis of some of these studies, I have tried to endorse a systemic perspective of a productive and recreational landscape, provide new experiences in understanding the urban condition, the interstitial voids and the quality of the landscape itself. The landscape is transformed into something different, a place which is sensitive to changes and which records the movements and events that occur in it. It should also be an active entity, structuring conditions to fresh relationships and interactions among the elements of which it is made. In this novel concept, the landscape is no longer based on a naturalist image, but a continuous structure appears that can be managed through the manifestation of manifold activities. It is not only the space between buildings or the platform where the process of construction is organised, but a genuine energy field – a sensitive and dynamic membrane composed of systems that establish relationships, flows and processes among the activities taking place.
REFERENCES