



POLITECNICO
MILANO 1863

FEEDING ΕΛΛΙΩΝΑΣ

From a **marginal** reality to an **inclusive** community

Politecnico di Milano
School of Architecture Urban Planning Construction Engineering
Master degree in Architecture - Built Environment - Interiors
A.A. 2020-2021
Author: Nicholas Delle Donne
Supervisor: Lionella Scazzosi
Co-supervisor: Paola Nella Branduini

Abstract (English)

Introduction: The increase in the global population, the high rates of urban growth and climate change are the contemporary challenges that cities will have to face, and local solutions must be sought to combat the phenomena of social and urban marginalization on the territory. The neighbourhood of Eleonas in Athens is an example of a marginal reality, where it is possible to investigate an experimental intervention strategy built around existing social and productive structures, relating functions and people and revealing the possible tools to be adopted to facilitate inclusion processes within complex metropolitan areas.

Objective: This work evaluates the connections between territorial realities and research, with the aim of providing methodological principles and guidelines for the sustainable recovery of marginal urban areas.

Methodology: The research is introduced by an in-depth work focused on the historical, socio-demographic, physical and territorial regulatory aspects of the case study in order to understand its strengths and weaknesses. Afterwards, a large-scale urban strategy is proposed, aimed at urban, environmental and social conditions improvement. Subsequently, a significant area was analysed in order to put forward a project proposal.

Results: The analyses highlighted Eleonas' strategic potentials and problems. Further investigations conducted on the theme of public green spaces and urban agriculture in Athens revealed the need to build a system that provides functions, services and infrastructures.

Conclusions: The thesis provides a local design solution based on the integrative application of urban agriculture to social, cultural and commercial practices to stimulate a process of collaboration between different subjects, providing progressive strategic interventions with the aim of restoring and giving back spaces currently inaccessible to the population, stemming the phenomenon of urban poverty by strengthening the sense of community.

Abstract (Italian)

Introduzione: L'incremento della popolazione globale, gli alti tassi di crescita urbana e i cambiamenti climatici sono le sfide della contemporaneità che le città dovranno affrontare: occorre dunque ricercare soluzioni locali per contrastare i fenomeni di emarginazione sociale e urbana sul territorio. Il quartiere di Eleonas ad Atene è un esempio di realtà marginale, dove è possibile indagare una strategia sperimentale di intervento costruita intorno alle strutture sociali e produttive esistenti, mettendo in relazione funzioni e persone, evidenziando i possibili strumenti da adottare per facilitare i processi di inclusione all'interno di complesse aree metropolitane.

Obiettivo: Questo lavoro valuta le connessioni tra realtà territoriali e ricerca, con l'obiettivo di fornire principi e linee guida metodologiche per il recupero sostenibile di aree urbane marginali.

Metodologia: La ricerca viene introdotta da un lavoro di approfondimento focalizzato sugli aspetti storici, sociodemografici, fisici e sulle normative territoriali del caso studio per comprenderne i punti di forza e debolezze. Dopo l'acquisizione di tali informazioni, si è proceduto alla presentazione di una strategia urbana su larga scala finalizzata al miglioramento delle condizioni urbane, ambientali e sociali. In seguito, è stata analizzata un'area significativa per poter avanzare una proposta progettuale.

Risultati: Le analisi hanno messo in luce le potenzialità strategiche e le problematiche di Eleonas. Ulteriori approfondimenti condotti sul tema del verde pubblico e dell'agricoltura urbana ad Atene hanno fatto emergere la necessità di costruire un sistema che articoli funzioni, servizi e infrastrutture.

Conclusioni: La tesi fornisce una soluzione progettuale locale basata sull'integrazione dell'agricoltura urbana ad altre pratiche sociali, culturali e commerciali per stimolare un processo di collaborazione tra diversi soggetti. Vengono delineati degli interventi strategici in progressione con l'obiettivo di riqualificare e restituire alla popolazione gli spazi attualmente inaccessibili. Si vuole arginare il fenomeno della povertà urbana tramite il rafforzamento del senso di comunità.

Acknowledgements

Foremost, I would like to express my sincere and deep gratitude to my research supervisors, Prof. **Lionella Scazzosi** and Prof. **Paola Nella Branduini** for providing guidance throughout this research thesis and to Politecnico di Milano, Universidade de Évora, L-Università ta' Malta and NTUA of Athens.

Thank you, **Mum**, for always being present at every stage of my personal growth, for your work, for the sacrifices you have made to allow me to enjoy everything that life can offer. You have never held back, overcoming every obstacle along the way, going against everyone, without ever being discouraged, giving me the strength to face every difficulty head-on with tenacity and teaching me to seize as an opportunity every misadventure.

You've been by my side since I was a child, and you're still here for me, no matter how far away I am. Your encouragement has pushed me to always take a step forward to achieve my goals, moving away from my beloved Milano, but never forgetting my past and the values of our family.

Mom, your love has turned this world into a wonderful place to explore.

Dear **Dad**, you have succeeded in pushing yourself beyond your limits and questioning your certainties. I believe that in recent years we have both had the opportunity to reflect, to confront and to grow together, maturing a unique experience between father and son.

I wanted to express to you my greatest gratitude for this, teaching me an inestimable value, that of understanding towards others.

Dad, you are a very resourceful person. You have always found the strength to sacrifice yourself for your family, so that we never miss anything.

You have always encouraged me to open the wings of my mind, to look beyond the horizon and the importance of looking at reality through different perspectives.

Thank you, Mum, and thank you Dad for all the effort and dedication you have taken to raise me and make me the person I am now.

I love you.

I take the opportunity of this happy event to thank my family, my maternal grandparents, grandmother "**Nunzia**" and grandfather "**Mimmo**", for having always believed in me and for having always supported me with your smiles. I thank the paternal grandparents, grandmother **Bianca** and grandfather **William** who unfortunately cannot be here by our side physically but with the certainty of their presence from above.

Thank you "**Dionisiss**", for always being by my side during these months of work and for supporting me until the last. I thank you for being patient with me, for being my family in Athens and for making this city into Αθήνα μου, turning this period in Greece into one of the most beautiful of my life, a memory that I will always cherish with joy.

Thanks to friendships, the greatest gift after family.

I sincerely thank **Sara**, colleague and best friend in life, who has always been present in this university roulette, allowing me to live the University and my life with more serenity and happiness. You're my accomplice and you deserve the best. I love you.

Acknowledgements

Thanks to the legendary **Simona**, you are my person. You are an amazing friend, and it is thanks to you and everything we have spent together on that rocky island in the middle of the Mediterranean, Malta, that I had the opportunity to season my life unforgettable acts of madness.

You're beautiful as you are, never change.

Thank you, **Alessandra**, a warrior on whom I am sure I can always count and whose strength is of inspiration.

Thank you **Savino, Davide and Paolo**, for our endless conversations, for your moral support and for your "counseling", for having been close to me since the beginning of this University course among the many adversities that have occurred.

Thanks to the wise **Pietro** who with his calmness always manages to find the right words to fill my silences and doubts. You're a special guy and already as I told you, you always stay the way you are, cheerful and carefree.

Thanks to you **Matilde**, for the first years always spent together, for the desperate nights before the deliveries, for being there in the most fragile moments and for welcoming me into your life without thinking too much. For sharing so many exams, but not just university exams but all the tests that occur in life. Thank you for pushing me to do that internship in cold Denmark, always together. I love you.

Thanks to the tireless "**Magiu**", you are a strong girl, full of resources from which I learned so much. I hope you achieve all your goals because you deserve them all.

Thanks **Lucio**, you are an inexhaustible source of smiles and always push me to improve and has reach my goals.

Thanks to **Elisabetta** who shared with me from the first moment together, when we were sitting on the ground in the corridors of our High School 9 years ago, the passion for this subject and putting into effect all the efforts possible to be able to crown our common dreams.

Thank you, **Greta**, for teaching me the love of art through your passion. Sooner or later, I'm going to meet you in London so we can have a Spritz together in front of the Thames.

I would also like to thank all the people who have been part, albeit for short periods, of my human and professional growth.

Thanks to my fellow Irish adventurers, the good **Massimiliano, Federico, Alfredo, Giulio** and **Ludovico**. I always think of you with affection.

Thanks to the Erasmus friends who shared with me some wonderful experiences of study and life in Portugal, Malta and Greece.

When I think of Évora I remember with pleasure **Ajsi, Jorge, Claudia, Lisa, Jitka, Flora, Kevin, Irthe, Marcello, Almu, Anna, Raquel** and **Albert**.

Acknowledgements

In Malta I remember of **Kudjey, Elias, Jan, Vasco, Caroline, Giorgia, Angeliki, Taur, Kobus, Lorena, Chiara** and the great **Alberto** and in Athens I remember with affection **Martaki, Maraika, Julia, Lilia, Andrea, Alessadro, Liam, Jacob, Antonia, Kostas, Stavroula, Speppe, Raphael, Giuseppe, Lavinia, Tommaso, Lorenzo** and **Mariacristina**.

Finally, thanks to **me**. For constancy and for being able to reach the goal of this university course despite the many obstacles that have followed. I believe that Nicholas of five years ago would be proud of what I have become, always keeping in mind the teachings of the past and the present as an opportunity to realize the dreams of the future.

Contents

Abstract	5
Introduction	16
Analysis	18
A. Eleonas (Ελαιώνας)	19
A.0 Introduction	*
A.1 Athens within Attica Region	*
A.2 Eleonas within Athens' urban fabric	22
B. The different characters of Eleonas over time	24
B.0 Introduction	*
B.1 Agricultural Age: from the Ancient Period to the Ottoman Occupation	*
B.2 Industrial Age: from the XVIII till the XX century	30
B.3 Logistic Age: from the '80 till 1995	42
B.4 Commercial Age: from the Presidential decree in 1995 to the Double Regeneration Program	43
C. People of Eleonas	45
C.0 Introduction	*
C.1 Migratory phenomena	*
C.2 The population of Eleonas through the 1991, 2001 and 2011 censuses	47
C.3 Eleonas Refugee Camp	50
C.3.1 Housing the refugees	
C.3.2 Food supplies	
C.3.3 Education and School	
C.3.4 Working in Eleonas	
C.4 Eleonas investigation survey on refugees and local population	56
C.4.1 About refugees	
C.4.2 Local Population about Eleonas Refugee Camp	
C.5 Gypsy Population	58

* The page number corresponds to that of the previous paragraph above

Contents

C.5.1 The Scavengers: Eleonas' Union Market	
C.5.2 Interview with “ <i>The Scavengers</i> ” people, Athens, 26/06/2021- 04/07/2021	
C.6 Social exclusion in Eleonas	65
C.7 The media construction of Eleonas	67
D. Physical Analysis of Eleonas	70
D.0 Introduction	*
D.1 Administrative management	71
D.2 Land use	73
D.2.1 Industries	
D.2.2 Housing	
D.2.3 Commercial	
D.2.4 Unbuilt spaces	
D.3 Urban density	79
D.3.1 “ <i>City Piece by piece</i> ”: the phenomenon of polykatoikia and the informal extension of the periphery	
D.3.2 Eleonas and its walls	
D.3.3 Urban landscape of Eleonas	
D.4 Accessibility	91
D.4.1 Cars Accessibility	
D.4.2 Public transport Network	
D.5. Eleonas' Symbolic places	96
D.5.1 Natural elements	
D.5.2 Architectural elements	
D.6 Urban Greenery	103
D.7 Water Basins	106
D.8 Environmental Pollution	109
D.9 Living Eleonas	112
E. Athens' and Eleonas' normative framework	113
E.0. Introduction	*
E.1 Vision for strategic planning of the City Centre	*

* The page number corresponds to that of the previous paragraph above

Contents

E.2 Land use zoning and regulatory planning	117
E.2.1 Manufacturing	
E.2.2 Housing	
E.2.3 Recreational activities	
E.2.4 Challenges and questions on space	
E.3. Policies in Eleonas	121
E.3.1 Ancient Times till 1950s	
E.3.2 From the first unsubstantiated planning attempts in the ‘50 to the 1985 RSA plan in Eleonas	
E.3.3 1991-95 Presidential Decree: key points for the future development of Eleonas	
E.3.4 Post-Olympics Games 2004 and The Double Regeneration Program	
E.3.5 Athens-Attica 2014-2021	
F. A new life for Eleonas: The Double Urban Regeneration program	128
F.0 Introduction	*
F.1 The Double Regeneration Program	*
F.1.1 Interview with A&A Architects, Athens, 23/07/2021	
F.2 Regeneration for whom?	137
F.2.1 The citizens’ committee for the rescue of Eleonas	
F.3 Development trends	141
F.4 Eleonas as dead organ within the urban fabric	*
Strategy	144
G. PD 1995 as direction for the sustainable implementation of Eleonas	145
G.0 Introduction	*
G.1 Environmental urban green planning in Greek cities	*
G.2 Green Planning in Athens	147
G.2.1 Green spaces in Athens	
G.3 Master Plan agencies	157
G.4 The “ <i>Green</i> ” experience in Greece	*
G.5 Green infrastructure: definition	160
G.6 Assumptions	161

* The page number corresponds to that of the previous paragraph above

Contents

H. Urban Agriculture as a tool and possible direction to recover parts of the city	163
H.0 Introduction	*
H.1 Metropolitan Agriculture: socio-demographic dynamics, urban growth and food-city relationship in the Mediterranean	*
H.2 Urban agriculture and demographic dynamics	167
H.3 Urban Agriculture in Greece	*
H.3.1 Urban and peri-urban agriculture in Athens	
H.4 Urban growth and the food-city relationship	173
H.5 How family farming in Greece challenges the economic crisis	174
H.5.1 “ <i>The movement of the potato</i> ” (“ <i>Η κίνηση της πατάτας</i> ”)	
H.6 The fundamental characteristics of family farming in Greece	177
H.7 Trends and challenges of family farming in Greece	178
H.8 Assumptions	179
I. Approaching Eleonas	180
I.0 Introduction	*
I.1 Purposes	*
I.2 Dealing with Eleonas	*
I.3 Links, Hubs and Existing Nodes	182
I.3.1 Key Elements	
I.3.2 Hubs: Abandoned Areas	
I.3.3 Existing Node: Eleonas’ Symbolic Places	
I.3.4 Existing Nodes: Existing Greenery	
I.3.5 Existing Node: Residential Pockets	
I.3.6 Links: Road Axes and Water Channels	
I.4 Visions for a Future Athens	191
I.4.1 Athens in Recession post Covid-19	
I.4.2 Athens European Capital	
I.5 Objectives	195
I.6 Urban Agriculture as a tool to recover the Hubs	198

* The page number corresponds to that of the previous paragraph above

Contents

I.7 Methodology: Votanikos	200
Project Proposal	202
L. The project area: Votanikos (Βοτανικός)	203
L.0 Introduction	*
L.1 Why Votanikos?	205
L.2 Physical Analysis of Votanikos	206
L.2.1 Introduction to the Area	
L.2.2 Geometric Survey	
L.2.3 Built Environment and functions	
L.2.4 Permeability	
L.2.5 Barriers and obstacles	
L.2.6 Accessibility: private cars and public transport network	
L.2.7 Votanikos' Symbolic places	
L.2.8 Greenery	
L.2.9 Water Basins	
L.2.10 Environmental Pollution	
L.3 SWOT Analysis	242
L.3.1 Strengths	
L.3.2 Weaknesses	
L.3.3 Opportunities	
L.3.4 Threats	
L.3.5 Summing Up	
M. Design Proposal Hypothesis	251
M.0 Introduction	*
M.1 Concept	*
M.2 Stakeholders	252
M.2.1 Local stakeholders	
M.2.2 Supralocal stakeholders	
M.3 Insights	256
M.4 Step.1	257
M.4.1 Soil Preparation	
M.4.1.1 Project Actions and Stakeholders	

* The page number corresponds to that of the previous paragraph above

Contents

M.4.2 Sowing	
M.4.2.1 Project Actions and Stakeholders	
M.4.3 Resuming	
M.4.4 Preliminary Masterplan	
M.5 Step.2	270
M.5.1 Rooting	
M.5.1.1 Project Actions and Stakeholders	
M.5.2 Germination	
M.5.2.1 Project Actions and Stakeholders	
M.5.3 Resuming	
M.5.4 Intermediate Masterplan	
M.6 Step.3	279
M.6.1 Growth	
M.6.1.1 Project Actions and Stakeholders	
M.6.2 Maturation	
M.6.2.1 Project Actions and Stakeholders	
M.6.3 Resuming	
M.6.4 Final Masterplan	
M.6.5 Descriptive diagrams of the planned interventions of the final Masterplan	
M.6.6 Zoom	
M.6.7 Views	
M.7 Sketches	305
Conclusions	309
Bibliography	310
Sitography	314

* The page number corresponds to that of the previous paragraph above

Introduction

During my academic career, I had the opportunity to investigate how cities are the outcomes of the stratification of human relationships and the product of spatial solutions to the various criticalities that have occurred over time.

