

D. REFLECTION

Learning from Eleonas

Eleonas, as an island of Third spaces produced by the processes of urbanization and rooted at the heart of Athens, is a characteristic example of a space of contradictions; so close to the city centre and yet disconnected from the surrounding urban web, it is full of complexity and uncertainty. While dominated by environmental degradation caused by the remaining industrial and arbitrary uses, Eleonas is also a haven for wildlife that thrives in urban environments. Finally, as a site in perpetual transition, it is in search for a new identity.

As problematic as the Third spaces of Eleonas appear to be, their complex and contradictory character is what fascinated and urged me to use them in the process of improving the quality of life in Athens through the proposed design.

From the very beginning of my learning process, the goal of my research was to obtain an in depth knowledge of the intrinsic qualities of Third spaces, understand the nature of their relationship with the urban web, find out how they are being valued by past and current societies and discover the ways they could be used in a landscape architectonic design. Early on in my research, I realized the significance of the connection of Third spaces with spontaneous vegetation, ecological succession processes and the potential it presents. I was particularly influenced by theoretical frameworks on Third spaces and urban biotopes, such as the works of Gilles Clement, Martin Prominski, Forman and Godron, Ellen Braae and Robert Smithson. Similarly, projects like the documentary "Natura Urbana - The brachen of Berlin" by Matthew Gandy and Sandra Jasper, Landschaftspark Duisburg-Nord by Latz + Partner and Ville Nouvelle Melun Senart by OMA were projects that inspired my graduation thesis.

With insights and elements from both theory and reference projects, I was able to form the premises of my proposal by supporting that through the Third spaces ecological, cultural and morphological connections can be made within the urban web in the process of urban transformation.

Once I reached this stage, it became obvious to me that a cross disciplinary approach would be needed to undertake the task of realizing my proposal. As a result, I attempted to combine design methods and principles from Landscape architecture, ecology and urban design, always directed by the specific characteristics of the site.

Strengths and weaknesses of the design methodology

As Eleonas is an area that started to draw the attention of designers in the beginning of the 21st century, information and data about the site was difficult to find, especially with regards to its physical and social aspects. In order to overcome this challenge, I relied on analysis that I conducted during my site visits. This strengthened my design proposal considerably. By experiencing the unique spatial qualities of Eleonas I identified elements that later became integral for my design. The dead ends leading to the Third spaces along the Prophet Daniel stream, for example, were used as access points to the new landscape architectonic design.

Moreover, the study of site specific elements like the presence of water, temperature, shade etc. challenged the way I usually design, since my purpose in this project was to create a variety of conditions in the area of my design proposal. For instance, the spatial configuration of the trees in the Alse, creates the conditions for a cool and shaded resting place, whereas the row of pine trees, the water canal and the herb gardens along one of the connecting strips in the flood marshes creates the conditions for a cool, olfactory landscape.

A high level of complexity was also involved in the process of envisioning the future landscape and its evolution through time. This has been a challenging process for me, as it involved three aspects of change: the programmatic change, ecological succession and seasonal change.

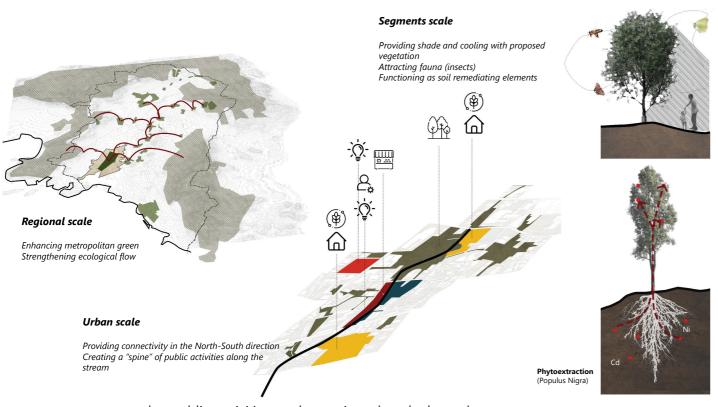
A multiscalar approach

Due to the fact that the existing situation of Eleonas is determined by factors that act on different scales, a multiscalar approach was implemented. That provided a clear understanding of the broader context (regional scale), the forces that determine the existing conditions in Eleonas (urban scale), the patterns of different ecosystems (patches and corridors) and the ecosystems themselves (segments). Implementing a multiscalar approach ensured that every element of my design proposal has multiple functions that contribute to the improvement of the quality of life in Athens in every scale.

