The urban square: from space to place

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ABSTRACT: This paper explores the potential of fostering an integrated research culture between academia and the profession through a case study in the city of Nicosia, Cyprus. By focusing on the nature of the urban square as a socioeconomic and spatial phenomenon and the notion of a sense of "place" as its most important characteristic, the paper aspires to a) expand knowledge base in relation to architectural projects undertaken by the profession and academic research, b) address through the use of research methods, the challenges of designing an urban square while at the same time responding to local culture and community aspirations. The walled city of Nicosia is connected with the city outside the walls through three gates, two on the south and one on the north. Still, the main connection between the old and the new city which evolved through historical time, is Eleftheria Square. Although the spatial characteristics of the space are geometrically more those of a bridge rather than a square, it is symbolically the centre of the south section of the city. This is where major events such as political rallies, soccer celebrations and New Year's festivities take place. Following an international competition, Zaha Hadid's office was awarded the first prize and the commission for the renovation of the existing square. When the design was presented to the public, there were protests against it, partly because according to the protestors, the proposal does not fulfil the spatial requirements of a "square"; the square as it is familiar to the city-dwellers. This forms, according to this paper, an important challenge for scientific research: to explore the potential of a methodology which takes into consideration both spatial analysis and people's intuitive explanations. The present study suggests the development of such a method which combines both quantitative, spatial analysis of the structure and morphology of the urban "square" and qualitative investigation of individual perceptions and aspirations, of people's sense and awareness of their environment.

Conference theme: New methodology in architectural research
Keywords: "sense of place", "configured" space, urban square

INTRODUCTION

The production of "place" has been a central concern for architects and urban planners during the past years. Increased mobility and relocation of people to new cities and countries has formed a major challenge for recognizable "places" that will form distinctive, socially and economically sustainable urban environments. Architects and urban designers are called in to either create new sustainable and distinctive "places" or to redesign the old ones reinforcing existing dynamics. The need for a new positive dynamic to reinforce the existing social and economic forces within the old part of the city of Nicosia, prompted the Municipality to hold a competition for redesigning the area around the city's central urban square.

Named Eleftheria Ssquare, the space has been the focus of high profile activities such as advertising promotions, political rallies and celebrations of sporting events and is described by locals as "the most important link between the historic centre and the contemporary city". (Stefanos Evripidou, London, for Cyprus Mail, 2008).

The competition for the redesign of the area was held in 2005 and the first prize was awarded to the study of Zaha Hadid, Christos Passas and Saffet Bekiroglu.

The report of the jury committee for the first prize noted that the proposal stands out for its originality, its contemporary style as well as for the successful creation of an uninterrupted flow between the areas within and outside the old city. The solution was described as an exquisite architectural composition, which is functional, while it also pays its respect to the Ancient Monument in its whole. The design of the square itself is mentioned as a sculpture in the area, which creates a central point of reference in the city.

When the design was presented to the public, there were protests against it, partly because according to the protestors, the proposal does not fulfill the spatial requirements of a "square"; the square as it is familiar to the city-dwellers. Some claim that the specific site was never a proper square nor could or should it be converted into one, due to its peculiar relationship with the moat and the historic walls. The argument put forward is based on the way in which what the city dwellers perceive as primarily a bridge (and has been a

familiar, distinctive place for them) is, with the proposed design, forced to behave more like a square.
Drawing on the above, this paper reviews the context of the urban square and the study of possible urban factors that construct a "place". What is proposed is the development of a method which combines both a quantitative, spatial analysis of the physical structure and morphology of the urban "square" and a qualitative investigation of individual perceptions and aspirations, of people's sense and awareness of their environment. Analytical approaches of spatial characteristics are thus set in a phenomenological-experiential perspective.