Our times propose new challenges that directly affect urban centres that must be faced in the short and medium term. In fact, it is estimated that the global population by 2050 will overpass the threshold of 9.8 billion individuals of which 68-70% will find shelter at the margins, not only urban but also social, of metropolitan realities increasingly hostile, fragmented and characterised by social inequalities stemming from scarce economic resources.

These phenomena directly concern my generation and all future ones and, as a student of Architecture, my aim is to contribute to the on-going debate on what tools our urban communities will have to adopt in order to approach these issues.

I had the opportunity to deepen into these issues during my Erasmus period in Athens thanks to the support of my professors at the Politecnico di Milano and the Professor of Urban Sociology, Dr. Penny Koutrolidou, from National Technical University of Athens.

When I arrived in Athens, I was particularly impressed by the district of Eleonas which, despite having a semi-central location, looks like a social and urban enclave, completely detached from the city.

Eleonas represents the spatial crystallization of the economic cycles of modern Greece, an area whose urban landscape is characterized by the constant repetition of large empty lots, industrial warehouses and the skeletons of large infrastructures never completed, determining a negative perception of the neighbourhood in the collective imagination.

During my first visit, walking through Eleonas, I had the impression of a completely uninhabited reality, until I accidentally met a father with his children playing in the waste, in the area of Votanikos and living in the nearby Refugee Camp. That meeting was so crucial that I was convinced to work on that neighbourhood and, first, understand it by studying its nuances so that I could see the way to take to help the resident communities.

The first part of the research is structured on the critical study of the historical, socio-demographic, physical and legislative aspects of Eleonas, information collected through documents, direct and indirect testimonies and several site visits. This approach gave me the possibility to get to know this reality in depth by bringing out its weaknesses and potentials. Eleonas is a mosaic of social realities, as well as spatial, precarious and poor, where every part of the puzzle is represented by communities from different origins, from the Refugee Camp in Votanikos to all informal Roma settlements, which have been repeatedly evicted from time to time, undermining the right to the city of everyone, including minorities and the weakest.

In addition, Eleonas is an area that has always been ignored by the legislation and expansion plans of the city, until a few decades ago, when the Presidential Decree (PD) 1995 (N. 1049/30.11.1995) was issued including Eleonas for the first time in the management plans and providing special regulations for the protection and improvement of the environmental and social conditions of the district, setting the grounds for the implementation of Green as a tool to achieve the objectives set. However, the PD 1995 has never been implemented so far.

PD 1995 Plan was the starting point for proposing a large-scale urban strategy involving Eleonas and integrating it within the surrounding urban context.

Through a process of comparison and reinterpretation, I am providing a new adaptation of

Introduction

PD 1995, suitable for the needs of the city of Athens of 2021 looking towards the future, by implementing a Green Infrastructure based on the recovery of all the abandoned areas (which we will call *Hubs*), on the conversion of road and water infrastructures into integration connectors (*Links*) and on the enhancement of symbolic places, residential areas and greenery (defined as *Existing Nodes*).

My intention is to provide initially a contextualized general framework, enabling us to go down the dimensional scale and focus on one of the *Hubs*, in this case that of Votanikos.

The selection of Votanikos is dictated, given the fact that in due course it will be subjected to future transformations for the commercial conversion of the area, through projects aimed at the construction of the new PAO Stadium and the VOVOS and NBG Office Building/Shopping Centre, the realization of which will have a significant impact on local communities which will be further evicted, destroying any social relations and deteriorating the existing economic fabric.

This is one of the reasons that have led me to deepen into Votanikos by proposing an experimental rehabilitation strategy built around productive and social structures already present in the territory with the aim of relating different human activities and connecting people.

Currently, the present realities are independent, and it is necessary to take into consideration all the social, cultural and economic aspects enabling us to put all the involved entities into a linking system, for themselves to collaborate, like an electric circuit, so that we can build a sense of community and belonging, where people can take care of each other.

In this way, people from different backgrounds and skills are brought into contact in order to contribute to the construction of a common vision where everyone can cooperate by providing unique solutions. The action consists of moving from a part way of thinking to an overall one, from an objective to human relationships in order to help the whole community, a process that can be defined as inside-out, based on the strengths and not on the weaknesses of these considered social groups.

In fact, these communities are described as deficient and this perception, in the long term, is internalized by convincing people that the only tool they have, to be rescued or that things change, is due exclusively to an external action, by an entity with financial resources to invest to “help” them, often producing actions that turn out to be negative for the community.

The realization of the sense of community motivates people to share their experiences and knowledge in a way that every citizen is no longer a client of a service but becomes the centre of a better and more inclusive community.

It is necessary to transform all these invisible resources into visible ones, where each group has the possibility to take sides by using its own forces in view of a common vision.

Analysis

#History #Society #Physicality #NormativeFramework #ChangesTakingPlace

Eleonas arises in respect of the city of Athens as an enclave, closed as a precious casket in which it is possible to read the crystallized richness of the great transformations that determined the history of Athens.

Eleonas is a complex reality, an organism that has acquired its own autonomy, unable to integrate with what the orbits around.

In order to understand the better project strategy to be adopted, with the aim to revitalize the area and to integrate it within the urban fabric of the city, a critical reading of the historical, social, spatial, architectural and regulatory facets that distinguish Eleonas nowadays was needed; analysis collected in this macro-chapter to provide the reader all the tools needed to have a complete overview of this outstanding reality.

A. Eleonas (Ελαιώνας)

A.0 Introduction

In the long history of the city of Athens, Eleonas is one of those areas that have undergone more transformations and great changes and that have determined its character in different historical periods.

In fact, the history of Eleonas is linked to the changes in the Greek economy that have taken place over the time and reflecting them into space and built environment and profoundly changing the landscape of this neighbourhood.

Eleonas was born as an area with an agricultural character since ancient times, a character that it maintained until the XIX century. After that, the area was directly involved in the industrialization and settlement processes of manufacturing activities, becoming a reference centre for the secondary sector.

In more recent times, however, the area has become the heart of Athens' logistics and transport, thus transforming the economic characteristics of the area which has become the centre of reference of many activities in the tertiary sector.

Today, however, driven by real estate investors, the area is subject to a slow regeneration process that will transform its character once again, making Eleonas a centre of services and commerce.

Before critically analysing Eleonas from a historical, social e demographic, physical, and regulatory point of view, it is important to make a general framework on the location of the neighbourhood within the city of Athens and in the region of Attica, also providing geographical and demographic information to better accompany the reader to Eleonas's study.

A.1 Athens within Attica Region

The modern city of Athens, the capital of Greece since 1834, is divided into 7 Municipalities and is positioned in the same position as the historic city on a territory that has been inhabited for more than 7000 years. [Figure.1]

The city is located within the Attica basin, on the Aegean Sea, and the available space is very limited as the morphology of the territory is characterized by the presence of mountains and hills. [Figure.2]

Mount Hymettus [Figure.3], Mount Penteli and Mount Aegaleo represent natural limits that determine the plain of Attica together with the river Kfissos, located instead in the eastern part of the region. Another important water source is represented by the Ilissos river which flows into the Faliro bay.

Currently both rivers have lost their natural characteristics as they have been channelled and drained to allow the expansion of the city within the Region. The same fate occurred for the approximately 550km of smaller canals that once flowed across the territory. However, the plain of Attica stretches from North to South for 22 KM and from East to West for 10 KM. Here, today, the urban agglomeration of Athens has reached its maximum expansion, causing the most recent settlements to pour out of the Basin. [Figure.4]

The resident population in the Attica region is 3 686 371 inhabitants, of which 3 130 841 live in the urban area of Athens out of a total population of 10.8 million inhabitants. Attica is one of the 13 regions of Greece and is divided into 8 provinces, divided between 66 municipalities. Of the 8 provinces, five are in the region's plain (Athens North, Athens West, Athens South, Athens East and Piraeus) while the remaining two consist of West and East Attica.



Figure.1
Title: Greece, Satellitar view
Source: googlemaps.com



Figure.2
Title: Attica, Satellitar view
Source: googlemaps.com



Figure.3
Title:The city of Athens with in the background Mount Hymettus
Source: Richard F. Ebert, 2020



Figure.4
Title: The city of Athens, aerial view
Source:Keith Jenkins's Archive

A.2 Eleonas within Athens' urban fabric

Walking along the axes to the West to reach Piraeus from the Historic Centre of Athens, you can perceive visually and spatially a suspension of the compact urban fabric of the city until then returning shortly after, to its original characteristics. [Figure.5] This short break consists of the Eleonas neighbourhood, an area of approximately 900 acres located in the western part of Athens, 2km from the Acropolis. Here the space is characterized by a mosaic of abandoned industries and small unbuilt plots. Eleonas is presented as crystallized and introverted, with visible traces of the different eras and phases that have followed one another over time. However, it is only possible to perceive the boundaries of the area, as Eleonas presents itself as a ghost in the eyes of the visitor, hidden behind its own physical limits whose geometry is defined by the large axes of flow that connect the urban heart of Athens with that of the Piraeus. Its strategic geographical position on the territory, between the City Centre and the Port of Piraeus [Figure.6] was decisive for the prosperity of this land over the centuries, from ancient times when the area was used for the cultivation of olive trees, up to the modern era where Eleonas became the theatre of the country's industrialization processes. In fact, the space dedicated to the cultivation of the olive tree decreased over time to support the new needs of a rapidly growing city overwhelmed by the industrialization process till all the agricultural activities and fields were replaced by manufacturing factories as it will be explained in the following Chapter focusing in the different characters of Eleonas over the time.

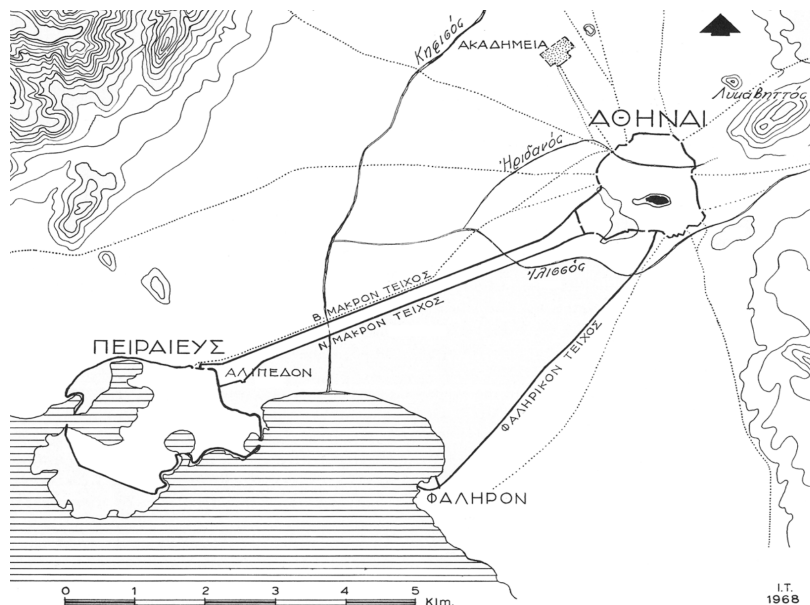


Figure.6
Title: The classical city of Athens, 1968
Source:Ioannis Travlos's archive



Figure.5
Title: Eleonas within Athens
Source:googlemaps.com

B. The different characters of Eleonas over time

B.0 Introduction

Eleonas is one of the oldest neighborhoods in the city of Athens and has contributed in a fundamental way to shape its destiny.

In fact, although today it can be considered a detached reality, from a social and urban point of view, Eleonas has always had a mutual and indissoluble relationship with Athens and has been the pulsating centre of agricultural and industrial production, guaranteeing prosperity to the capital.

The neighbourhood has always been able to adapt, to change and to host new settlement and production activities according to the economic changes, always remaining a point of reference for the population. It can be said that Eleonas reflects the economic cycles that have followed one another over time and that have characterized the economic history of Greece, transforming them into built environment within the city.

This chapter studies and analyses the history of Eleonas and its relationship with Athens through historical documents, direct sources and indirect testimonies of those who have experienced the neighbourhood first-hand and its changes over the years. The goal is to make the reader understand the wealth that lurks behind a neighbourhood that is now considered by the Athenians as independent reality from the city and therefore to provide the tools to have a critical and comprehensive vision of economic, social, and spaces transformations that have changed the character of Eleonas.

B.1 Agricultural Age: from the Ancient Period to the Ottoman Occupation

Eleonas is nowadays known by the inhabitants with the original toponym which was already used in ancient times. In fact, the word Eleonas in Greek literally means olive grove (Ελαιώνας).

The olive tree has in fact a profound link with the history of Athens and with the area of Eleonas, since its ancient times.

In the myth of the dispute between Athena and Poseidon, to decide who should become the protector of the city, it is told of the strength of Athena who managed to grow the first olive tree on the rock of the Acropolis [Figure.1], on a territory, that of Attica which according to the descriptions of Dion Chysostom was completely rocky and devoid of any type of vegetation.

For this show of strength, the Athenians and their king Kekropos decided to elect Athena as protector of the city (Bofilias, 2005). This olive tree was Athena's gift to the city and from this sacred specimen other 12 were born, one for each gate of the ancient city.

These trees were thus planted, under the order "*to fill lean and treeless Attica with olive trees*" by the King Peisistratos, in the first olive grove of Athens on the banks of the sacred river Kifissos, in what at the time represented the most fertile territory in Attica due to the flooding of the river during rainy periods.

Thus originated this forest that ran from the slopes of Mount Parnitha to Faliro Bay, on both banks of the Kifisos River. This area, defined as "*the Holy Olive Grove*" or "*The most beautiful suburb*" [1], represented for the Athenian citizens a place dedicated to recreational

1 Sotiriou A.G., "*The oils of Athens in Diary of Travel Association*", Athens, ESTIA, 1926.



Figure.1
 Title: Athena fighting Poseidon with the Olive tree in the background.
 Source: "Grandi Miti Greci", Volume 22: Poseidone – La forza del profondo.

activities and walks due to the beauty of its landscape. Moreover, in this valley, mainly in the northern part, there were various pastures and floral crops, cereals and vines and there were also several plots dedicated to the production of vegetables and fruit trees such as the gardens of Rentis.

activities and walks due to the beauty of its landscape. Moreover, in this valley, mainly in the northern part, there were various pastures and floral crops, cereals and vines and there were also several plots dedicated to the production of vegetables and fruit trees such as the gardens of Rentis.

Its location, near the Kifissos river and with a part that flowed towards the sea, allowed the passage of sea breezes and winds transforming Eleonas in the perfect area to develop agricultural activities. [Figure.2]

Between the VI century BC and the V century BC under the rule of Pericles, after the Persian wars, Athens reached its cultural, artistic, political and economic apogee.

The city had signed important trade agreements with other Greek *polis* [2] and had consolidated democracy as a form of government.

The city had established its hegemony in the region thanks to two urban centres [Figure.3], that of Athens and the one that orbited its port, the area of Piraeus, which allowed a commercial connection with the rest of the known world.

In particular, the production of oil was of vital importance for the economic well-being of Athens as it represented a fundamental product for commercial trade.

Furthermore, the olive tree was the symbol of Athenian democracy, and its branches were used as a prize in the ancient Olympic games. [Figure.4] Aristotle himself, in his work "*Athēnaion Politeia*" reports how the Athenians took care of the olive trees, as if it was a sort of cult, and the social importance that these plants had in greek culture.

2 Polis is a type of city-state belonging to Greece's political and urban organisation of the territory in classical age



Figure 2
 Title: Eleonas' Panorama view illustration
 Source: Ferdinand Stademann, 1853

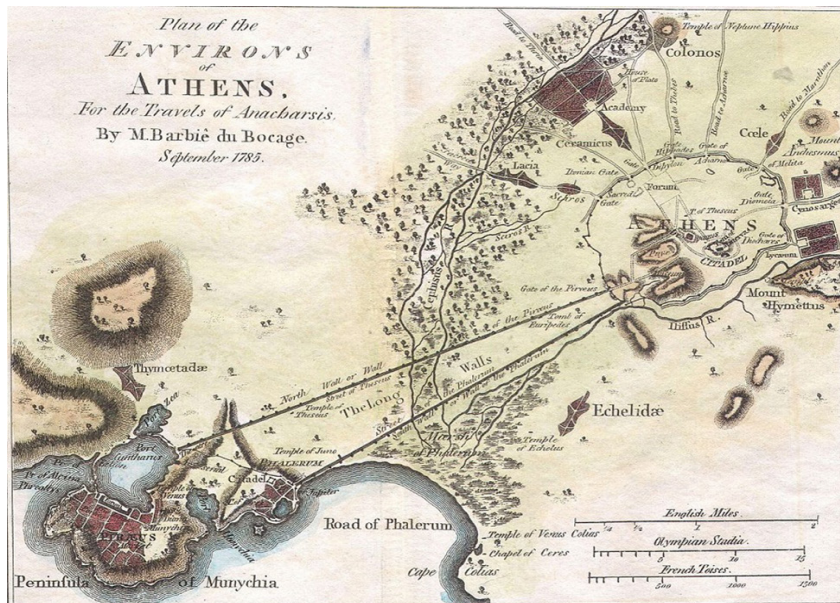


Figure 3
 Title: Athens and Piraeus
 Source: M. Barbîe du Bocage, 1781



Figure.4

Title:Nike, winged goddess of victory in ancient Greek mythology, presents a laurel wreath and sash to winners of the Olympic Games.