A characteristic example of this multifunctionality is the design proposal along the Prophet Daniel stream. The decision of preserving one of the last remaining streams of a water system that has practically been "wiped out" by urban growth and providing more space for its ecological processes has multiple benefits in the regional scale. Not only does it increase the public green in the Attica basin, but also it bears testament to the idyllic landscape of the distant past in which the multiple streams and creeks of the Athenian plane were an essential part.

In addition, the interventions along the Prophet Daniel stream complete a considerable gap in the existing network of metropolitan green, thereby strengthening it. At the same time, they provide an essential stepping stone for ecology, thus enhancing the ecological flow between the urban green and the areas of ecological value surrounding the Attica basin.

As a corridor of different ecosystems attached with a variety of uses and activities, the design along the stream provides a much needed connection in the North to South axis in Eleonas which enhances pedestrian access from the surrounding areas. Furthermore,



the public activities and uses introduced along the stream attract people from other parts of the city while the new residential areas ensure that the stream is "alive" both during the day and the night. As a result, the introvert character of Prophet Daniel is inverted as it changes from a residual space into a spine of public uses. That intervention is the first step in the process of transforming Eleonas from the backyard of Athens into a successfully integrated area within the urban web.

In the flood marshes, the spatial configuration of the proposed plan provides much needed shade and cooling in both the Alse and the corridors leading to the stream. The collection, storage and reuse of excess rainwater accumulating on the ground and the rooftops of buildings during flash floods is another sustainable way of taking advantage of the site specific intricacies of the area.

The orchards in Votanikos will provide financial gain to both the refugees and local inhabitants, while the process of cultivating and maintaining them will also create social bonds. On the other hand, the ruderal refugia introduced in the area do not just enhance the existing ecological network but also, combined with the orchards, the riparian vegetation and public green, provide an aesthetic variety in Eleonas.

Needless to say, the selection of trees and shrubs in the proposed design is not random. Trees like Aleppo pines, poplars and Gleditsias are used for their thick canopies that provide shade and create different spatial qualities. Olive trees, pomegranates, vineyards and citrus trees, apart from their productive character, are also a reference to the agricultural past of Eleonas while the ruderal refugia vegetation refers to the river landscape of Kifisos. The proposed vegetation has also air and soil remediating functions; Populus nigra and Gleditsia triacanthos have the ability of fixing nitrogen dioxide (NO₂) and carbon monoxide CO in the atmosphere (Agarwal et al. 2018, p. 232). Similarly, Populus alba and Morus alba are also used for the phytoextraction of Nickel (Ni) and Cadmium (Cd) from the ground (Rafati et al. 2011, p.961). As a result, within the span of 30 years, the air and soil quality in the flood marshes, Votanikos and the stream will have improved to a considerable degree.

Ethical and moral issues

During the course of this graduation project a series of ethical and moral issues arose.

Re-evaluation of Third spaces

From the very beginning, it was imperative for me to escape from the established "cultural predisposition" that the Third spaces have **no cultural value**. That, as the young parts of urban development (Post War Era, after 1950), they have no age and historical value, since they are not necessarily fragile and they do not reflect the contrast between impermanence and timelessness¹.

I accept that the Third spaces are neither archaeological sites, nor buildings/ urban spaces with multiple meanings attached to them. However, they are spaces of high ecological diversity and aesthetic variety and that is where their cultural value lies. In this context, the Prophet Daniel stream is not viewed as an adverse feature of the urban environment that should be covered and hidden from the public eye, but rather a haven for urban wildlife that presents ample opportunity for urban transformation.

1. That comes in contrast to buildings or spaces that have age and historical value and that have resisted urban development to a certain extent. According to Ellen Braae, due to their age, such spaces appear to be fragile and transient, but at the same time, they reflect permanence and timelessness (Braae 2015).

Dealing with the palimpsest

Furthermore, dealing with the palimpsest of Eleonas entailed the danger of romanticizing its agricultural and recreational past and promoting a design proposal that would "restore" Eleonas to its pre-industrial phase. However, such a proposal would allude to a state that Eleonas cannot go back entirely, partly because it does not correspond to the needs of current society and partly because the physical resources of the site cannot support agriculture in such a large scale.