1. BRIEF HISTORICAL BACKGROUND

1.1 The Urban Square

A square is considered to be an open place or area usually formed at the meeting of two or more streets. It tends to be a flat, convex space which allows for the gathering of people. It is a communal public space. Still, it usually implies the presence of movement, pedestrian or other. It could even be claimed that the life of a square depends as much on events that take place in the square itself as it does on through traffic which may or may not participate in those events. In other words, a square may not necessarily or primarily be a major destination since it may acquire its character by being a crossroad.
Mark Childs's book titled 'Squares' starts with the following paragraph:

> As places of joyful celebration, heartbroken communion, civic discussion, and as places to exercise the rights of assembly and free speech, civic places are essential to participatory democracy and the good life. Vital civic places-squares, the post-office steps, farmers' markets- are the great advantages of life in town. The architecture of civic places can support or frustrate these convivial uses….conviviality may be used to speak of the enjoyment of festive society, as a means of living together. Conviviality, in this meaning, is the vibrant sense of belonging to a settlement. (2004)

In other words, for a space to be a public square, its geometry and other spatial characteristics need to be supplemented with its use by the community.
Another element of the built environment which may or may not have an urban character is the bridge, a structure that is, which carries a pathway or roadway over a depression or obstacle. This tends to primarily be a transitional space, allowing that is, for the passage of its users from one side to the other. Still, as in the case of the square, its use is not pure; while passing through may be the main activity taking place on it, this frequently takes place along some form of social interaction.
Childs argues that 'it is the job of the designers of a civic place to uncover, foster, and give place to a sustained and evolving dialog between a community and its landscape' (ibid). What then are the tools which the designer can use in order to achieve that? Inevitably, some form of abstraction or representation regarding a selected number of parameters is involved. This process, according to Lefebvre, is dangerous:

> Knowledge falls into a trap when it makes representations of space the basis for the study of 'life', for in doing so it reduces lived experience. The *object* of knowledge is, precisely, the fragmented and uncertain connection between elaborated representations of space on the one hand and representational spaces (along with their underpinnings) on the other; and this 'object' implies (and explains) a *subject* – that subject in whom lived, perceived and conceived (known) come together within a spatial practice. (1991: 230).

Lefebvre describes a flattening out process which shatters space into images, into signs, into connected-yet-disconnected data that reduces the subject into a lived abstraction (1991: 313).
This seems to be the fear of the people who are against the proposal of the Zaha Hadid team for Eleftheria Square. One of the points they keep stressing is that the designer herself never actually visited the island. A second criticism is the way the design addresses, or does not address the climatic conditions of Cyprus. A third point which is put forward as we have noted above, is the way in which what they see as primarily a bridge is, with the proposed design, forced to behave more like a square. This paper focuses more on this last criticism.

1.2 Eleftheria's Square

The city walls of Nicosia may be considered, if not its strongest, but certainly its most visible feature. These walls were designed by Julio Savorgano and built by the Venetian rulers of the island in the 16thC. They are one of UNESCO's World Heritage monuments due to their cultural value and their unique architectural character.

Figure 1: The Square

During the Ottoman Occupation of the island (1570-1878) the three gates of the Walls, the Kyrenia Gate, the Paphos Gate and the Famagusta gate were the only points connecting the walled city with the surrounding region and the other cities. The gates would close at sunset and could only open with a special order. The closing of the gates also continued for some time during the British Rule. It was eventually decided that the city should open to the outside for the convenient transportation of people and goods. In 1950 the British did not demolish the wall but built a version which accommodated the needs for a bridge, resulting to what we have today. A wooden bridge over the moat was initially constructed, joining the old city with the first houses built outside the walls. This was later widened, and was renamed Metaxas Square. It was named Eleftheria Square (Freedom Square) in 1975 after a public vote.A point to note is that British administrators had early on in their rule placed their offices, as well as some residences, south and south-west of the walled city (presumably for health reasons, as this area was slightly higher up and away from malarial swamps, but possibly also in order to separate themselves out from the natives). By the 1930's some wealthy Greeks had followed the example of the British, moving southwards, out of the walled city. This process was accentuated after the post World War II economic growth and the increasing use of the walled city for commercial purposes. This meant that many residences in the inner city were converted into shops and commercial offices (Attalides, 1981). Gradually this development expanded out of the walled city and a new commercial area grew, in a south and south - east direction. Effectively there are now two main commercial areas: the older one, within the walled city and the newer one, starting outwards from the walls.

These developments have brought new uses in the walled city. Firstly, because of the increasing congestion, most wealthy and middle class families moved to new areas of Nicosia, leaving behind the poorer families and the elderly. Second, increasing numbers of immigrants and other foreign nationals (such as unskilled manual workers, housemaids and students in local colleges) are moving to the area, since the rent for these, mostly old flats and houses is much lower than elsewhere in Nicosia. Thirdly, some parts of the walled city have acquired a new importance as cultural centres or as parts of the city's heritage. In most cases this latter use involved restoration work by the Nicosia municipality or the state – and this has brought about a fourth trend, relating to commercial restoration of old houses, restaurants, pubs, galleries, and so on, aiming at exploiting the higher values bestowed on the return of culture and tradition in the area. During its recent history, the walled city gradually became for many people an "urban ghetto", accommodating ethnic minority and lower social and occupational class groups. However, Eleftheria Square still remains the city's center, with the inhabitants often expressing a strong attachment to this specific "place".