Source: Photograph by deagostini/Getty Images

The appreciation of the Athenians for this olive grove is reflected in the words of Sofloce who said to Antigone:

“Here the place seems sacred, thick laurels and olive trees full of vines and in the middle of the night motionless sweeten the world to song [...]”

The oil trade and its production guaranteed prosperity to Athens and Eleonas: the city expanded, especially to the west of the walled city where once there was the most important gate for the Athenians, what was defined as “Dipilon” (Double Gate), where the Sacred Road (Today Iera Odos) ended, connecting the heart of Athens to Elephis and the port of Piraeus passing through the Eleonas area.

Also, in this east area, close to Eleonas, the Academy of Plato [Figure.5] was founded in 387 BC. This institution represented the greatest philosophical school of the ancient world until its destruction. During Hellenistic and roman times not great changes were taken, just in 88 BC the Romans, on the order of Emperor Silla [3], destroyed the Academy and part of the Sacred Olive Grove of Eleonas.

The School of Plato will only be reopened in 410 AC at the hands of the Neoplatonists and will remain in business until 529 AC when the Eastern Emperor, Justinian I, decreed its permanent closure, a fatal act for the economic, social and cultural life of the city. In the same period, it was starting the construction and conversion of the old temples into churches, among which many were built *ex-novo* in the area of Eleonas.

It is important to report, from a planning point of view, Eleonas was first depicted in the VI century BC. There was legislation that protected the area and avoided being built with King

3 Boudouraki G. and Gitzias A., “Continuities and Discontinuities in a Changing Post-industrial Landscape”, Athens, NTUA, 2008.



Figure.5

Title:Reconstruction of Plato's Academy, Athens

Source: Francois Pouqueville (1770-1838), "*L'Univers pittoresque*", Europe, published by Firmin Didot Freres, Paris, 1835.

Peisistratus (561-527 BC)

Following the fall of the Western Roman Empire in 476 AC, Athens will continue to be part of the Eastern Roman Empire.

In this era of transition, Athens became the periphery of the Empire whose centre orbits around the capital Constantinople and suffers, together with the entire continental area of Greece, of a consistent demographic decline linked to the instability of the region triggered by the continuous Germanic incursions of the tribe of the Goths, Slavs and Avars.

Athens after a long and steady decline, experienced only a brief period of rebirth and prosperity between the XI and XII centuries AC under the reign of the Komninos dynasty.

In this period, parts of the Agora were rebuilt, and Athens established itself in the Mediterranean for the production and trade of dyes and soaps.

For centuries to come, particularly following the Fourth Crusade in 1198, Athens was a land of conquest by various foreign populations.

In 1204 it fell into the hands of the Latins, then the Catalans, then the Florentines and finally in 1458 into the hands of the Ottomans who had definitively conquered a few years earlier, in 1453 AC, the Eastern Roman Empire with the conquest of Constantinople.

In this transitional period the population of Athens stood between 12,000-15,000 inhabitants.

Eleonas, representing the heart of production, was destroyed several times but thanks to the attention and care of the population it always managed to be recreate it and

make it prosper.

As it can be seen by Niccolò da Martoni, notary from Capua that in 1395 wrote:

“The city is between two mountains and surrounded by a wonderful plain full of beautiful crops of olive trees “. [4]

Athens under Turkish domination regained its role as a commercial city [Figure.6] and supplied the Ottoman Empire with olives, honey and olive oil [5], all products coming mainly from Eleonas.

Thus, Athens again became, after many centuries, a pulsating centre and spot of migratory phenomena, where migrants with different origins, customs and social affiliations settled in different parts of the city, including Eleonas.

This district represented a very attractive investment opportunity and thus, many wealthy Greek and Turkish families settled there with their estates.

One of the richest landowners was Mehmet Ali who owned more than 50 lands on which about 2000 olive trees stood [6] and he made it possible the construction of an aqueduct to irrigate his own fields.

At the time, the population of Athens was divided into four social classes linked to the economic status of the individual groups:

- “*Xotarides*” represented the group at the lower level of the social system and was made up of farmers and those who worked on the estates of large landowners and lived in the pomerium, outside the walled city;
- “*Pazarites*” was the social group dedicated to the trade and production of Athens products, such as honey, olive oil and soaps;
- “*Noikokyraioi*” was the class of large landowners and those who controlled the production of products to be traded and was a group of 24 families;
- “*Archondes*” was the elite of the city, 12 aristocratic families with Byzantine noble descent whose members presided over the city council.

The different social groups were living in specific areas of the city as well the production of goods had a defined geography within the urban fabric.

All manufacturing activities were located outside the city, mainly they along the Iera Odos axis, which led to the Port of Piraeus.

Along this road, in fact, activities related to the production of paper, ceramics, oil mills and soaps were born. The construction of the new production nuclei took place nearby of Eleonas. In the XVII century Eleonas still represented a prosperous centre for the cultivation of the olive tree. The products obtained such as oil and olives were exported throughout the Mediterranean, from Marseille to Constantinople, and their marketing represented the beating heart of the Greek economy. In 1675 the British poet Bernard Randolph, during his stay in the capital, described the area of Eleonas as:

“The olive grove is so dense towards the western side of the city that it looks like a forest it stretches across miles”.

4 Ropaitou Z. and Tsapareli., “*Eleonas of Athens, the place and its people in the passing of time*”, Athens, Editions Filippoti, 2006.

5 Karydis D., “*Urban planning of Athens during the Turkish occupation*”, Athens, NTUA, 1981.

6 Biris K.H., “*Arvanites: The Dorians of Modern Hellenism*”, Athens, s.n., 1960.



Figure.6
 Title: Plan of the city of Athens during the years of Ottoman rule.
 Source: Coubault, 1800. (Gennadio Library).

This image helps to understand the attention paid to this olive grove and its importance and link with the city.

In 1673 the olive groves of the city produced around 1200 tons of olive oil with its 48 olive pressing plants. This scenario will begin to have a consistent change with the phenomena related to the industrial revolution and internal migration that will invest Athens in the short term. In fact, because of its strategic position and the available water resources, Eleonas will become an attractive pole for the future establishment of industrial activities.

B.2 Industrial Age: from the XVIII till the XX century

Between 1821 and 1832 Greece was the theatre of war to achieve independence from the Ottoman Empire and causing a deurbanization process. [Figure.7]

After the revolution all the lands owned by the Turks were distrained and then owned by the Greek State. [7].

Since its unification in 1832, Greece had a fragile economy with limited investment capacity.

Furthermore, there was a deficiency on the part of the state in controlling the private sector and producing regulations.

In 1833 Athens was named the capital and it is estimated that the resident population at the time was just over 4000 inhabitants. The city was settled in the same location where once there was the ancient city, on the northern side of the Acropolis. [Figure.8]

7 See *fn.4*



Figure.7
Title: Battle Scene from the Greek War of Independence 1821.
Source: Georg Pelberg, 1821



Figure.8
Title: A view of the city of Athens in XIX century
Source: painted by Richard Temple (1810).

The culture of the newborn Greek state was strongly influenced by the great Western powers, by the Austro-Hungary Empire and this manifested itself in the first expansion plans of the city and in the neoclassical architectural style used as architectural style. In fact, many western architects and urbanists were called to join and design the new

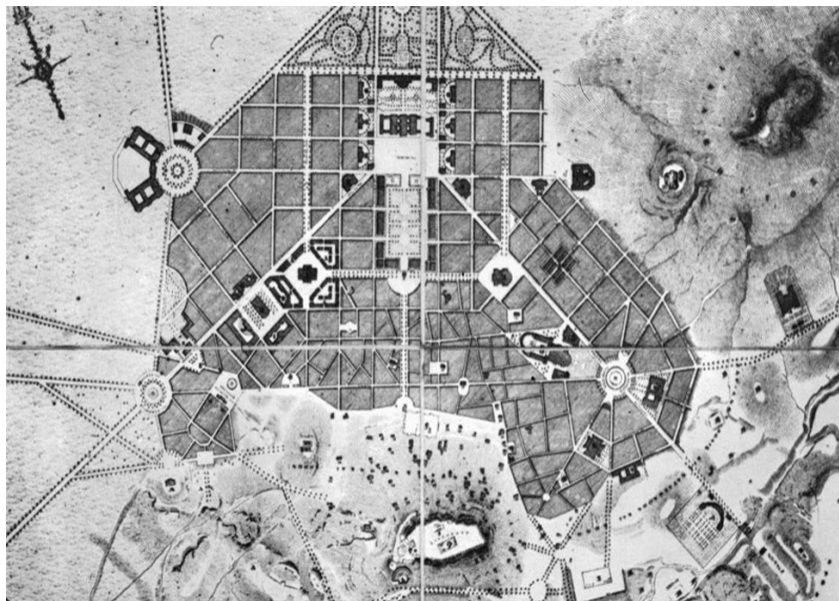


Figure.9
 Title: First planning proposal for Athens
 Source: by Stamatis Kleanthis and Eduard Schaubert (1833)

masterplan of the city. Under the dominion of King Otto, son of King Ludwig I of Bavaria, the new urban layout of Athens was developed by foreign personalities with the aim to make Athens a worthy western capital.

The first plans proposed in 1833 can be traced back to Stamatis Kleanthis (1799-1862) and Eduard Schaubert (1804-1860), Prussian architects and urban planners, who proposed the new layout of the city. [Figure.9]

At the time the population was multi-ethnic and multi-cultural with native Greeks, Byzantines, Turks, Roma and Egyptian and it was constituting a diversified society in different social layers. The population was divided in the different areas of the city and the plan proposed managed to accentuate the strong social segregation of neighbourhoods between East and West part of the city, respectively to rich and poor.

Anyway, the masterplan was based on the creation of a triangle, whose base coincided with the acropolis converging to the north with the construction of a new Institutional Building, where nowadays there is Omonia Square. The following year, after a review by the architect Leon Von Klenze (1784-1864), it was decided to place the construction of the building in the western part of the triangle, near the Keramikos district. This proposal was later abandoned as the proposed area was one of the unhealthy and poorest areas of the city and for this reason it was decided to move the construction of the building and the institutional and administrative heart of the capital to another area. The new institutional building was then built, based on a project by architect Gaerthner, in the eastern part of the triangle, thus leaving free space for future industrial development in the western part of the centre, in Eleonas. In fact, the North-West area with Eleonas included was selected with a use of land to settle centres of productions

and factory.

This industrial-agricultural feature that will be characterizing Eleonas emerged in “*The Broader Athens*”, a document written by lawyer Stilianos Leoudas in 1919 and focused on the outskirts of the city centre. [Figure.10] This document it’s useful to understand the spatial organization of the metropolitan region of Attica.

After these plans new figures will enter the scene as Ludwing Hoffman in 1908 and later, between 1915-18 Thomas Hayton Mawson whose plans focused on the implementation of the urban fabric of the Historical Centre.

Since 1833, the year in which Athens was established as the capital, there has been a very important demographic growth. The urbanization rates of the city were equal to 7% per year and in a few years the population exceeded 50 000 inhabitants.

The demographic and spatial growth of the city resulted in a necessary implementation of the infrastructure system. Thus, the road network was expanded with the construction of Piraeus Avenue, a road connection between the Port and the city centre and the connection with the Peloponnese region.

Instead, in 1835 the construction of the first railway line in Greece was planned, a new network of 8.8 KM which connected Piraeus to the city of Athens. The works for its construction were only started in 1857 and then concluded the following decade in 1869. [Figure.11]

The construction of the railway, located in the eastern part of Eleonas, had a strong environmental impact on the area as it is estimated a substantial felling of about 30 000 trees out of 117 000.

In 1881, by decree of Prime Minister Koumondouros, the railway network was further expanded with the aim of making Greece a fundamental hub for trade between Europe and the East and to give an impetus to the homogeneous development of the country. Athens due to these infrastructure implementations became an attractive pole for the establishment of new industries, especially in the western areas of the city, close to the railway and the road leading to Piraeus.

An influx of people who came mainly from the peripheral areas of Greece, came to the city in order to settle there.

The city began to grow in an uncontrolled way particularly in the North-West, in opposition to the general plan which instead indicated a development towards the South.

In 1907 the population of Athens exceeded 167 479 inhabitants. Population growth also meant a greater demand for food. Thus, it was that the decline of the Eleonas olive grove slowly began, in which it was converted close to the First World War, to agricultural land destined for horticulture and the cultivation of vineyards to satisfy the food needs of the city [Figure.12] as Sepolia’s and Kolokynthos’ gardensthat were later destined to host the first manufacturing activities.[8]

In 1920, following the First Great World War, there was a rapid economic development and the birth of small and medium-sized enterprises throughout the Greek national territory.

Thousands of companies linked to agricultural and industrial-handicraft production were thus founded. In fact, in 1920 there were 33 704 craft and industrial units operating throughout the national territory, of which 92% consisted of small businesses with 1-5 employees.[9]

Economic growth, correlated to the increase in population, slowed down when the trend of emigration from Europe to the New Continent was established, a phenomenon that also

8 Agriantoni C., Bournova E., Papathanassopoulos K., Progoulakis G., Riginos M., Charlaftis and Kremmidas, V., “*Introduction to modern Greek economy history (18th-20th century)*”, Athens, Printed George Dardanos, 1999.
9 Kanetakis G., Beneki E. and Sarigiannis G., “*Agios Iannis Rentis: the historical and urbanistic evolution*”, Athens, AIRM, 2002.

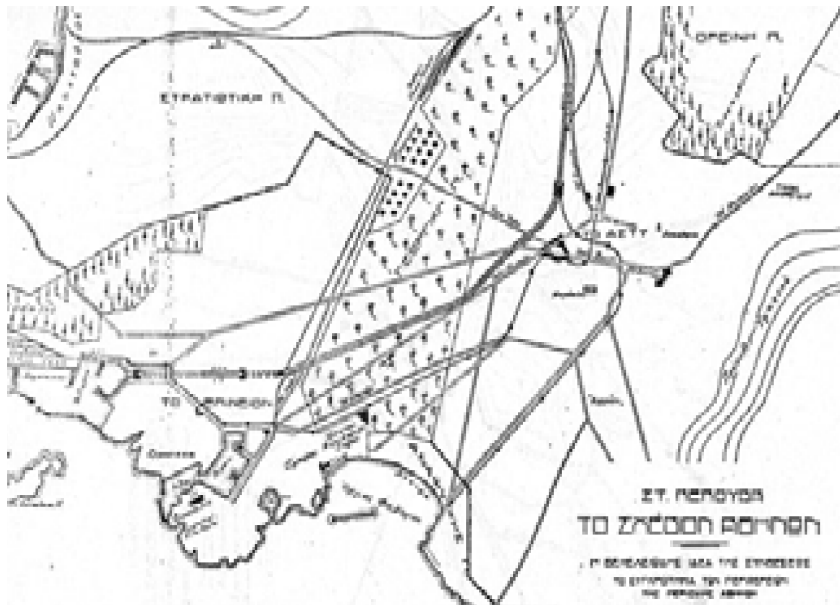


Figure.10
 Title: Proposal for the land use in Athens, Eleonas still represented as agricultural land
 Source: "The Broader Athens", St. Leloudas (1920)



Figure.11
 Title: Athens-Piraeus Railway 1969
 Source: By Athens to Piraeus Railway's (Αττ' Αθηνών εις Πειραιά Σιδηροδρόμου) Archive.

involved Greece and which hindered the rapid urbanization of Athens. Despite this population haemorrhage, in Greece, the number of industrial and artisanal activities, in 1930, amounted to a figure equal to 67 892 units, more than double compared to 1920 [10]

10 See *fn.8*



Figure.12
 Title: Eleonas in the '20s
 Source: Nikaia-Agios Ioannis Rentis' Archive

In addition to the advantages linked to the spatial location, Eleonas presents an adequate typography for industrial settlement processes, a flat territory rich of underground water provided by the river Kifissos. These characteristics favoured the establishment of the first manufacturing activities to produce various goods such as tanneries, soap factories, activities related to the production of ceramics.

Subsequently, the new industrialization processes that were involving Europe also affected the Eleonas district, creating according to the survey conducted by NSSI in 1984 about 38 000 jobs in this district over time. Among the first wave it can be remembered the beverage industry Ivi (HBH) in 1884, the Chropei industry in 1883m ka Faliro electrical station in 1903 and the Tavros slaughterhouses in 1914 and the Elais oil industry in 1920.

