The Agia Sofia's axis. A corridor of change and resilience for Thessaloniki

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Introduction

The paper dwells on greenways as natural and cultural corridors, and their value for the contemporary city change and resilience. Just after a short theoretical approach on urban landscape architecture related to the sustainability and urban resilience, we intend to present our project that won the second prize in the Panhellenic competition, organized by the Greek Ministry of Environment and Energy, for the redesign of Agia Sofia's axis, one of the main historical traces of Thessaloniki's urban landscape. This example supports our design approach, socio-ecological and perceptual, for landscape architectural projects, in both planning and design.

Theoretical approach

a. Urban Landscape architecture, sustainability and resilience

Urban landscape architecture reveals the continuous need, not only for an efficient use of natural resources, but also for quality standards of life conditions in the cities, for the present, for the future and for everyone. Within an overall socio-ecological and perceptual approach (Ananiadou-Tzimopoulou, 1997), the paper broadens the discussion upon sustainability and urban environmental improvement, establishing the contribution of a strategic landscape planning design to the durable future and resilience of our cities.

Design for resilience needs an evidence-based approach that contributes to adaptive design in the face of complexity, uncertainty and vulnerability (Lister, 2015). In terms of landscape architecture, it is important to understand the dynamics, the basic characteristics and in this sense the 'spirit' of a place. You never change things by fighting the existing reality. To change something, you need to build a new model that makes the existing model obsolete (Farr, 2008).

Urban landscape architecture (Corajoud, 2001) is dealing with contemporary issues of restoration, enhancement and design of the urban space, in terms of the necessary conciousness for environmental protection, restoration and sustainability. It is about designing open public space in relation with the urban landscape and its background, often restoring relations of continuity, cultural and natural, disturbed through time due to fragmentary interventions and initiatives.

The urban landscape is the mirror of the society and even from the 1970s stays at the forefront for the reconstruction of the image of many European cities. A space appropriated and codified that undergone numerous uses, habits and adjustments, which is above all not free and by no means empty. It is the result of relations between economic activities, social structures, cultural values, as well as their physical background that changes over time. A dynamic space, with man acting and affecting, as factor of creation, socially and, less directly, individually, rather than as a mere observer (Ananiadou-Tzimopoulou, 2005).

b. Greenways in urban landscape planning and design

Among the landscape architectural projects, those that contribute to the emergence of the urban environmental continuity, create new strategies for spatial structures and their process of adapting, the development based on subtle operations and the environmental protection. Landscape planning and design is nowadays strongly related to sustainability and resilience through a multi-, inter- and transdisciplinary view to landscape architecture (Crăciun and Bostenaru, 2014). In this context, urban environmental and cultural corridors maintain a strong value for urban design, where sustainability and resilience are significant meanings. Equivalent importance is given to vegetation as natural structural element of the urban tissue.

After generations of viewing nature as something safely distant from the city, more often people today are aware that natural processes are better planned for, accommodated, and even celebrated than fought or ignored (Hellmund and Smith, 2006). In the context of sustainable development that concerns and protects the interests of future generations, new urban landscapes arise, adapted to and inspired by the site dynamics, linear continuities, spatial and ecological, urban open space networks, strengthened by operations in every design scale.

Urban corridors, streams, waterfronts, rivers, like Quais de Seine in Paris, Cheonggyecheon stream in Seoul, the Highline in New York, are some of the contemporary projects of large scale urban redevelopment. In the context of sustainable and viable perspective for the cities (Farr, 2008), networks of open and green spaces, cultural and environmental corridors, that never lost their value through the history of urban design and planning (Soulier, 1968), remain always in the forefront of the dialogue and discussion.

Goals, objectives and methodology

We intend to highlight the importance and the value of physical space's continuity in both urban landscape planning and design for the development or even often for the restoration of the urban environment. We support the socioecological and perceptual approach in landscape architecture, claiming that it can be applied to multiple design scales in landscape architectural projects. In order to demonstrate this, we utilise the project for Thessaloniki's landscape Strategic and Operational Plan (Ananiadou-Tzimopoulou et al., 2006), and then we present our urban landscape design project for the redevelopment of Agias Sofia's axis, transformed into a strong natural and cultural urban corridor for the city.



Figure 1. Thessaloniki's landscape Strategic and Operational Plan

Thessaloniki's landscape Strategic and Operational Plan

Thessaloniki's landscape Strategic and Operational Plan, a project that proposes an urban green network, both emerges from and is giving to the cityscape its lost identity (Figure 1). The project responds to the fact that the city's open public and green spaces are reduced to minimum and aims to an urban renewal, a landscape redevelopment and its contemporary design.

More precisely, networks of open and green spaces are proposed, with sequels of the city's open spaces, penetration and perspectives of the natural environment. Natural zones, restored sites of the ring road, junctions, technical projects of streams etc, are articulated to the above. In addition, more spaces complete the above network, newly designed sites, like ex-military camps, parts of streams, restored green areas and abandoned sites, areas of mixed or special use, university campuses, sports activities, old cemeteries, always in

parallel with the leverage of the considerable existing buildings. This green frame extends from the periphery and the forest, towards the waterfront and the sea, with distinctive inscription through the unique characteristics of the urban landscape.

The objective is the creation of a green urban tissue and the emergence of the city's landscape. The main design principles are: The rectangular grid structure for the city center that follows the historical urban grid cardo decumanus combined with a curved structure arising from the fluid crosswise connections of mountain and sea, with the emergence of the streams into green rings and inscriptions following the natural topography, parallel to the sea, for pedestrian routes. Articulation of large open spaces, military camps and degraded habitats to the above network

This way a new image of the city emerges from its cultural landscape, its physical and natural continuities and specific characteristics of the urban landscape, with the contemporary highlight of its monumental wealth, its history and physiognomy. The city becomes more attractive, not only for the economic development, but also experientially for the residents and the visitors. The proposed networks of open and green urban spaces, in continuity with the natural environment, restore disturbed relationships, reorganize and enhance the urban environment.