2. A SENSE OF "PLACE" IN CONTEMPORARY CITIES

According to Hall (1997) post-industrial cities are polycentric systems with multiple centers of residences, employment and other social activities. Musterd argues even further, that the majority of social activity takes place in a spatially "local" context due to several constraints that people experience in space and time (2001). City-dwellers, as in the case of Nicosia, often express sentimental bonds with certain geographical spaces or "places" such as their neighborhood or the city's squares. They even suggest that these distinctive "places" are a way of defining their urban identity.

The perception of "place" and locality has been the object of discourse since the 60s. Lynch (1981:131) has suggested that the "sense of place" is related to the ease with which its elements can be linked to other places or events as a mental representation of time and space which includes non-spatial elements as well.

Hillier (1996), through the theory of Space Syntax, introduced the concept of "intelligibility" defined as the degree that we can be informed about our position within the urban system as a whole, from every location that we potentially occupy.

However, he argues that there is not sufficient evidence to support a corresponding relation between space and social identity. Hillier and Hanson (1987) support the argument that the urban environment is heterogeneous and space plays a role in controlling and generating this heterogeneity; a point also suggested by Jacobs (1961) and Appleyard (1981). They argue even further that empirical evidence does not support a correspondence model between space and society as suggested by Alexander (1977), Newman (1980) and Lynch (1981); furthermore, it does not support self-contained spaces and neighborhoods at the local scale. Hillier argues that cities have a dual nature, operating both at the local scale of the neighborhood, the square or other node, and the global scale; hence, although we experience the city in fragments each time, we are aware of the whole. He criticizes research focusing only on place-making since, according to him, it deals mostly with the "local and apparently tractable at the expense of the global and intractable in cities"; "places" he argues, are not local things but "moments in large-scale things, the large-scale things we call cities" (1996:151).

Recent architectural and urban theory has in many cases proposed the social benefits of local groups, enclosures and identification. Space Syntax empirical studies have shown however, that the effects have been rather negative, resulting in the fragmentation of the urban structure into over localized zones; natural movement is consequently prohibited since there is lack of integration with the global structure of the city and signs of both social and physical degeneration may appear (Hillier, 1996).

Hillier suggests through a number of analyzed examples that "places are not local things" and do not make the city; but rather it is cities that make places.

> our analytical studies of the structure and functioning of urban space suggest that it is the global scale that is critical, whether to the structuring of co-presence through movement, the sense of safety, the development of social networks, or the distribution of crime. The local sense of place arises not from the existence of segregated local zones, but from the different types of deformity in the local grid. The same applies to social networks. Good urban networks are not self-contained groups but distributions of probabilities within a larger, continuous system. The key to "urbanity"….lies in the way the local and global scales of space and networks relate to each other." (Hillier, 1996 p.256).

The most important global mechanism of cities, is what we know as the **urban or deformed grid;** a mechanism which is found in all settlements. Cities and more specifically the urban grid, can be described as a "mechanism for generating contact"; contact between the city's inhabitants and between the inhabitants and visitors, basically generated through movement. The grid itself and the good relation between local areas and the global structure of the city is what make a city function well by allowing the user to experience it in an effortless and pleasant way.
he deformed grid is also the mechanism which gives the city its individual characteristics; characteristics related to culture and social processes.

> The urban grid is an imprint of the history of the city, containing traces of different growing, planning and social processes. Each grid tells us a particular history, that might include the accelerated growing of Latin American cities or the deep medieval roots of some European cities (Figueiredo and Amorim, 2007)[1].

What emerges so far, is the need to seek the difference between space and "place" as conceived by both experiential and analytical theories like space syntax. The latter as we have seen above, suggests the concept of "configured" space, that is, the inhabited or experienced space, not only in relation with a bounded local setting but with its global dimensions.