In 1922, following the military campaign of Greece in Asia Minor, better known as The Great fire of Smyrna, after the destruction of the city of Smyrna the entire area between Greece and Turkey was in a situation of strong instability which led to important migratory phenomena. In just a few years, more than 300 000 refugees arrived in Athens.

In 1928 the population of the city was composed of 43% by internal immigrants, 28.7% by Athenians and 28.2% by refugees. [11] [Figure.13]

This exponential increase in population had direct consequences on the spatial development of the city. In fact, a process of random growth of new settlements had started, which had escaped the control of urban planning. This led to a consistent informal development of entire neighbourhoods which were then regulated by a special commission, the Commission for Refugee Settlements (RSC), set up in 1923 to deal with the phenomenon.

Despite the efforts made to relocate and plan the new parts of the city, the situation was completely out of control. In this way, entire areas and agricultural land were occupied by immigrants to build the new parts of the city that literally looked like slums.

11 Dritsa M., *"Industry and banks in Greece during the interwar period"*, Athens, Educational Institution National bank, 1990.

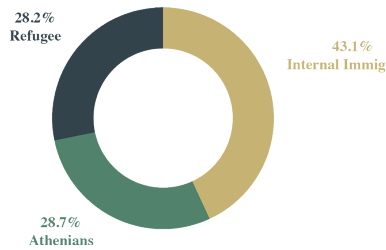


Figure.14
 Title: ETMA Areal view
 Source: SMPE 2008

The city grew in different directions, without any kind of planning. Many of these new areas were then legalized and were included in the urban plan. Some of these new slums were also created in Eleonas, precisely in its inner part, in the areas of Nikaia and Tavros. The influx of migrants had an impact on Greek industry as they represented low-cost labour and this factor gave a further boost to the industrial development of the area around Eleonas.

In fact, in this first period, some of the most important Greek industries settled in the immediate vicinity of the Eleonas district, along the Piraeus and Iera Odos road. These include ION (1926), VIAMYL (1926), the silk and nylon industry ETMA (1928) [Figure.14], EVGLO (1930), The Athenian Paper Manufactory (1933), LANARA (1933), the MANOS oil mill (1934), EVGA (1934) and VIS (1936).



Figure.14
 Title: ETMA Areal view
 Source: SMPE 2008

All industries that were specialised into textiles, metalworking, wood industry, leather goods and food supplies.

Following the Great Depression of 1929 - world economic crisis - Greek manufacturing

12 Kanetakis G., Beneki E. and Sarigiannis G., “*Agios Iannis Rentis: the historical and urbanistic evolution*”, Athens, AIRM, 2002.

production reached its peak and then went into decline, if not completely interrupted, with the beginning of the Second World War in 1939 and then recovered in the post-war.

Until the outbreak of the Great War, industrial activities were located along the Piraeus Road and in the vicinity of Eleonas.

It was only after the 1950s that Eleonas was directly affected by a second industrialization process.

This is because in the first half of the 1900s, Eleonas still maintained a strong agricultural character.

Despite the drastic reduction of the land destined for olive cultivation, when the number of remaining specimens was equal to 50 000 units, many lands had been destined for horticulture and were essential to meet the growing demands for food, in particular way to overcome the famine in the city during the occupation of Athens by the Nazis from 1941-45.[12] Only a small percentage of the plots were converted to house and industrial complexes at this first stage.

The end of the Second World War represented the first step to set the reconstruction process in Greece to shape a country that had been devastated by the war.

Many of the urban centres of the country were destroyed and thus, a new migratory phenomenon of flows of people to the capital was triggered.

In a few years, more than a million inhabitants arrived in Athens and Piraeus. It was necessary to restart the economy of a suffering country, restart production processes, realise a plan to house all migrants and implement and restore the infrastructures damaged and destroyed during the war.

Two plans were proposed to support the reconstruction of the country: the first consisted in favouring the development of the infrastructure system and heavy industry through direct investments, with money received from the Marshall aid plan.

The second, on the other hand, concerned the building-residential sector and investments dedicated to the development of agriculture as the main engine of recovery and the implementation of light industry and it was this plan that was then selected to restart the Greek economy. It is important to underline that the development of heavy industry and manufacturing in Greece was an exception since the economy has always based itself on small-medium companies which was related to the small private propriety [13] and it constituted with companies into agriculture the economic fabric of the country. In the 20th century, the process of dividing agricultural lots into small lots that can be sold began. When the areas reached a high density, they were legalized by presidential decrees. The city pattern is the result of a lack of growth planning and building legislation.[14]

An organized plan was studied and developed on a low-scale building system, also called "*Polykatoikia*" (Πολυκατοικία), a system based on a multi-storey building with different owners, basically a typology that we could define as a condominium.[Figure.15]

Furthermore, it was used the "*Antiparochi*" (Αντιπαροχή) practice. This was a provision that allowed landowners, who could not financially afford the construction of these residential units, to enter a contract with a construction company which had to take care of the construction of the new lot and as the terms of the contract they should have assigned some of the apartments to the landowner. This system became the most popular method for financing and building new condominiums from the 1950s onwards.

13 Vaiou D., Mantouvallou M. and Mavridou M., "*Social dynamics and urban development space. Readings in Greek town planning*", Athens, NTUA, 2009.

14 Loukopoulos D. and Kosmaki-Loukopoulos P., "*Athens 1833-1979: the dynamics of urban growth*", Boston, MIT, 1980.



Figure.15

Title: Polykatokya under construction, Athens

Source: <https://www.domusweb.it/en/architecture/2012/10/31/from-dom-ino-to-em-polykatoikia-em-.html>

With these measures and with the minimum invested capital, the cities were rebuilt autonomously, managing to satisfy the housing needs underway without having a real welfare program.

Basically, this system was just based on the division of agricultural lots into small lots that could be sold to realize the buildings and then when area reached a high density, they were legalized by presidential decrees.

So, the final result was a city pattern due of a lack of growth planning and building legislation. [15][Figure.16]

In 1955 the resident population in urban areas in Greece stood at 37%, of which 50% of the total resided in the urban agglomeration of Athens with a population of 1.4 million. The following decade, the residents in Athens reached 2.5 million inhabitants and then exceeded the threshold of 3.4 million individuals in 1981. Athens and the urban centre of Piraeus began to grow rapidly until they met and transformed into a single mass and joined together by the urban continuum pattern of the city.

The intense building activity that took place in these decades decreed the entire occupation of every free land within the cities, giving shape to the modern and compact city without public spaces and parks.

Instead, to encourage the relaunch of the industry, in 1953 the ΝΔ 2687/53 law was approved which decreed a simplification program to favour the processes of establishment of manufacturing activities and the birth of new industrial nuclei through inflows of foreign investments. In fact, Greece in the period between 1960-74 had a relative industrial boom thanks to foreign capital and companies that decided to open branches there due to the few restrictions, low labour costs and for the flexible tax regime.

Thus, the first industrial centres initially settled mainly along the railway and road axes that

15 See *fn.14*



Figure.16

Title: Typical View of Athens, 2000

Source: Dimitris Philippides, "Modern Architecture in Greece", Melissa, Athens 2001. Courtesy of Dimitris Philippidis Archive

led and connected the Centre of Athens with the Piraeus Area, as on the Odos Pireos axes and the Moshato area. The gradual saturation of these areas led to an increasing pressure on the neighbouring areas including Eleonas. In this subsequent phase, the industries settled inside the area, gradually replacing the land devoted to agricultural production.

Thus, it witnessed a slow process of conversion of Eleonas into an industrial pole, changing the use of land use from agricultural to manufacturing. Its excellent strategic commercial position, the presence of a usable reservoir and the immediate proximity of residential areas of workers supplying cheap labour, Eleonas became the industrial heart of Athens.

Eleonas promised to be the perfect place to set all the activities that were repudiated by the historic centre, such as warehouses, markets and industries.

In 1959 the Central Fruit and Vegetable Market of Athens was in fact moved to the southern part of Eleonas, in the area named Rentis.

The National Electricity Company DEI and the National Telecommunications Agency OTE were subsequently placed as well in Eleonas.

In addition, industries such as Papadopoulou (1955), VIAMAX (1958), Mozakis Textile (1957), APCO (1959), PITSOS (1959), AMSTEL (1963), VIANYL (1964) were established. Despite the settlement trend of small and medium-sized industries, Eleonas, due to its proximity to the centre, was not suitable for hosting heavy industry. Thus, the few latter began to choose new areas for their positioning, especially along the axes of the Athens-Lamia highway. Anyway, in order to better understand the nuances that animated the neighbourhood today, in 2006 it was created in a book, Zoe. E. Ropaitou - Tsapareli's book "*The Olive Grove of Athens - Space and people over time*".

This text tells direct testimonies of the people who experienced these changes from the 1930s to the 1980s.

From the stories of the inhabitants emerge the changes that took place from the era of orchards to the prevalence of industrial activities.

Here is a short collection of extracts from these testimonies that will help us understand Eleonais' souls.

George Skiadopoulou (Γιώργος Σκιαδόπουλος) SOFTEX driver, originally from Corfu and resident in Votonikos since 1950 (Op. Cit. Pp. 264):

“A relative of my wife worked at SOFTEX before me [...] She also recommended me me there. SOFTEX is Agios Polykarpos and Kefalas. I was walking from it home. To the right and left were orchards. We also stole some cabbage. It was not called then SOFTEX. It was called Athenian Paper Mill. In the beginning it had only two machines. It worked then in shifts. It did not stop at all. The shifts were: 6-2, 2-10, 10-6 in the morning. In 1950 the work was done by hand. We took out paper bags, cellulose, paper wrapping, writing for notebooks [...] In time, her train driver was killed 2nd engine. His name was Karavitis. We all went to the funeral. When the director came Zeritis, the company was named SOFTEX because other paper making machines came they made toilet paper, handkerchiefs, napkins. I worked until 1985”

Irini Kavalaris (Ειρήνη Καβαλάρη), resident of Votonikos (Op. Cit. Pp. 254):

“Around 4-5 in the afternoon, the “grassmen” from the orchards were studying. So we said the orchard workers. They went to their houses ... They carried grass or for that home or to kiss. In addition to the payment, they also got their greens. Many of them they carried on their heads, above their tsemberi. They wore aprons with “chest” and boots. [...] In this cistern, opposite Agios Polykarpos, the grass was washed by the gardeners. The sound of running water reminded me of waterfalls. That’s kind of how waterfalls should be, I thought.”

Panagiotis Ampleas (Παναγιώτης Αμπλέας), (Op. Cit. Pp 265-266):

“I was 15-16 years old in 1966, when I went to get a job at SOFTEX, why not me my mother gave money for pocket money. I thought I was just going to work for it summer, but I worked ... twenty-four whole years. At eight o’clock in the morning, it was ringing the siren and we got to work. Anyone who violated did not work for even a minute.”

Vassilios Mentis (Βασίλειος Μέντης), resident of Votonikos (Op. Cit. Pp 268-270):

“Our house was Agios Polykarpos II. [...] In the building block of Agios Polykarpou, Amfipoleos, Strymon and Kozani were the shelters during the war. But and the tavern of barba Giannis of Kavroudakias had a basement with barrels, which it also served as a refuge in the war. We all gathered there for him to pass the time we were telling fairy tales. These tales could last up to fifteen days. [...] We also bought bread from Kyritsis who passed with the spring and also from Papadopoulos, which is now demolished [...] In 1951-52 I worked in his factory Falierou, in Thiseio, who made spools. A year later the factory transferred to Eleonas. So came trucks loaded with pieces of tree trunks. Their trunks were cut into small pieces on the ribbon in Thissio and then we went to spread it out to dry in the new factory in

Olive grove. After Amphipolis there were all orchards, pottery and tanneries. After Amphipolis there were all orchards, pottery and tanneries. The Tsatiris orchard started from the beginning of Agios Polykarpos and reached up to Agios Polykarpos. The army looked for it to make officers' residences, but they did not agree on the price. Half of it was sold on plots and the other was taken by ASPA, the today's OASA "

No name, resident of Eleonas (Op. Cit. Pp 277-278):

"Now we bring the wine ready, and we only do bottle, my son Stelios Skandalis (Στέλιος Σκανδάλης) makes it. In 1945, when we came here, it was all around orchards. Eg of Christos Ripis (Χρήστος Ρίπης), who is now rented to agencies, of Stavrakas, Pericles Protopapas and the Markides, who became agencies and that's all. Of the factories, only Grigoropoulos owned the soap factory that he is now electrical warehouse KONSTANTAKATOU, his vinegar factory Papadimitriou and further on ETMA. It was also KYKLOPS, the pottery, which creased to operate in the 1950s. "

Vassilios Kafetzopoulos (Βασίλειος Καφετζόπουλος), resident of Votonikos (Op. Cit. Pp 268-270):

"Our kiln was in Agios Polykarpos, where the Botanical Garden ends. There about fifteen workers worked. The three of them, which we later made partners, lived in brick houses, which they had built themselves. "

Fotis Athanassiou (Φώτης Αθανασίου), (Op. Cit. Pp 263):

"Evangelos Karadamitsis (Ευάγγελος Καραδαμίτσης) mediated for me to get a job at ETMA as a janitor, because he worked there. The ETMA factory, on Agias Annis Street, employed 3,500 workers. I worked there from 13-4-1979 until 2001. A lot of people ate bread there. I was too pleased. The factory-made artificial silk thread. Woods from Sweden came here as a pulp. This pulp was mixed with other chemicals and baking soda to make the thread. It was because of the fumes unhealthy this profession. The whole neighborhood smelled. However, the people who worked inside were well paid and the working conditions were good. Every two hours the workers had a break. There were two canteens, one of the technician staff and one of the craftsmen. There was also a restaurant. "

From the stories and words of those who personally experienced the dynamics of Eleonas and its changes, images of a bygone era can be relived, where the social dynamics of an area in transformation are highlighted, with people from remote regions of Greece and Asia Minor and who had arrived in Athens with the hope of improving their living conditions.

The images of a neighbourhood experienced by the community emerge through the work staggered by the fields and the sirens of the industries and the time spent in taverns and orchards, which, little by little, in the last decades of the 1900s were almost completely replaced by foundries, tanneries and various other types of industries and crafts.

B.3 Logistic Age: from the '80 till 1995

In 1973 the oil crisis had consequences on the secondary sector causing a slow decline in manufacturing activities and the outbreak of the recession in 1979.

Furthermore, due to the new economic policies pursued and the accession of Greece in 1981 to the EEC (European Economic Community), which had entailed difficulties related to the adaptation of production plants to the standards established by the EEC, they determined the end of many industrial activities and had a major impact on the Eleonas neighbourhood since there was also an increase of the imported goods and supplies from the European community that passed from 12,3% to 19,7%. [16]

In Europe, including Greece, many industries in order to remain competitive on the global market, decided to relocate their production sites outside their own countries, to other areas of the world where the cost of labour, taxation and material costs are extremely advantageous for companies.

Thus, it was that many industries, including the historic ETMA, SOFTEX and PITOS, for example, moved their production channels to countries such as China, Turkey, Pakistan and Syria.

In the decade 1995-2005 the number of industries present in Greece dropped drastically and steadily, reaching from 5900 units in 1995 to 3000 in 2005.

Subsequently, the 2008 crisis led to the adaptation of economic austerity policies which followed the outbreak of the recession in Greece, creating a further haemorrhage of small and medium-sized enterprises and the last remaining industries that left the country by decentralizing their production sites. Eleonas was directly involved in these processes and many industries failed or decentralized their production plants, leaving entire voids within the urban fabric. At the same time, however, Eleonas was a fertile field for the birth of new tertiary activities linked to the provision of services.

The economic changes taking place therefore had a strong impact especially in the processes of expansion of the tertiary sector (including trade and transport) and reduction instead of manufacturing production. Furthermore, western cities were hit by a new process, that of outsourcing, which changed the policies of production processes.

Greece was also involved in these events which led to deindustrialization processes flanked by the tertiarization processes of the country's economy. In fact, today the predominant activity present is that linked to logistics and road transport of goods on a local, national and international scale.

Around this new market, new transport companies developed such as car showrooms, petrol stations, the sale of spare parts, mechanics, car and truck repairs etc which chose Eleonas as a district to settle in due to its strategic position, good connection with the rest of Athens and the country and cheap land prices.

This change of direction has its roots in the '60s when there was a transformation in individual modes of transport as the private car became the ultimate means of transport within the city having consequences on Eleonas' near future.

Road axes were further implemented in this area, creating high-speed roads that guaranteed a direct and fast connection with other areas of the country.