Agia Sofia's urban landscape design

Our project (Ananiadou-Tzimopoulou et al., 2013) for the redevelopment of Agia Sofia's axis, as announced by the Greek Ministry of Environment, concerns one of the most important historical and physical axis of Thessaloniki's central tissue. It extends from the upper town to the sea and connects two important byzantine monuments, the Agia Sofia and the Acheiropoietos church. We transform this axis, known as Agia Sofia's street, into an urban landscape corridor, a part of a wider green network of the city's open public spaces. This new urban corridor emerges from its hidden dimension, both natural and cultural, to become a new public open space for residents and visitors, a new destination for Thessaloniki, that offers a variety of experiences, for the environmental pleasure and the economic revival of the center of the city.

The proposal is based on the site dynamics that arised from the site analysis, taking into consideration social, ecological and perceptual parameters as part of a multidimensional approach. We perceive the physical space with its singularity, the genius loci, and the continuities in the history, the time and the physical integration into the urban context. (Figure 2)

Our concept and main design idea is inspired by both the natural and cultural aspects of the site, presented in the diagram entitled "a spine of natural and cultural history of the city". We create a spine, a green corridor that crosses vertically the whole city, a continuous open space system with squares opening to the historical and cultural monuments, in a linear way from the north to the south or vice versa

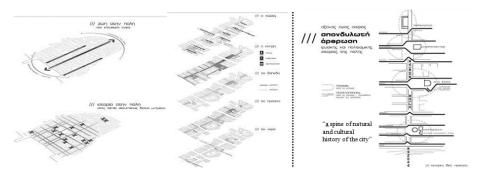


Figure 2. Agias Sofia's site analysis and conceptual diagrams

The design proposal unveils the historical trace of the ancient axis and the byzantine monuments. It broadens the sense of the axis' verticality to the waterfront in the cardo decumanus system, revealing the opening to the sea's horizon and enhancing the perspective of the upper town to the northeast. The pedestrian connector, on the eastern side of the corridor, provides continuity, legibility, and monuments' accessibility, and enhances the perspective along the way to the mountain, the forest and the sea. Additional pedestrian connections across the axis, parallel to the waterfront, wavy, like the sea's sosmosis, following the site's topographical configuration, connect to the city's main streets and articulate the corridor to the wider urban historical network of archaeological sites and monuments, streets, plazas, parks and the waterfront. (Figure 3.1)

Pedestrian ways and resting areas, openings to squares and grounds (champs, campo) are continuous, converting the street into esplanades. Vehicle circulation is allowed with restrictions in the west side of the corridor, integrated in the overall design. The commercial character, where already exists, is preserved and strengthened, while the landscape varies gradually along the corridor, depending on the special characteristics and physiognomy of the site. From the Peiramatiko Square, the entrance and view from and towards the upper city, the Acheiropoietos Square-Park (Figure 3.2), the Agia Sofia Grounds (Figure 3.3) and Square (Figure 3.4), The Catacomb of Saint Ioannis, The Mitropoli and Macedonian War Museum Square (Figure 3.5) till the Agia Sofia Seafront (Figure 3.6) the last articulation with the waterfront

that turns into a balcony with views to the sea and mount Olympus, for recreation and happenings related with water. Openings and squares give space to the monuments and open the view towards them; the planting reduces the scale difference between the monuments and the bult environment and creates green links with the rest of the urban open space network. The equipment and the paving are designed as details with emphasis to the site's identity.

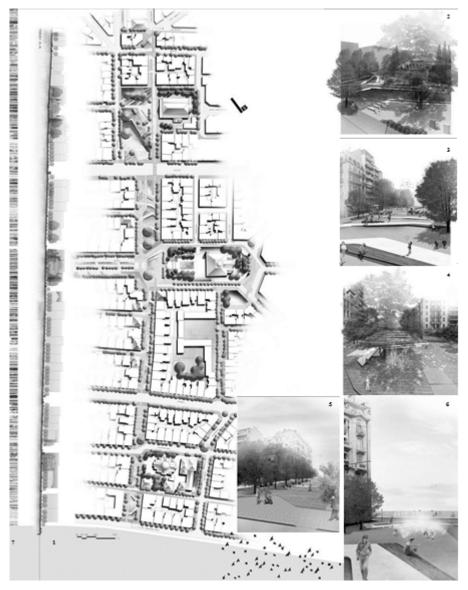


Figure 3. Agias Sofia's corridor masterplan and perspectives

Through the proposed spatial arrangement and design, we emphasize the ecological gradual progression from the waterfront to the hilly and forested natural landscape. We achieve this by choosing the appropriate new planting species, along with the preservation of the crucial ones of the existing vegetation, so that they could create a resistant continuity (Figure 3.7) and natural perspective in the future.

Conclusions

Through the landscape planning example, as well as the Agias Sofia's corridor landscape design project, we support the multidimensional approach, socioecological and perceptual one, appropriate to be applied to both landscape planning and design projects. The two projects presented above showcase the complementarity of scale in urban landscape design. It is not sufficient just to create, preserve and organize urban green networks through landscape urban planning in order to restore the urban landscape. Appropriate landscape design is needed, as well, so that they could be considered as urban landscapes of high quality of life, enjoyment of the site's history, natural and cultural, restoration of disturbed continuity of the urban open space, in accordance with the landscape dynamics.

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