3. SPACE SYNTAX METHODOLOGY – AN EXPERIMENTAL PERSPECTIVE

3.1. Space Syntax Methodology

Morphological studies presented through the Social Logic of *Space* (Hillier and Hanson, 1984) and subsequent research during the last decades, try to clarify the configurational properties of space described in the previous section and their meanings, by mathematical and graphical analysis rather than intuitive explanations, through Space Syntax methodology. A set of non discursive techniques are utilised to discover how far it is possible to bring to light and subject to rigorous comparative analysis the configurational[2] aspects of space and form in settlements, cities and buildings, through which culture is transmitted.
Space syntax research sees settlements as specialized forms of spatial engineering which permit a large number of people to live in concentrations. Seen as systems of organized space, settlements seem to have deep structures or genotypes, which vary with culture. Studies of cities and traditional settlements all over the world, reveal such differences in spatial organization which seem to be expressions of what might be called "spatial culture" (Hillier and Hanson 1984; Hillier 1996; Space Syntax Conference Proceedings 1999, 2003, 2005, 2007). Furthermore, spatial properties which define cities and settlements as cultural types seem to be associated with the social systems of their corresponding societies[3].
Space Syntax research attempts to shed light on the aforementioned issues by treating built environments as systems of space, analyzing them "configurationally" and trying to reveal their underlying patterns and structures (Hillier and Hanson, 1984).
Two levels of analysis describe the organization of public space: the "convex" analysis or "two-dimensional" organization of the system, and the "one-dimensional" or axial organization (Hillier and Hanson, 1984).

> The essence of urban form is that it is spatially structured and functionally driven. Between structure and function is the notion of intelligibility, defined as the degree to which what can be seen and experienced locally in the system allows the large scale system to be learned without conscious effort.

[1] Two factors need to be taken into account at this point: that cities are unique since the forms they take are influenced by factors quite specific to the time and place in which they grow (and indeed in a unique way we experience each city); secondly, the spatial and physical development of a city is believed to be a reflection of the social and economic processes responsible for their existence. Differences for example, in the physical and spatial forms of cities to the north and south of the Mediterranean, have been shown through thorough analysis to be connected to the cultural and social idiosyncrasies of the European and the Islamic traditions.

[2] What does the term "configuration" tell us? According to Hanson (1998), spatial relations exist where there is any type of link between two spaces. Configuration exists when the relations that exist between two spaces are changed according to how we relate each to a third. Configurational descriptions, therefore, deal with the way in which a system of spaces is related together to form a pattern, rather than the more localized properties of any particular space.

[3] For example, in cities in the Arab world, the spectrum between public and private spaces is often quite different from that in European cities .In historic European cities, local areas are for the most part easily accessible to strangers whereas in many Arab cities strangers tend to be guided to certain public areas in the town and access to local areas is much more forbidding.

> Structure, intelligibility and function permit us to see the town as social process, and the fundamental element in all three is the linear spatial element, or axis." (Hillier, 1996).

In this way, the "axial" map[4] of the city has a structure - the distribution of local and global "integration"; the latter is considered by several researchers as the most powerful functional mechanism driving the pattern of movement, the distribution of land uses, building densities and large-scale spatial and physical elements such as landmarks and open areas. Well-functioning cities according to Hillier can be considered as "movement economies". In other words, the effects of space and movement on each other, and the number of effects on both that arise from patterns of land use and building densities (themselves influenced by space-movement relation), give cities their characteristic structures.

3.2. Space Syntax and Phenomenology

At this point, we could possibly argue that Space Syntax offers a fairly accurate picture of how the physical world contributes to place experience and place making, through what Hillier calls the "deformed grid"; the physical core of this grid is the most integrated system of pathways, that is, those routes that have many other pathways leading into them and are therefore, potentially more alive with public life. This deformed grid as Seamon suggests (2007) is the underlying foundation for a web of connections among people and among people and places. This web, according to Vaughan, affords and is afforded by a particular district character and sense of place (2006).

It has been claimed during the past years that space syntax descriptions are by their nature experiential entities (Seamon, 1994, 2007). According to Perdikogianni (2007) it is exactly this experiential aspect of the Space Syntax analytical tools, along with the correlated observed patterns of usage of the "configured" space considering the global properties of the urban system, that could lead us to the definition of "place" as the "inhabited" space, the "lived" space. She argues even further that a problematic needs to be established upon which empirical data about how people understand and define "place" could be incorporated as other concrete values in the syntactical model of the city. She claims that there are other implicit interactions between the individual and space which are related with his/her awareness of the surrounding environment.