16 Lolos S.; and Papagiannakis L., "Greek industry in the European Community", Athens, Academy of Athens, 1993.



Figure.17
 Title:Leof. Kifissos as a discontinuity element.
 Source: googlemaps.com

Thus, Eleonas became a fundamental node of the country's transport road system, the one between Leoforos Kfisou and Athinon.

The new roads, however, became real physical barriers that divided, despite the spatial proximity, Eleonas with the rest of the city, transforming this area into an enclave. [Figure.17] Eleonas today presents itself as a disadvantaged and abandoned area, characterized by an alternation of vacant lots, informally built buildings, old disused industries and small production centres, parking and warehouses.

Over the past 30 years Eleonas has undergone a slow process of transition and redefinition. In fact, the Municipality of Athens, today, must interface the indefinite character of Eleonas, with its history and relevance within the city as it still represents, albeit in a reduced way, the productive heart, an over-fundamental place and refuge of various social groups that have settled there.

The question to ask is how to regenerate Eleonas, in order to give him a new character within the Athenian social context.

B.4 Commercial Age: from the Presidential decree in 1995 to the Double Regeneration programme

Eleonas presents itself today as an urban void generated by economic transformations taking place in Greece and presents itself as the Backyard of Athens.

Anyway, it is in a strategic position, between the administrative, political and economic heart of Athens and the commercial and maritime hub, the port of Piraeus, and represents still nowadays an extremely important resource of the productive potential of the city and Attica. From the IOBE study programs (2005/2006) it emerged the economic importance and the



Figure.18
 Title:PAO's Stadium, Double regeneration program
 Source: A&A ARCHITECTS' Archive

productive character within the urban agglomeration of the capital and its influence on a regional scale. During a conference in 1996, “*Small and medium-sized manufacturing enterprises in the Web city*”, held at the NTUA, the economic importance of Eleonas in the field of employment and industrial production further emerged.

This district, despite decades of decline, is still a dynamic centre that attracts companies from the secondary and tertiary sectors who choose this district to settle. Eleonas is the country’s road transport hub due to its accessibility to major roads. Furthermore, Eleonas is adjacent to the densely populated municipalities of Egaleo, Peristeri, Korydallos, Nikaia, Agia Varvara and Moschato. This feature pushes the present economic and labour market integration with the reality of the city basin still attracting companies to settle, becoming an interesting area to regenerate. In fact, to date, several options have been proposed whose common purpose was to give an impetus for the future development of Eleonas, trying to address and solve the various problems related to the neighbourhood and to make it more attractive.

Most of the proposed projects, however, only addressed some of these problems, failing to give a valid and complete answer to all the difficulties that may be encountered in the area. Furthermore, the proposed projects were intended to accompany the transition from today’s tertiary district to a commercial area by providing spaces for recreational activities and consequently, also with the fact that land costs are low, producing large-scale architectural artifacts.[17]

The most interesting project, whose construction is currently pending , despite its stoppages over the years, is the PAO’s stadium (that it is a part of “*Double Regeneration*” programme) by A&S ARCHITECTS architecture studio (Cf. Chapter F). [Figure.18]

17 Sapountzaki P. and Wassenhoven L., “*Spatial Discontinuities and Urban Transformation: The example of Eleonas in Athens*”, Siena, ATINER, 2004.

C. People of Eleonas

C.0 Introduction

The neighbourhood of Eleonas, compared to many other realities in Athens, has been literally shaped and involved by the migratory phenomena that have pervaded Greece from the beginning of the XX century to our times.

It is therefore necessary to analyse these events in order to have an overall and critical view of the demographic growth of the capital and of the direct repercussions on the case study.

Eleonas is a complex reality made up of different social groups that inhabit it together. In fact, here Greek citizens coexist with groups of immigrants, nomadic envoys and refugees who live together in poor and precarious housing complexes.

Thus, the analysis of materials provided mainly by the Hellenic Statistical Institute was carried out to study the general profiles of the different social groups.

Eleonas is perceived by Athenians as a segregated area and ghetto of the individuals who inhabit it. Therefore, in order to have an overall view of Eleonas it is important to outline the reasons that fuel this condition and finally, articles, studies and citations were collected in which the Eleonas neighbourhood was mentioned to understand how the media narrative has contributed to create a social stigma and negative perception of Eleonas.

C.1 Migratory phenomena

The city of Athens represented in the XX century an attractive pole of the migratory phenomena that affected the country in several phases.

In 1922 the Greek military campaign in Asia Minor turned out to be a catastrophe which resulted in strong political and social instability on the Turkish's borders.

This conflict caused a violent expulsion of the Greek population settled in Turkey, before the 1923 Treaty of Lausanne was stipulated which institutionalized the exchange of population between Greece and Turkey.

There were over 1.2 million Greek and 500 000 Turkish refugees, of which 300 000 settled in Athens.

In the 1930s the population of Athens was in fact mitigated by the arrival of Greek migrants who came from rural areas and who made up 43% of the population, while the remaining percentages were divided by 28.2% of refugees and 28.7% of locals. [1]

A few decades later, in the period between the two Great Wars, there was very substantial immigration from Turkey. After World War II, the urban population in the country stood at 37%. Half of the total Greek population resided in the metropolitan region of Athens which had reached a population exceeding 1.4 million inhabitants.

Number destined over the years, thanks to economic well-being, to rise to 3.4 million residents in 1981 starting from a base of 1.2 million inhabitants in 1940. [2]

These data represented important numbers as it was necessary to be able to house all this part of the new population.

In 1922 the Refugee Assistance Fund (RFA) was born, then abolished in 1925, which took care of the construction of the first formal settlements to assist refugees at least temporarily even if the number of buildings provided was not sufficient to support real needs.

1 Dritsa M., *"Industry and banks in Greece during the interwar period"*, Athens, Educational Institution National bank, 1990.

2 Lentidou L., *"Cities of silence. Labour settlement of Athens and Piraeus, 1909-1940"*, Athens, PIOP, 2013.

The situation, at least initially, was out of control.

Refugees in search of a home illegally occupied land, public buildings, archaeological spaces and even railway carriages. [Figure.1]

Slums arose around the first settlements provided by the RFA. This phenomenon of expanses throughout the city, from the centre to the suburbs, including Eleonas.

Thus began the first processes of popular suburbanization through the informal construction of self- built settlements on private property.

These neighbourhoods were spontaneous and were overcrowded and built with waste material. [3]

However, thanks also to the economic growth and prosperity that was involving Greece and the Western countries, this situation was reversed, transforming these suburbs into places of possible social redemption and lively working-class neighbourhoods. [4] In fact, these neighbourhoods cannot be compared with the refugee camps of today, as there was no feeling of segregation and confinement in these new districts.

In 1923 the Commission for Refugee Settlements (RSC) emerged, then dissolved in 1930 and replaced by local authorities, it was the commission that dealt with providing services and large-scale residential projects to facilitate the settlement processes of refugees.

The RFA and the RSC were not the only bodies that dealt with the resolution of the problem, but other bodies came into play such as the Greek National Bank and the Ministry of Social Policies.



Figure.1

Title: Temporary settlement of the 1922 refugee in the Municipal Theater of Athens,
Source: Hellenic Literary and Historical Archive, cover of liFO, n.498 01.12.2016

The RSC was involved in the implementation of several projects in Athens. In the capital, some neighbourhoods were built becoming a symbol of these groups of migrants, settlements characterized by the alternation of residential and collective spaces to promote the processes of social integration. Among these it can be mentioned the district of Kaisariani, Byron,

3 See *fn.2*

4 Leontidou L., *“Beyond the Borders of Mediterranean Cities: The Mediterranean City in Transition”*, Cambridge, U.P, 2006.

Nea Ionia and Nea Kokkina (Nikaia), the latter close to the Eleonas district where there were already traces of other informal settlements. [5]

Many families ran their own workshops and craft businesses using their homes as a base and thus favouring the proliferation of the informal economy within these suburbs of the city.

The RSC became the body that indirectly dealt with urban planning and the expansion of Athens, through interventions placed outside the city and which further pushed the spatial expansion of the urban fabric.

However, it must be emphasized that they only managed to direct the urban development of the city without considering the degree of expansion and volume of the new settlements.

The situation thus went completely out of control and favouring the processes of popular construction and illegal settlement. This is because there was still not enough space to accommodate everyone as the refugees were housed based on waiting lists and this could take a long time. Instead, wealthy migrants managed to create building cooperatives. [6]

Thus, the refugees decisively marked the horizontal expansion of the city and the alteration of its urban structure, to the point of creating settlements on the Aegaleo and Hymettus mountains and not following the masterplans that regulated the development of the urban fabric.

In fact, it is estimated that in the time span from 1940 to 1970, the “illegal” population living on the outskirts of Athens in these informal settlements is between 450 000 and 500 000 people. [7]

Today, there is a situation at the antipodes if compared with that of the previous century as today there are about 60 000 refugees on the national territory out of a population of 11 million inhabitants compared to 1.2 million refugees out of a population of 5 million in the last century.

The numbers, when compared, are disproportionate to each other. Despite this, however, following the economic crisis of 2008 and the imposed austerity, it is unthinkable to be able to provide housing to all these refugees who find themselves having to live in informal situations, squatting or in a few refugee settlements and among these it is possible to remember the refugee camp of Eleonas as many other gypsy camps in the city.

C.2 The population of Eleonas through the 1991, 2001 and 2011 censuses

The Eleonas area can't be defined as a residential area at all, but despite this, it is possible to identify about 16- 17 residential pockets currently inhabited.

To understand the demographic geography of the area, materials provided by the Hellenic Statistical Authority (HSA) have been selected which has drawn up over the years, respectively in 1991, 2001 and the last in 2011, of the statistical censuses concerning the population of Eleonas residing in the borders administrative outlined in the PDR 1995.

The analysis of these data is important to define the general profiles of users who will be directly involved in the project as stakeholders.

By observing and comparing the various censuses, it can be seen the positive trend between 1991 and 2001 where the resident population increased by + 15.3%, passing from 5 762 to 6 643 inhabitants. Instead, in the following decade 2001-2011 there is a decrease equal to -36% for a total resident population in 2011 equal to 2 391 individuals. [Figure.2]

5 Leontidou L., “*A place of hope and architectural initiative: Informal work and residence in the refugee neighbourhoods of Nikaia*”, Athens, Livani Publications, 2002.

6 See *fn.2*

7 See *fn.4*

	1991	2001	2011	1991-2001%	2001-2011%
Athens	629	1037	343	+ 64.9%	-66.9%
Taurus	771	700	547	+ 9.2%	-21.9%
Egaleo	707	638	553	- 9.75%	-13.32%
Peristeri	28	131	25	+ 367.9%	-80.9%
Rentis	3627	131	2784	+ 14.1%	-32.7%
Total	5762	6643	4252	+ 15.3%	-36%

Figure.2
 Title: Comparative table of the population of Eleonas through the censuses of the years 1991-2001 and 2011
 Source: ELSTAT, sample processing

The population, according to the last census of 2011, is divided into the five municipalities in the following proportions: 8% lives in the Municipality of Athens, 13% in the Municipality of Tavros, 13% in the Municipality of Egaleo, 1 % in the municipality of Peristeri and the remaining 65% in the municipality of Rentis. [Figure.3] 53% of the population is male and 47% is female. [Figure.4] The young population between 0-19 years old represents 17.4% of the total population, while the population of productive age 20-59 years is 59.5%. The population over 59 is equal to 23.1% of the total. [Figure.5] Regarding the levels of education, it can be considered that 30% have dropped out of compulsory primary studies, 14% have passed the second level primary schools, 26% have a high school diploma, 7% have obtained a three-year degree and only 5% have a master's degree. The remaining percentage is made up of students still in progress. [Figure.6]

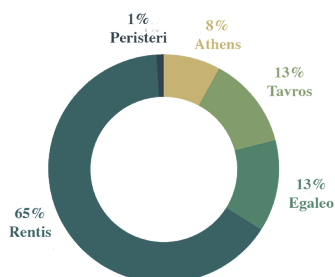


Figure.3
 Title: Population distribution by 2011
 Source: ELSTAT, sample processing



Figure.4
 Title: Population by Gender 2011
 Source: ELSTAT, sample processing

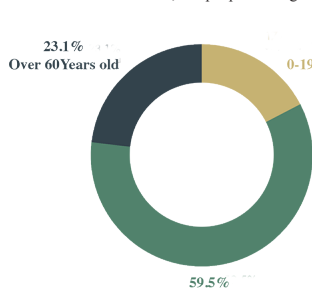


Figure.5
 Title: Population by Age 2011
 Source: ELSTAT, sample processing

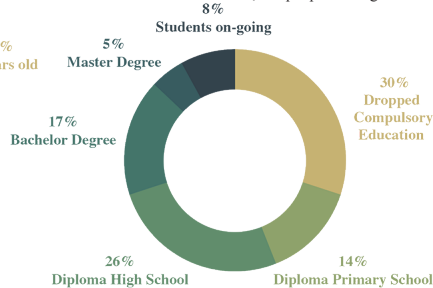


Figure.6
 Title: Population by Education Level 2011
 Source: ELSTAT, sample processing

A substantial change in the school environment can be described if it is compared the percentage of people who dropped out of school in 2011 equal to 29% compared to the same figure in 1991 where the percentage stood at 50.8% of the total.

It is also interesting to observe the changes that have taken place in relation to the Greek population with citizenship residing in Eleonas, a figure that has changed over the three censuses. In fact, in 2011, Greek citizens accounted for 78.4% of total residents and it can be seen a substantial difference if compared to the 2001 figure where the number of people with Greek citizenship stood at 83.7%. and at 97.4% in 1991. [Figure.7] It can therefore be said that Eleonas has become a reference centre for economic immigrants who arrive in Athens and choose this district to settle. In fact, the figure is very consistent also compared to the national average.

According to the latest census analysed, the immigrants come respectively from Pakistan, Iraq, Russia and Albania.

The unemployed population looking for a job has increased compared to 1991 where the figure stood at 11.6% up to 39.1% in 2011. Reflection of the economic changes taking place in Eleonas and the 2008 economic crisis.

The unemployed population looking for a job has increased compared to 1991 where the figure stood at 11.6% up to 39.1% in 2011. Reflection of the economic changes taking place in Eleonas and the 2008 economic crisis. The number of male unemployed in 1991 was 9.9% and in 2011 it is 39.4%, however, the number of female unemployed in 1991 was 15.6% and in 2011 it is 38.5%. These comparative data show us the difference and inequality of gender in the workplace. [Figure.8]

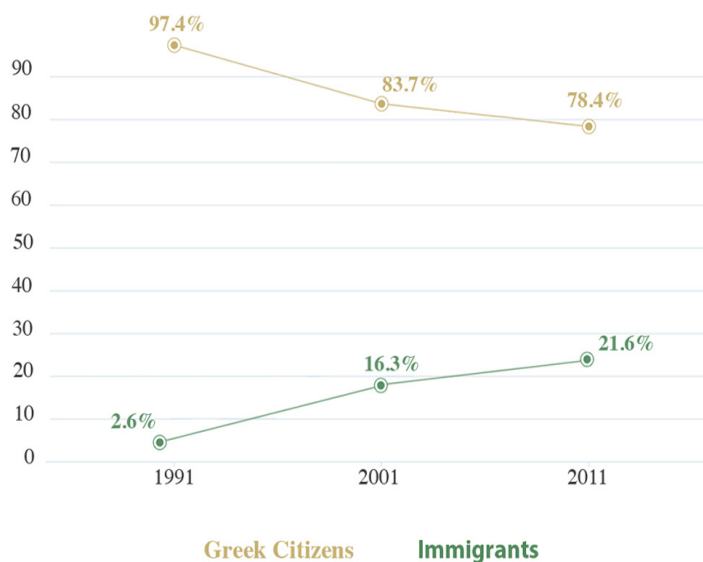


Figure.7
 Title: Percentage of Greek and not citizens in 1991, 2001, 2011
 Source: ELSTAT, sample processing

Of the people currently employed with work, it can be identified 85% of employees, 11% of self-employed workers and 4% of managers. Data that highlight the strong working-class identity of the neighbourhood.

Therefore, 85% of the resident population is employed in manufacturing and service sectors.

In 1991, workers in industrial activities represented 33.7% until drastically reduced in 2011 to only 19.4%. Instead, the population employed in the tertiary sector stood at 18.8% and in 2011 reached a percentage equal to 24%, showing an increase in employees in the tertiary sector and a decrease in the secondary sector.

Instead, to understand how the inhabitants of Eleonas move, it can be considered the ownership data of a car. 40% of residents do not own any cars, 47% own one and only 13% own more than one car. [Figure.9]

2 391 people censused, reside in the different buildings scattered around the neighbourhood. The 80.8% of buildings were constructed between 1946 and 1980 and are in poor housing conditions.

In the various studies conducted in 2015 by the Attica region to create a strategy to fight poverty, the neighbourhood of Eleonas was found to be one of the poorest neighbourhoods in Athens.