Instead of pursuing that route of action I chose to make subtle references to the agricultural and sacred past of the archaic, classical and post-classical eras and combine them with practices of sustainable design. By encompassing the water basins of the flood marshes with trees I am referring to the spatial qualities and mystic atmosphere of the alsos ($\alpha\lambda\sigma\sigma\zeta$) and at the same time I am storing water in the basins and providing shade and thermal comfort to the users of the space.

Working with social integration

The social milieu of Eleonas proved to be another challenge for this graduation project. Consisting of mostly groups of low incomes and different nationalities, refugees and Romani groups, the people of Eleonas have become social outcasts, isolated and segregated from the rest of society. The co-existence of such diverse ethnicities in a very poor post-industrial environment has inevitably led to social unrest. Therefore it was imperative for me to address these issues by promoting social integration in the Prophet Daniel stream.

I admit I did not address the Romani population that arbitrarily occupies Third spaces in the area due to the fact that they are constantly changing the location of their settlements in a very unpredictable way.

Nevertheless, I made it a point of promoting the social integration of refugees through the process of transforming the camp into hybrid agricultural neighborhood inhabited by both refugees and locals. By engaging several stakeholders (Agricultural School, refugees and permanent residents) in activities of soil remediation, cultivation of crops and maintenance in Votanikos, I am promoting the creation of social bonds between the parties involved. On a more personal level, I believe that such activities have positive effects on the psychology of individuals scarred from the trauma of war. Working with the earth, cultivating the orchards and selling the "fruit of their labour" in open markets along the stream can improve their mental wellbeing.

Financial implications

On a practical level, another issue has been the financial implications of the realization of such a project. Despite the fact that this aspect was not taken into account from the beginning of the design process, the question of whether the fragile Greek economy can finance such an endeavor became crucial. It is a fact that the financial crisis that lasted approximately 10 years has resulted to a very unstable economy in Greece. Nevertheless, signs of improvement in the last year have shown that the economy is slowly but gradually recovering.

In this context, it is true that many of the interventions proposed by my graduation thesis require a significant amount of money. However, they also provide several ways of recuperating the financial loss. Collecting, storing and reusing rainwater in the flood marshes, re-purposing the existing post-industrial buildings, re-envisioning the multifunctional character of the Polykatoikia typology and selling the products of the orchards and olive groves in open markets are all sustainable practices of good (financial) value.

Relevance

During the past few decades urbanization has been occurring at a very fast pace, claiming new territories by spatial expansion and occupying the last precious open spaces that are left. Urban growth, in combination with rapid climate change and the neglect of ecological processes, has had severe negative effects on the environment: land degradation, water shortage, fertile soil erosion, increasing temperatures and biodiversity loss are some of those effects. Therefore, improving the quality of life in urban environments and transforming them into resilient cities has never been more relevant.

At the same time, as current practices of urban development are failing to cope with the existing conditions, new opportunities are occurring. One of these opportunities are the unused and forgotten areas generated by urban growth that occupy large parts of the urban web. Despite their derelict appearance, these spaces provide a haven for spontaneous vegetation - the (so called) Third spaces.

The Third space is a concept forged by the theories of Ignasi de Solà-Morales and Gilles Clément and refers to all types of places that constitute a territory of refuge for biological diversity. As a result of their abandonment, the Third spaces evolve into secondary landscapes that are colonized by pioneer species and perform ecological services.

With Athens as the context of the proposal, the aim of this thesis is to explore the potentialities of the Third spaces in the new processes of urbanization and re-envision their role, by supporting that they are able to accommodate and establish ecological, morphological and cultural interrelations within the urban landscape. By using theoretical approaches on terrains vague and ruderal landscapes, ecology and landscape architecture, I wanted to create my own theoretical base for dealing with the Third spaces of Athens.

Needless to say, the significance of the project does not just lie on that basis; it also lies on the fact that it approaches urban environments as complex systems in which environmental, urban, cultural processes and spatial forms interact over time, thus creating conditions for new activities and patterns. Such an approach, however, could not have taken place and have had a viable result without addressing the intricacies of the site and its components, which, in the end, determined the outcome of the design project itself.

Last but not least, the context of this project can be used as reference for the transformation of other urban environments of similar geographical, morphological and cultural backgrounds. In order for that to happen, it must be clear that this graduation project does not provide a definite and absolute solution to a problem. By contrast, the aim of the research and design proposed is to take the field of study relating to the Third spaces of urban environments a step further.