Seamon (2007) defining phenomenology as the careful description and interpretation of human experience, suggests that the space syntax tools potentially relate to a particular kind of phenomenological place structure, what he calls the place ballet. In the latter, the spatio-temporal regularity of individuals potentially coalesces into some larger environmental dynamic that both sustains and is sustained by an attachment to and a "sense of place".

Many of the analytical concepts and procedures of space syntax, as Seamon suggests (2007) is that they "appear to arise from and accurately point towards real-world aspects of environmental and place experience... In this sense, axial and convex spaces are an accurate analytical rendition of the movement/rest dialectic". These tools help us understand how spatial and physical qualities might contribute to lived aspects of movement and rest; as Seamon points out, the two-dimensional quality of convex space is possibly associated to rest and allows for "local places". On the other hand, axial spaces relate to the one-dimensional, "moving" quality of open space and to a global relationship. Experientially, Seamon suggests, the kind of place ballet arising out of axial-space structure is different in its spatial and temporal dynamics than the kind of place ballet associated with convex spaces.

Seamon's aforementioned suggestions can be observed in the analysis of the existing Eleftheria's square and the proposed scheme, utilizing Space Syntax methodology.

4. ANALYSIS OF ELEFTHERIA SQUARE

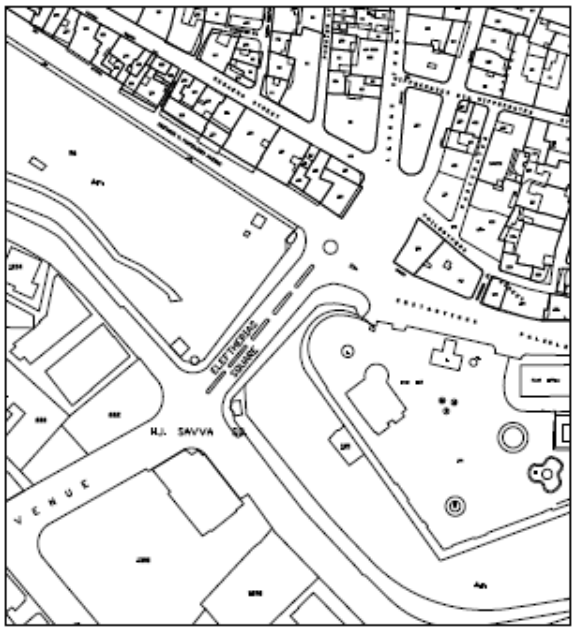

Figure 2. Plan of the existing square

[4] The analytic tool used to describe the organisation of public space in this paper, is the "one-dimensional" or axial organisation: this refers to the global organisation of the system from the point of view of those who move in to and through the system; that is, in terms of its lines of access and sight. It can be described by drawing the fewest and longest straight lines which pass through all the convex spaces of the settlement. Because visitors in a settlement, or in part of a settlement, are likely to be moving through the space, the axial extension of the public space accesses strangers to the system, whereas inhabitants have more static relations to the various parts of the local system (Hillier 1996).

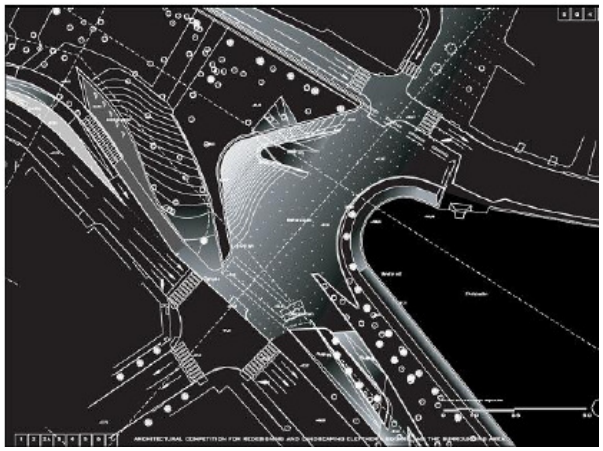

Figure 3. Plan of the proposed square

As seen in the plan of the existing square, we currently have an axial space structure (in the form of a bridge) which relates to the one-dimensional, "moving" quality of open space and to a more global relationship. Not surprisingly, a striking observation when we study the axial map of Nicosia (fig.6) is that Eleftheria Square is on one of the most integrated[5] lines and within the "integrated core"[6] of Nicosia. The integration core remains the same with the new proposal. Although the city of Nicosia within the walls becomes strongly isolated from the newly expanded city outside of the walls, the square remains strongly integrated in its axial dimension.
The basic difference however, of the winning scheme is the widening of the platform and smooth connections to the moat level, with the area below the platform accommodating a variety of uses (Figs 3, 4,5).