In fact, with the data taken in analysis they show an image of a neighbourhood where urban poverty is concentrated, and which lays the foundations for social exclusion from Athenian society.

These analysed data do not consider the situations of informal living, occupations, the refugee camps and the Roma camps present.

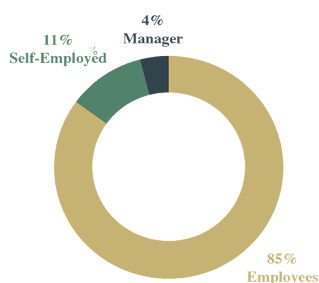


Figure.8
Title: Population by type of profession 2011
Source: ELSTAT, sample processing

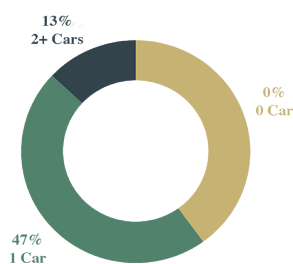


Figure.9
Title: Population by car ownership 2011
Source: ELSTAT, sample processing

C.3 Eleonas Refugee Camp

In the summer of 2015, due to continuing wars and political instability in the Middle East and Africa, migratory flows to Europe intensified dramatically, especially in the routes by sea, creating great pressure on the Greek maritime borders and on the European countries bordering the Mediterranean sea. In fact, the arrival routes mainly used by migrants are those of the Mediterranean and through the Balkan countries.

This entailed for the European countries of first arrival a substantial pressure in the management of migratory flows and, moreover, according to the first agreements of the Dublin Treaty, a contract previously signed by the EU members States, migrants had to remain within the borders of the country in which they had arrived, thus disadvantaging the countries of Southern Europe including Greece. The European Union needed a swift response to be able to deal with this humanitarian crisis.

On 15 March 2017 the Dublin Agreement was amended with the aim of involving all European countries in the redistribution and management processes and relieving pressure on the countries of the South Europe.

The changes to the Agreement if refugees not entitled to asylum had to be repatriated to the first country of entry into the Union to be relocated to other Member States or to be expelled and repatriated.

Greece, to cope with the refugee crisis, drew up a mobilization plan to be able to temporarily accommodate these large numbers of people.

This plan included the construction in Eleonas, a semi-central district of Athens with an ex-industrial character, of a new structure to house refugees. [Figure.10]

Thus in 2015, the committee of the Municipality of Athens (ADS 906/15) gave the green light to the approval for a temporary concession of land use for short-term residential purposes, of a property of the Municipality of Athens in Ag. Polykarpou 87, in the area where it will be realized the PAO's Stadium, an area equal to 12,506 square meters. [Figure.11]

In November 2015 the Municipality of Athens, together with the Ministry of the Interior and the Ministry of Infrastructure and Transport, signed the terms of the Program Contract (ADS 1510 / 23-11-2015) for the operation “*Temporary open accommodation for refugees in Eleonas*”. [8]



Figure.10

Title: Eleonas Refugee Camp

Source: <https://www.aljazeera.com/gallery/2015/9/30/greeces-only-refugee-camp>

The program mentioned:

“This program contract defines a framework of agreement between the Municipality of Athens and The Ministry of Interior and Administrative Reconstruction, which is established in

8 Eleonas Refugee Camp functions as an open camp that allows the free exit of refugees on the local territory, as opposed to the Refugee centers that operate on the islands, which detain refugees and not allow them to leave the structures.



Figure.11
Title: Eleonas Refugee Camp, Areal view
Source: googlemaps.com

order to address the emergency created by the influx of large numbers of refugees from the country's maritime borders. In particular, the aim is to address the temporary housing needs of this population, which includes vulnerable groups of persons and beneficiaries of international protection, as well as to prevent risks to public health and their own health, which would be caused by living in open spaces of the Municipality of Athens. The Municipality of Athens assists in the implementation of the treatment plan, in the continuation of the operation of Accommodation Structure of beneficiary's international protection and vulnerable groups of people and the increase of place in the already existing Structure, which is in the area of Eleonas (Votanikos) of Attica, on a plot of 20,000 sq. m. (approximate), enclosed by Ag. Polykarpou, Anonumous and Orpheus, at OT 45-46-50 and belongs to a plot owned by the Municipality of Athens. "

C.3.1 Housing the refugees

The project of Eleonas Open Structure of Refugee Housing is designed as a temporary structure, since the use of the land has not changed and has not been converted to accommodate residential activities, whose aim is to provide housing for families escaping from wars that are taking place in their own homelands and are seeking for asylum in Europe.

The structure is in the eastern part of the site where the Double Regeneration project was to be implemented but due to the economic crisis was never developed since the construction works stopped in 2013.

This camp was constructed in August 2015 in response to the refugee crisis and in order to better support the reception structures for migrants as currently, in Greece, there are a lot of problems related to the refugee housing situation.



Figure.12

Title: Eleonas Refugee Camp Dance Activities

Source: <https://www.aljazeera.com/gallery/2015/9/30/greeces-only-refugee-camp>



Figure.13

Title: Prefabricated containers' bedroom

Source: <https://www.aljazeera.com/gallery/2015/9/30/greeces-only-refugee-camp>

Eleonas Refugee Camp is literally a Village that provide a shelter to families and children. [9]

Thousands of migrants are housed in precarious accommodation facilities where sometimes there is a lack of the bases to live in dignity, such as the presence of hot water, running water

9 Data obtained by UN Refugee Agency (UNHCR) which surveyed a population of residents to 1470 individuals in the period of August-September 2018 and there are certain periods where the number arrives close to 2000 residents.

and heating systems. People thus find themselves having to live, albeit temporarily, an unstable and precarious situation, a condition also accentuated by the uncertainty of the length of stay in Greece and in Europe.

Waiting for asylum applications to be accepted in Europe creates a feeling of suspension between the past, what individuals have left behind, and a possible and potential future. This situation has direct repercussions on the psychological health of individuals. Many of the residents of these facilities have been diagnosed with symptoms related to depression and mental stress.

The Ministry of Immigration Policies used the term “*Limbo*” to describe this daily life and situation in which refugees find themselves.

It is therefore essential to allow residents to build their daily routine by alleviating their difficult situation, through the provision of tools and activities.

Eleonas currently has several International Organizations, such as *Projectelea*. [10] and private entities that act directly on the field by offering various services: thus, taking place, for example sports and educational activities. [Figure.12]

In addition, there is the possibility of being able to cook or to go out of the camp to grocery. The will to create a stable routine on the part of the residents manifests itself in space.

Compared to the precarious conditions of first operation in 2015, Eleonas refugee camp shows more stable housing characteristics such as, for example, the creation of small gardens or the presence of satellite antennas.



Figure.14

Title: Eleonas Refugee, Child playing

Source: <https://www.aljazeera.com/gallery/2015/9/30/greeces-only-refugee-camp>

Life inside the camp revolves around the residential units, which consist of prefabricated containers characterized by three compartments, one central where there is the kitchenette and the bathroom (with toilet and shower) and two side rooms dedicated to bedrooms [Figure.13].

10 <https://projectelea.org/>

Then, in punctual area in the camp, it is possible to find the shared spaces such as areas for washing machines, football fields, the canteen etc.

Thanks to the donations and sponsorships offered by private and public entities, it was possible to further improve and equip the structure.

Electricity, for example, is provided by photovoltaic panels that generate energy to be able to illuminate the field even during the evening and their installation was made possible thanks to donations.

The offers also allowed the installation of a playground for children [Figure.14] and the construction of a football field.

Google had instead offered the installation of areas equipped with Wifi and computers to allow refugees to be able to communicate with their loved ones.

C.3.2 Food supplies

The meal inside the facility represents a staggering element of the day for refugees.

Three main meals are provided: breakfast, lunch and dinner which are distributed in a special common structure within the Camp, becoming a place for socializing.

However, currently, the management bodies of the camp are planning to install kitchenettes inside all containers since not all of them are fully equipped. This factor, together with the increase in financial and economic aid that everyone receives, would result in the end of the distribution of meals as a supply.

Each household spends an average of 77.7 € per week, of which 47 € used for the purchase of food and beverages.

In addition, there are companies, such as supermarkets, which through a marketing strategy based on corporate social responsibility, constantly offer food and equipment supplies to the camp. There is an upside to the fact that since there are no set meal times, camp guests will have more flexibility in building their daily routine.

This is a fundamental aspect to be able to determine the daily life of an individual as they will no longer be forced to base his routine on set times and the act of cooking for their families is of extreme help to get out of the dynamics of the camp.

C.3.3 Education and school

Within the camp, various educational and school activities are carried out which are aimed at all refugees in the camp, from children to adults.

In the heart of the structure there is a school where Greek and English are taught.

The International Organization for Migration (IOM) is the body that is actively involved in guaranteeing access to education for refugees and therefore deals with the coordination of recreational and educational activities.

Most of the children are enrolled in 14 different schools within the Municipality of Athens. The desire to let children go to local schools and to make them interact with other children

outside the camp was born with the aim of favouring the integration process within a cultural and social context very different from that of the families of origin.

In addition, the formal creation of a nursery school is planned, the management of which will be taken over by the Ministry of Education, which will also take care of the recruitment and hiring of kindergarten teachers through contracts.

C.3.4 Working in Eleonas

The staff, operating within the Eleonas Reception Structure, was selected by the Municipality of Athens which identified a team of employees dedicated to community service programs through contracts with an average duration of 8 months.

In fact, upon expiry of the contracts with the Municipality, many of these employees were hired by Non-Governmental Organizations (ONG) to allow the continuity of the social relations that had developed over time between refugees and employees.

These Bodies are financed by European Union programs, through funds intended for vulnerable social groups (VOC).

There are other organizations that operate on the territory with the “*Site Management and Service*”, a program also supported by the European Commission - Directorate of Humanitarian Help.

C.4 Eleonas investigation survey on refugees and local population

In 2016 the Athens Municipality Observatory for Refugees and Migrants decided to develop a survey with a dual research purpose.

The first objective consisted in taking a census of the refugees present in the Eleonas structure in order to understand the demographic characteristics of the population, the forms of assistance, financial situations and access to work, their language skills and future.

The second purpose, on the other hand, consisted in recording the attitudes of the local population, therefore of the citizens of the municipality of Athens, towards the migrants present inside the camp.

The survey was conducted between 11/17 and 12/27 2016 mainly through quantitative field-to-face interviews and questionnaires addressed to family groups of refugees.

About 1600 individuals and 534 family groups were involved and registered.

The results published and reported here show some characteristics of these social groups that live within the camp.

C.4.1 About refugees

The outcome of the survey conducted in the Refugee camp helps to understand and to frame some aspects of the people living in it.

The average age of guests is 20 years old, of which 45% are women. [Figure.15]

42% did not attend school in their country of origin, while only 8% had access to higher education.

70% did not work while 30% did.

33% of families are composed of only one member, while 20% of families are composed of 3 members.

71% of the population is Sunni Muslim. 52% know how to use and use the internet, 35% know how to use a computer and 51% know how to use a smartphone.

75% of the total have an account on a social network.

69% of the refugees present come from large cities [Figure.16] and 48% had an average income in their country of origin. 80% of guests claim to have left their country of origin for reasons related to war and personal safety.

72% arrived in Europe, in Greece, via the Aegean Sea while 27% from Evros.

Most of the migrants present arrive from Turkey and the majority have as their destination Germany for economic reasons and to be able to reunite with their families.

In fact, 60% want to move and reach another European country while 34% want to return to their country of origin and 6% want to remain in Greece [Figure.17].

65% have applied for asylum and 57% are registered with the United Nations High Commissioner for Refugees.

Only 23% of the residents claim to have met and received support and help from the Greek population.

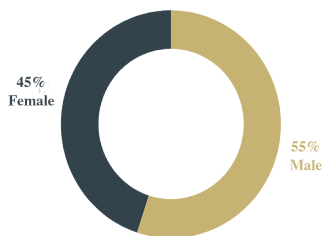


Figure.15
Title: Population by Gender
Source: Observatory of the Municipality of Athens, 2017 Research

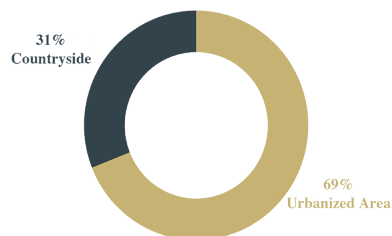


Figure.16
Title: Population by places of origin
Source: Observatory of the Municipality of Athens, 2017 Research

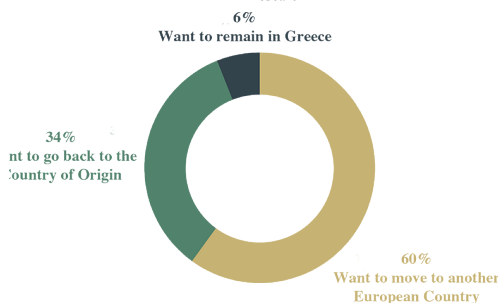


Figure.17
Title: Population by future intentions
Source: Observatory of the Municipality of Athens, 2017 Research

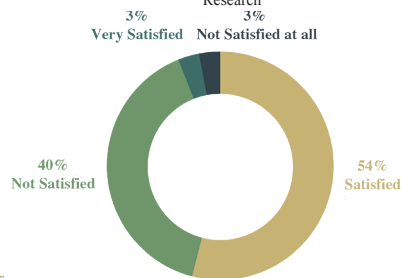


Figure.18
Title: Population by satisfaction level about Eleonas' refugee camp
Source: Observatory of the Municipality of Athens, 2017 Research

55% say that the living conditions in the Eleonas open camp are good and that the most common problem is related to food.

54% say they are satisfied with life inside the camp, while 40% say they are not, 3% feel very satisfied and 3% doesn't feel satisfied about the life conditions offered by the camp [Figure.18]. 93% say they feel safe inside the facility.

98% of them leave the camp every day to go to the heart of Athens, especially in Omonia square which in recent years has become, due to its spatial proximity to the centre, a point of reference for refugees and immigrants.

89% say they have not received any discriminatory acts or been insulted by the locals during their stay in Athens. Most of the refugee speak Arabic and Persian, 55% do not want to learn Greek but only 22% are interested in learning the local language.

C.4.2 About local population

The survey was taking in account the citizens of the Municipality of Athens, residents of different neighbourhoods were taken into consideration and particular attention was paid to the inhabitants of the Third Municipality, to which the Eleonas neighbourhood belongs. According to polls, 18% of people say that refugees can create problems within their district while 80% of the total say that they do not create any kind of problem. [Figure.19]

In Eleonas, on the other hand, the percentages change, and 32% of the population believe that refugees create problems within the neighbourhood while 66% support the opposite.

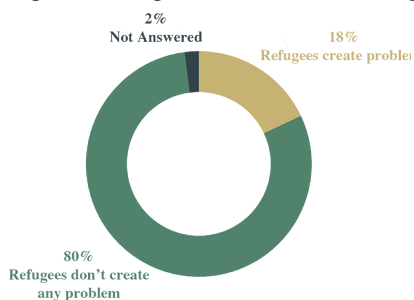


Figure.19
Title: Perception of Locals about Refugee in Eleonas
Source: Observatory of the Municipality of Athens, 2017 Research

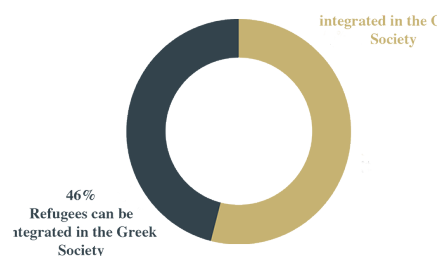


Figure.20
Title: Integration Capacity of refugee according to the local population
Source: Observatory of the Municipality of Athens, 2017 Research

Of the total, 72% of the population argues that refugee children should be enrolled in the city's public schools and interact with local children.

40% are in favour of building a mosque within the neighbourhood while 44% disagree.

54% of the population argues that refugees cannot integrate into European and Greek society, 43% think they can. [Figure.20]

43% of Eleonas residents say they have not helped refugees in the last year, through voluntary work or offers of money or goods, while 57% claim to have done so.

C.5 Gypsy Population

Following the approval of the law 3481/2006 with specific reference to articles 11 and 12, it was possible to proceed with the Double Regeneration program of Eleonas Area.

Some of the site in Eleonas were illegally occupied by several Roma settlements which had

to be cleared in order to proceed with the reclamation and recovery processes.

A 2005 Amnesty International report denounces that the community residing in Votanikos, an area in Eleonas, had been informed of the eviction to allow construction work on the new stadium to continue.

In this district there were two main settlements, one of these fields stood in the former industrial area in Orfeos Street [Figure.21] and the other in Agiou Polykarpou.

The eviction and demolition of the slums where these communities resided involved the dispersion of entire families who in a short time moved to nearby areas, creating new settlements or moving into existing ones or illegally occupying abandoned buildings.[Figure.22] The Orfeos camp was evacuated in the summer of 2012 when it caught fire from illegal metal smelting. It must be considered that the city of Athens, in the Balkan geographical context, has always been a point of reference and attraction for nomadic populations since the early decades of the 1900s.

Many of the areas on the west side to the centre have a history linked to this nomadic community and immigration phenomena. Many of these groups settled in the city while others passed through it. The main occupation on which this community revolved was the processing of metal waste such as iron. [11]

At the end of the century, in the 90s, there were new migratory waves from other Eastern European countries of nomadic groups who settled in Athens.

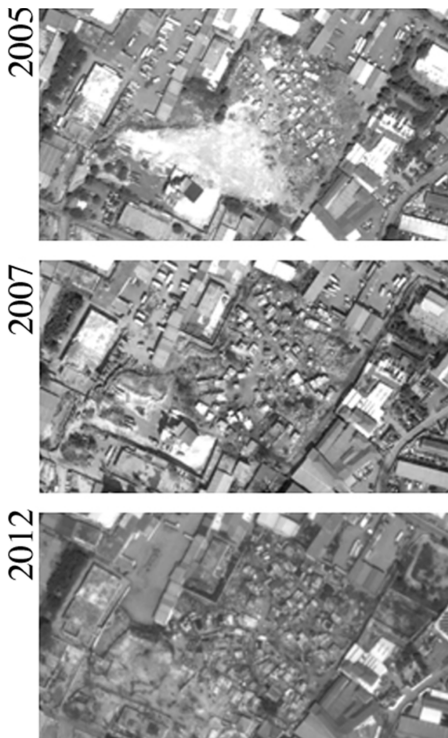


Figure.21
Title: Evolution of Orfeos Street Roma Camp
Source:maps.live.com



Figure.22
Title: Areal view of Roma Camp close to Prophet Daniel and St. Polycarp
Source:maps.live.com

11 NTUA., "Eleonas Area Development Agency Design", Athens, NTUA, 1997-98.

In 2007 it was estimated that about 2 000 Roma individuals of Albanian origin would settle in Eleonas, of which 15% were minors. [Figure.23]

The conditions in which these informal settlements found themselves were very precarious, characterized by overcrowding, the lack of sewage, water and electricity networks and the construction of houses with waste materials found in the area.

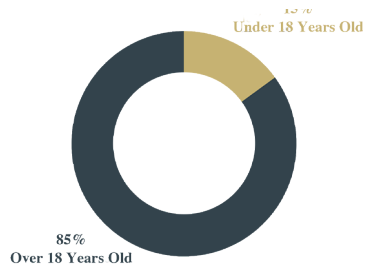


Figure.23
Title: Roma population by age
Source: Observatory of the Municipality of Athens, 2017
Research

In the following diagram [Figure.24] it can be observed the location over time of the different Roma settlements that have settled in Eleonas:

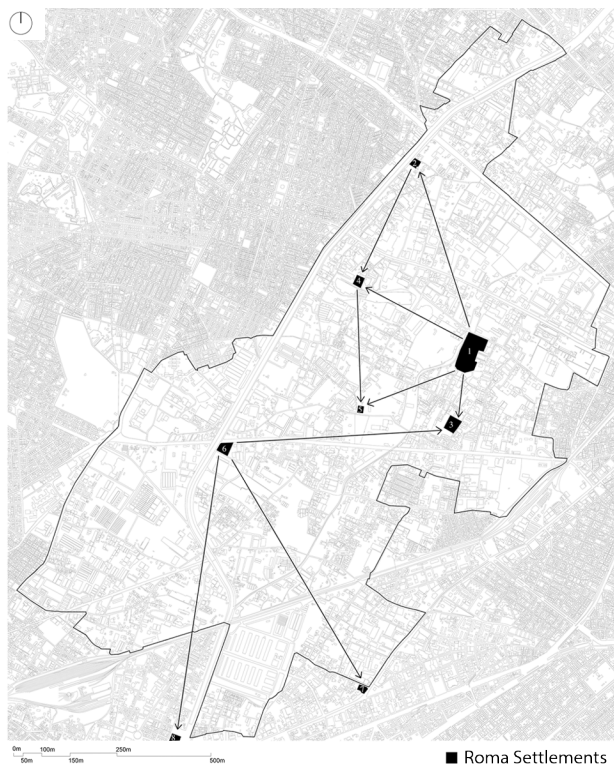


Figure.24
Title: Locations of Roma camps and how they have been moved over the time
Source:NTUA Paper by Gitzias Boudouraki 2008

- 1 Camp in Agios Polykarpos;
- 2 Camp in the former industrial area of VIAMAX;
- 3 Camp between Orpheus and P. Ralli;
- 4 Camp within an old agricultural space;
- 5 Illegal occupation of several rural houses; - Camp at the intersection of P. Ralli and Klifis-sos;
- 6 Illegal occupation of a residential building;
- Field in the pharmaceutical company Sanita.

C.5.1 The Scavengers: Eleonas' Union Market

A few kilometres from the Acropolis of Athens, in Eleonas [Figure.25-26] every Saturday and Sunday from 6.00 o'clock in the morning till 2.00 o'clock in the afternoon, street vendors prepare the stands where they will have merchandise of all kinds.

In fact, in Eleonas every weekend an illegal market regularly takes shape, called by the locals as *"The Scavengers"* or even as *"Gypsy Market"*. [Figure.27]

For decades the market has always been held in the district of Gazi, a smaller ex-industrial area nearby, when in 2014 it was moved instead to Eleonas, initially in an old roofless warehouse, at 94 Iera Odos. This is an informal market that is not tracked and regulated by the institutions.

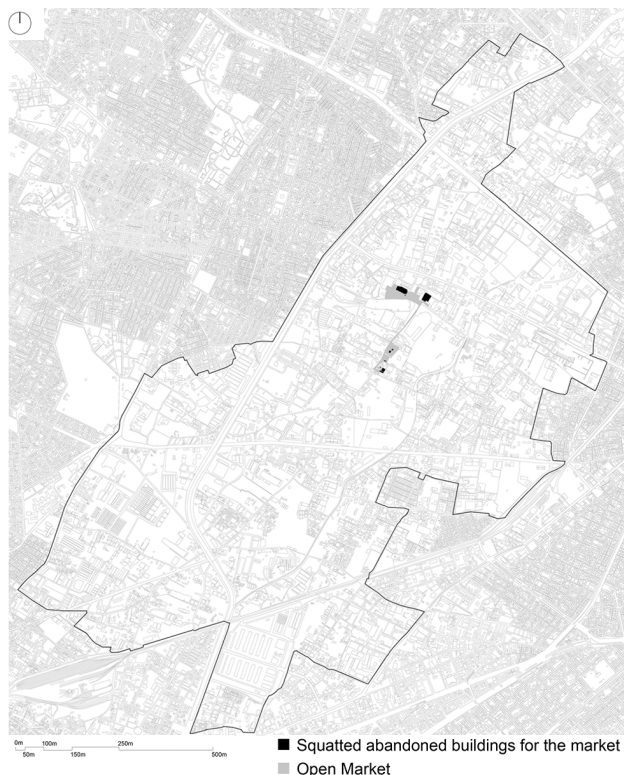


Figure.25
 Title: Location of The Scavengers Market 2021
 Source: Author

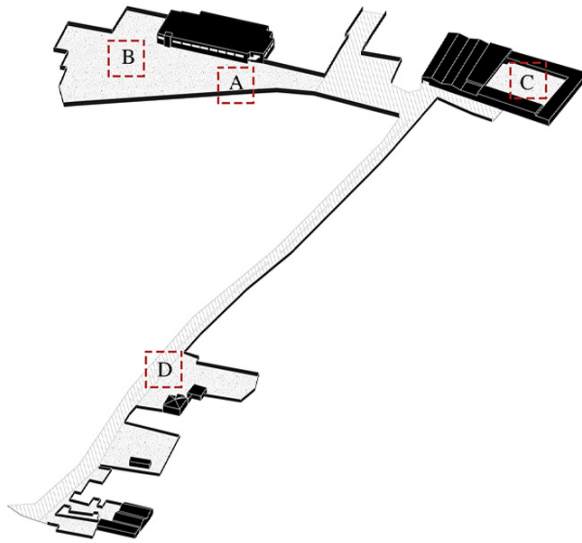


Figure.26
 Title: Disposition of The Scavengers Market
 Source: Author



Figure.27
 Title: Illustrative representation of The Scavengers market. (Point A, Figure.26)
 Source: Author



Figure.28
Title: Woman packaging after the market. (Point B, Figure.26)
Source:Author



Figure.29
Title: A Warehouse used as spot for the market. (Point C, Figure.26)
Source:Author

During the past years the market has changed its position different times, in different squatted buildings and streets since the most of the times the vendors were occupying illegally some of these warehouses and they were evicted by the owners and by the police, forcing them to find new

solutions and locations or paying a little amount of money to private to be authorised to use the spaces.

In this market all kinds of products are sold, from food to clothes and many objects abandoned and found around the city and then resold in this market with the appearance of an oriental bazaar, thus finding them a second life. [Figure.28]

In this market, many people are involved in informal and circular economy practices that reduce social and economic disparities through the sales and sociality processes that are created here.

The placement of several abandoned and disused warehouses makes the area a storage place for this market where many sellers illegally occupy these spaces to store goods.[Figure.29]

Accessing to some parts of the market is very complicated as there is no sign indicating its positioning within the district.

C.5.2 Interview with “*The Scavengers*” people, Athens, 26/06/2021-04/07/2021

Nowadays the market is settled along Agias Annis street, and it takes place directly on the road and in punctual squatted warehouse in Votanikos Area. The locals’ vendors, mainly belonging to the local Roma communities and to the refugee Camp in Eleonas, have been already notified that with the construction of PAO’s stadium, that will be realized in Votanikos area nearby Agias Annis, the people will be evicted, and the market will not take place in this area anymore since they will be forced to find other solutions.

In order to better understand the feelings about the local people who literally are “*The Scavengers Market*” it was important to have a direct feedback from the sellers and to interview them.

Here below are reported some of the most interesting answers of the interviews that involved about 15 people and that took place between June 26th and July 4th directly at the Scavengers Market in Eleonas by the author and dr. Dionisis Katzamperi (Διονύσιος Κατσαμπέρης) as translator.

Sousanna (Σουζάνα), seller, 65 years old and Πέτρος, seller, 70 years old:

“We really enjoy working in this market, I would say that I love what I do. Here we can be around people, to socialize and over the years we have built a network of friendships with other sellers but also with the buyers who come to visit us every weekend and then to buy other goods. What you throw away, we collect it and give it back to life. For us it is a treasure. If the stadium is built, we would be forced to leave. The biggest problem is that you must find another place that suits everyone. Here, in Votanikos, we are very well, and we have been here in this area for about two years. We are waiting to understand where to go”

Soula (Σούλα), seller, 85 years old [Figure30]:

“I am of Russian origin and was born on the shores of the Black Sea many years ago. My parents decided to move and come to Athens, and they brought me here when I was a little girl. Only God knows where we will go with the construction of the stadium.



Figure.30
Title: Soula (Σούλα) - (Point D, Figure.26)
Source: Author

If the municipality offered us spaces where we could sell our goods, it would be fantastic. This market has been around for about 22 years, and it would be a shame for it to close. More than anything else, it has become an important part of my life for me.”

Elefteria (Ελευθερία), seller, 45 years old:

“Who knows what will happen now. There is no support from the municipality of Athens. Thanks to this market we are able to earn something, make some money to feed ourselves and take care of our family.”

From the direct confrontation with the people who live the market every day, the social and economic importance that revolves around it emerged. In fact, this market represents for hundreds of people a possibility of earning, socializing and integration within Eleonas and offers an opportunity for interaction with the Athenian population that every weekend flock to Votanikos in search of some unique and antiques object. The future construction of PAO’s stadium represents a major upheaval for the locals as they will be evicted and therefore, they will have to find another place to revive the market again. Its relocation implies the destruction of social connections that have established themselves over the years, having negative impacts on this minority that already lives in decidedly precarious situation. In addition, the absolute lack of interest and lack of action on the part of the public administration of the metropolitan city of Athens emerged.

C.6 Social exclusion in Eleonas

The beginning of the process of social exclusion of the Eleonas neighbourhood with respect

to the city context of Athens has its roots in the XIX century when it was outlined and accepted the first city planning proposal based on a project by Stamatis Kleantis and Eduard Schaubert, whose plan created a social gap between the east and west areas of the city. The social division, as well as spatial, was further accentuated with the construction of the Institutional Building located in the east area of Athens, where today there is Syntagma Square. In fact, the great and noble Athenian families settled here, leaving the area to the west dedicated to the settlement of immigrants and workers as the area was in the immediate vicinity of the Eleonas Industrial Centre and the urban centre of Piraeus.

“Urban changes tend to be spatially differentiated, and highly uneven. Thus, in the context of urban environmental change, it is likely that urban areas populated by marginalized residents will bear the brunt of negative environmental change, whereas other, affluent parts of cities enjoy growth in or increased quality of environmental resources.” [12]

What is reported is to underline how those urban transformations that took place almost two centuries ago have had up to now, positive repercussions on certain social groups and individuals and negative consequences such as social marginality for the much more vulnerable groups. Today, this rift can be found in the maps of the Hellenic Statistical Authority which show an image of a city divided into two parts.

The part to the east is characterized by a more educated resident population and with a higher income that guarantees a certain level of well-being and the part to the west, including Eleonas, is instead characterized by a presence of individuals who do not have access to the same well-being as citizens of the East Athens.

The neighbourhood of Eleonas rises between these two demographic areas and stands between them as a sort of buffer zone. This demographic division in terms of well-being is then aggravated by the fact that Eleonas itself is an enclave closed to the outside, where the road and railway infrastructures literally become barriers and walls that socially and visually divide Eleonas from the rest of the urban fabric of the city.

Eleonas is today known by the Athenian population as an industrial area, a void and a ghetto devoid of any other human activity, which acts as a backside to the city itself, a sort of warehouse that houses all the activities that the city excludes and repudiates.

Eleonas is not conceived by the inhabitants of Athens as an area with its own character and history but only as an area negatively indicated as it is perceived as a stagnant area without any kind of potential.

The inhabitants of Eleonas, who represent a small number when compared to the demographic density of the adjacent neighbourhoods, feel excluded from the politics and planning and transformation plans of the territory in which they live and which they can call home. They themselves define Eleonas as *“their own little village in the middle of the chaos known as Eleonas”*. In fact, the few residential pockets present on this territory are perceived as elements completely detached from the political, social, economic and urban context of the city of Athens, almost as if it were a distant reality in which the general public is disinterested. To these considerations it must be added, due to the space availability and the character of an enclave of illegal activities, Eleonas has hosted for several generations and decades some Roma communities present in small clusters on the territory created informally. [Figure.31]

12 Heynen N., Kaika M., and Swyngedouw E., *“In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism”*, London, Urban Geography vol.28, 2006.



Figure.31
Title: Roma Camp in Orfeo with the Acropolis in the background
Source:Daily K.

Furthermore, since 2015 following the migrant crisis, Eleonas hosts a refugee camp with a population of around 2000 residents. All social groups that find themselves living marginalized in extremely precarious conditions and completely excluded from the social and economic life of Athens. The presence of these social groups is thus perceived by the locals and by the citizens of Athens in general as ghettoizing factors of Eleonas that transform this neighbourhoods into a segregated area and detached from the rest of the social fabric.

All these elements come together with the subjective perception of Eleonas' social landscape from the point of view of those who live it every day and from the entire citizens of Athens.

C.7 The media construction of Eleonas

Eleonas was mentioned for the first time in a newspaper only in 1988 [Figure.32-33] thanks to the initiative of some active residents who were looking for a way to get a message to the competent authorities about social hardship in the neighbourhoods. The articles that were reported dealt with the bad conditions in which the inhabitants were forced to live and were then elements that interested the public debate and politics. In fact, in 1991 the first Presidential Decree was issued which was the basis, together with the research conducted by the NTUA, for the definitive version of 1995.