Figure 4. The existing square

The old wall is restored and a palm tree lined pedestrian walk alongside it is created. The presently underused moat, seen as a green 'necklace' in case the city is reunified, becomes the main public park of the city. The moat will also be altered topographically to make it more accessible from the surrounding streets. A smooth downhill continuation of the square will lead

[5] Integrated areas or lines refer to spaces which following a computer spatial analysis exhibit high integration values; the most "integrated" lines of the system are shown in red. In simple terms high integration refers to areas which are easily accessible to a visitor of the city and well connected to the rest of the spaces.
[6] The integration core of a city includes the most integrated areas at a local level.

Figure 5. The proposed square

to the moat, where pedestrians can descend to the garden level and actively use the area. Coffee shops, snack bars and newsagents are placed on this level, while a range of recreational facilities including bicycle routes and walkways are proposed in an effort to enhance the quality of the residents. Retractable bollards will cut off the traffic at night, so that the square can be used for social events and gatherings.
In other words, the new scheme remains strongly integrated in the axial, moving quality of space and introduces the creation of convex spaces. The two-dimensional quality of the convex spaces proposed is associated, based on our observations in the previous section, to rest and potentially allows for the creation of local places. Taking the aforementioned ideas into consideration, design might be tailored to approach local communities and encourage acceptance of proposed developments and even behavioral change.

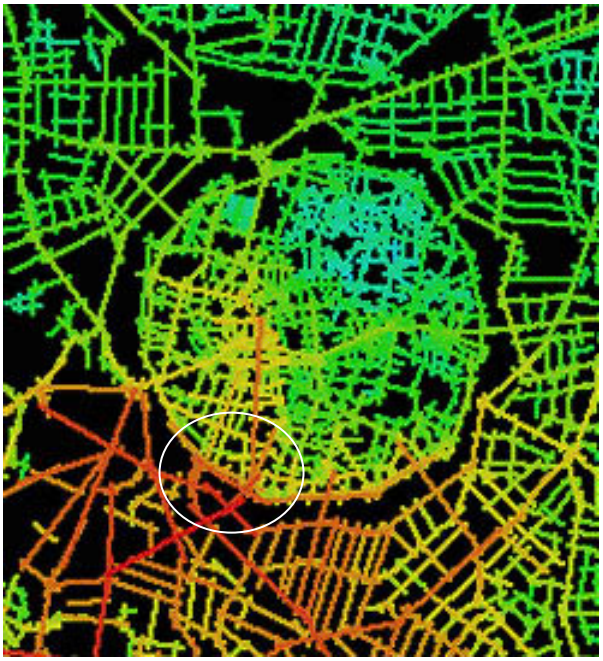

Figure 6. Axial analysis of the city within the walls

6. FROM SPACE TO PLACE

A major challenge faced by architects and urban designers is that of creating distinctive places which

people enjoy using, by taking into consideration the physical and spatial characteristics of the space proposed. This paper deals with the nature of such a space, namely the urban square, and brings to the fore the "sense of place" and people's awareness of it, as its most important characteristic.

It is acknowledged that the perception of "place" and locality has been the object of discourse since the 60s. Research has so far focused either on local design features of urban design or on individual's perception of spaces with a lack of methods that deal with the physical and the experiential at the same time. What emerges through the current study is the need to trace the difference between space and place and explore how this can be conceived in both analytical and experiential theories, a challenge that seems to be met by the Space Syntax methodology. This forms an important challenge for research: to explore the potential of a methodology which takes into consideration both spatial analysis of our physical environment and people's perceptions of it.

Space Syntax's analytical approach set in its phenomenological/experiential perspective, could lead us to the definition of "place" as the "inhabited" space, the "lived" space (Perdikogianni, 2007). Empirical data about how people understand and define "place" could be incorporated as other values in the syntactical model of the city (convex and axial structures) mentioned in the previous sections. Such a methodology might foster a more integrated research culture between academia and the profession and expand knowledge base in relation to architectural projects undertaken by the profession and academic research.

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