In fact, following the publication of these articles, the NTUA University also became interested in the case of Eleonas by investing in 1992 in a research conducted by Wassenhoven and Markatos [13] with the aim of framing the neighbourhoods. Following the publication of this research, other articles were also published in the university journal NTUA Pyrforos and

13 NTUA., *"Study of Recording and Sustainability of its Industrial Activities in the Olive Grove"*, Athens, NTUA,1992.



Figure.32
 Title: Mentions of Eleonas 1988-2020
 Source: Author

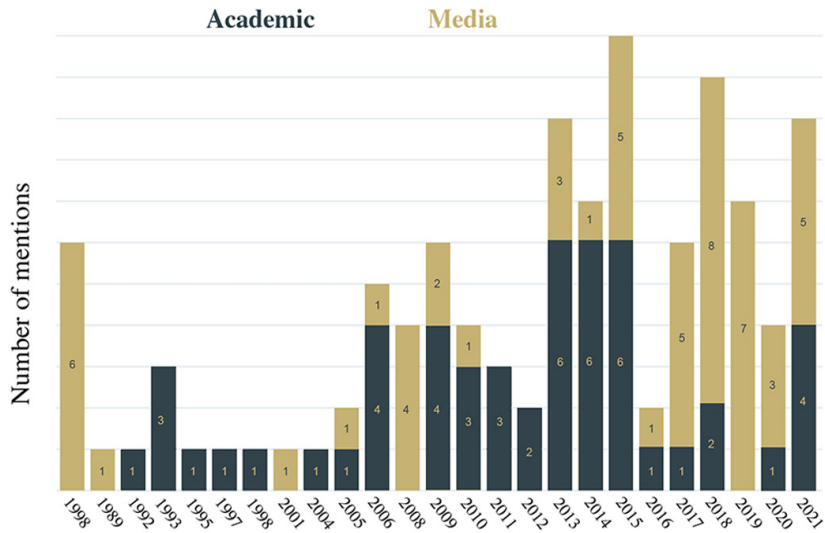


Figure.32
 Title: Mentions of Eleonas 1988-2020
 Source: Author

then, until 2005, another 7 research were conducted on the subject. It can therefore be defined the time period 1992-2005 as a period dedicated to academic research. From 2006 to 2012, however, after the opening of the debate on the Double Regeneration project, Eleonas was defined for the first time in an architectural journal as an urban void. [14]

14 Polychronopoulos D., "Urban voids: the void as a place", s.l., ARCHITECTONES, 2006.

From this moment on, thanks to the attention paid to the area for the construction of the stadium, Eleonas was also mentioned in television programs and news programs and most of the times in a negative frame.

Between 2012 and 2014 Eleonas was mentioned about 27 times, which is very significant when compared to the data available previously and it must be remembered that Eleonas was included in the 2014 plan of “*Athens-Attica 2021*”.

From 2015 onwards Eleonas returned to the public scene more than 21 times through television and newspaper interventions dedicated to the description of the opening of the new Refugee Camp and on the still project of the Double Regeneration program.

The reviews collected, from press mentions to citations in national newspapers, can help us understand how they played a key role in defining the character of Eleonas on the metropolitan scene, involving various actors and asking politics for an answer on how to reintegrate Eleonas in the social and urban fabric of Athens.

D. Physical Analysis of Eleonas

D.0 Introduction

In this chapter it is proceeded with the physical analysis of the urban reality of Eleonas in its various connotations.

The objective of this study is to be able to fully understand the dynamics of this territory that can be read as a mosaic. [Figure1]

The contextual approach thus allows the reading of Eleonas from the objective point of view of the viability, the built form, the natural resources present, the urban density and all those imperceptible aspects such as the human activities that there is the place and environmental factors such as the levels of pollution and degradation, all elements otherwise imperceptible if not thanks to a careful analysis.

The focuses will be concerned about:

D.1. Administrative management

D.2 Land use

D.2.1 Industries

D.2.2 Housing

D.2.3 Commercial

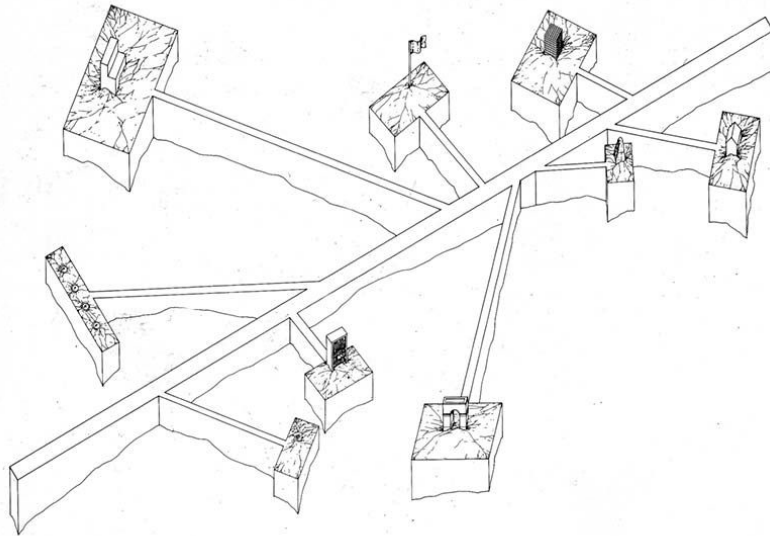


Figure.1

Title: About the spatial experience of cities, 1970s,
Source: Hans Dieter Schaal's drawing

D.2.4 Unbuilt spaces

D.3 Urban Density

D.3.1 “City Piece by piece”: the phenomenon of polykatoikia and the informal extension of the periphery

D.3.2 Eleonas and its walls
D.3.3 Urban Landscape in Eleonas

D.4 Accessibility
D.4.1 Cars Accessibility
D.4.2 Public transport Network

D.5 Eleonas' Landmarks
D.5.1 Natural elements
D.5.2 Architectural Elements

D.6 Urban Greenery

D.7 Water basins

D.8 Environmental Pollution

D.9 Living Eleonas

D.1 Administrative management

Although Eleonas is a homogeneous district in terms of urban density and has a common history of development of the territory, it has well-defined administrative limits. In fact, the area is administered by five different municipal bodies such as the Municipality of Athens, Egaleo, Tavros, Agios Ioannis Rentis and Peristeri. [Figure.2]

Eleonas is therefore divided between different public administrations which apply different management and implementation policies of the territory.

Over the years, the various attempts to create common basic guidelines have proved inconclusive.

Understanding the administrative fragmentation of Eleonas and its discrepancies is essential to understand the absence to date of an overall vision and the implementation of a long-term plan that can guarantee the area a homogeneous development and its recovery.

Therefore, the subdivision of the administrative borders that cross the area prevents the application of a common development plan.

It must be considered, as mentioned above, that the area was ignored by the urban plans of the city of Athens and was only incorporated in a later and recent phase, first in 1991 and then officially in 1995 following the issuance of a decree presidential (Official Government Issue No 1049D / 30.11.1995).

The intent of this decree was to be able to establish common planning rules and to protect and preserve the character of Eleonas through well-defined constraints from radical transformations.

Furthermore, despite the administrative boundaries outlined, there are some areas that flow into the neighbouring municipalities and that present similarities in terms of urban fabric and similar problems with those present in Eleonas, although they do not belong to this neighbourhood. [1]

1 Sapountzaki P. and Wassenhoven L., "*Spatial discontinuity and fragmentation of urban areas - The example of Eleonas of Athens and Barcelona*", s.l., V Biennial of urban planners, 2003.

- Athens
- Tavros
- Rentis
- Egaleo
- Peristeri

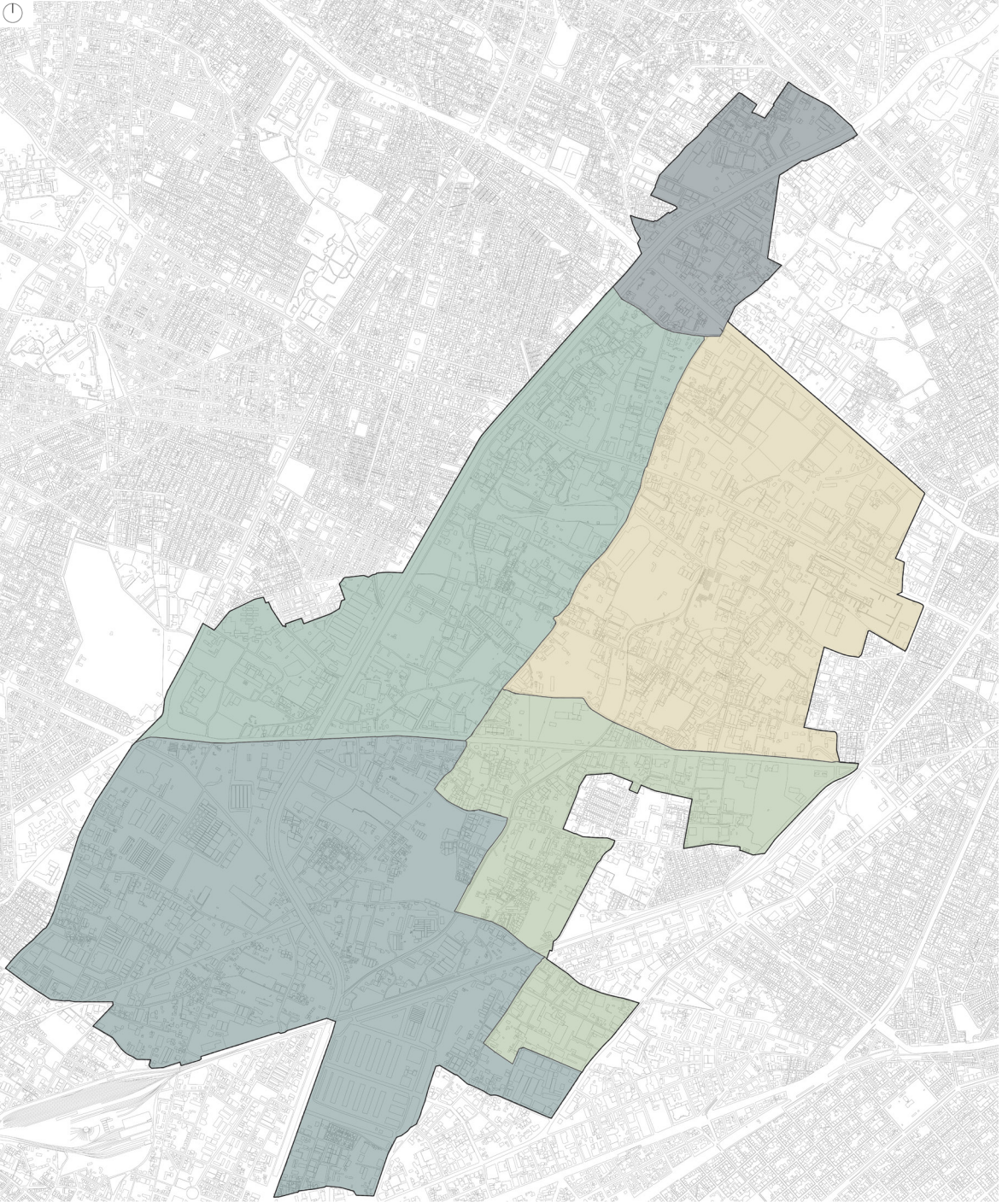


Figure.2
Title: Eleonas' Administrative Boundaries.
Source: Author



D.2 Land use

The Eleonas area today represents a large, underdeveloped void within the urban fabric of Athens maintaining an unsolved relationship with the historic centre and the rest of the capital, also presenting land uses that are sometimes incompatible with each other. The use of Eleonas land has always been associated with the changes and development of the Greek economy.

As explained in chapter B, Eleonas area was an agricultural area until the dawn of the XX century and later, during the mid. XX, the lots were divided and destined to host future manufacturing activities. In fact, the area was overwhelmed by a process of settlement of industrial activities that made it the productive pole of Attica with no kind of studied division and attribution of the land use. It must be considered that the control of land use in Eleonas will be introduced in the normative framework only in 1995 with the Presidential Decree. [Figure.3] Thus, in the twentieth century the area was completely urbanized, leaving no trace of the olive grove.

In fact, according to the Hellenic Statistical Authority (HSA) in 2011 there are about 3 332 buildings in Eleonas.

Their construction dates from before 1991 until 2011. Observing the data, it can be seen a peak of some importance between 1991 and 1995 in conjunction with the issuance of the Presidential Decrees. In just four years, 1953 buildings were built from scratch.

This is partially explained by the fact that Eleonas was included in the city planning plans and at the same time there was a need for new industrial settlements in the capital.

From 1996 to the present day, it returned to having similar data, in terms of construction of new buildings per year, to the data before 1991.

Another interesting aspect is to understand the geography of the place consists in the fact that only 25% of the buildings in Eleonas share a part of the wall, while the remaining 75% are isolated, according to HSA data.

Since the 90s with the deindustrialisation and outsourcing processes of the Greek economy, the Eleonas area has become the main seat of activities related to logistics and transport.

Currently, despite Eleonas is subject to a constant process of decentralization of companies that relocate their offices outside the city, the area still has small-scale industries and manufacturing activities, limited residential areas, sports fields, nomad camps and the refugee camp of Eleonas.

In addition, there are some plots of land intended for agricultural activity and owned by the Agricultural University of Athens and are used only for academic purposes. In any case, there has been no careful distribution and organization of land uses and this is reflected within the urban space of Eleonas.

The area is thus fragmented with land uses with different and incongruous needs.

The activities seem to be distributed randomly and there is a great spatial discontinuity that generates a great urban confusion within the neighbourhood. Only punctually it is possible to read a coherence of the presence of similar activities and functions, but it is a phenomenon limited only to some areas.

In the area there is therefore a spread of abandoned industrial buildings and many buildings built with low quality and construction techniques.

The area is today the subject of great discussion for its recovery and there are projects related

to the construction of various projects by investors who are attracted by the centrality of the area and the low cost of the land, encouraging the conversion of Eleonas from a logistics centre to a commercial one. Then it must be considered that in the area there is a spread of informal activity having a direct impact on the land use.

“Most of the small-scale manufacturing activities are not officially registered, so they are not visible and are not considered by official economic policies. So, these activities and their spatial placement does not allow for a clear and total overall view of the area’s uses “ [2]

The lack of planning and regulation by the state has pushed companies to position themselves naturally on the territory, according to their needs and requirements, near the roads, near the residential areas of the workers close to the water channels etc. generating the fragmented landscape that it can be seen today. This fragmentation generated by different land uses, volumes and types is also accentuated by the spatial discontinuity of Eleonas as the area is frequently crossed by impassable infrastructures such as the highway or the railway.

Here some data about land use:

- Industrial -25% [2 373 517 m²]
- Green Spaces -42% [3 987 507 m²]
- Commercial -10% [949 404 m²]
- Auxiliary spaces -8% [759 523 m²]
- Houses -6% [569 642 m²]

Eleonas is home to about 4 252 people distributed in 16 main residential pockets. Eleonas employs about 28 175 people (in 2005 about 34 071 people work there).

D.2.1 Industries

-25% [2 373 517 m²]

Over the last century, Eleonas has undergone major urban transformations and has hosted thousands of manufacturing and industrial businesses that have chosen this area to be able to set up their factories.

In Eleonas different types of industries can be found.

There are the heavy industries of large production that were built for large-scale production purposes and not for storage, then it is possible to find types characterized by light structures built for production and storage purposes.

Then there are lots characterized by the presence of many small, aggregated units that have the purpose of serving the largest industrial activities. These are often buildings built for storage or for the implementation and expansion of production plants.

Then there are 2-3 storey medium-scale industrial buildings and small-scale one-story buildings.

In any case, the 1980s represented a turning point in the Greek economy as the country underwent economic changes, like other Western and European countries, that were taking place on a global scale, having direct repercussions on the industrial pole of Eleonas and on the establishments present.

2 Boudouraki G. and Gitzias A., *“Continuities and Discontinuities in a Changing Post-industrial Landscape”*, Athens, NTUA, 2008.

The processes of deindustrialisation and the transition from a secondary to a tertiary economy involved Greece and the consequence was that many companies, medium-sized and heavy industries decided to decentralize their offices.

Thus, historical industries such as ETMA, the Athenian paper mills and Keranis Tabacco decentralized their factories in order to remain competitive on the global market.

Even medium-scale industries decided to decentralize their offices, however, in areas outside the city. Thus, a transition process is triggered in Eleonas that will lead this area to a haemorrhage of manufacturing industries, a process that will then be encouraged by the Presidential Decree of 1995 which supported the establishment of industrial activities outside the heart of the city so as to be able to improve air quality and reduce polluting emissions.

Furthermore, many companies decided to move due to the lack of space to be able to expand and for gentrify the modernization of the plants as the necessary space was absent due to a correct organization of the soil and due to a problem of traffic and congestion due to a system of internal streets in the neighbourhood that is not very suitable.

These policies thus disadvantaged the legal industries and favoured the establishment and development of informal businesses. However, it must be emphasized that small-scale industries linked to the food market did not decentralize but remained in the area up to the present day.

D.2.2. Housing

-6% [569 642 m²]

About Eleonas you can find different types of settlements, from self-built houses to projects related to public housing and controlled by the state, from clusters of Roma camps to a refugee camp. [Figure.4]

In any case, between 16 and 17 residential pockets inhabited by the premises can be identified and can be divided into four main recognizable typologies with common affinities.

There are several individual houses scattered throughout the territory whose construction can be traced back to the time when Eleonas preserved its agricultural character and were houses linked to this rural environment and inhabited by the owners and producers of the various crops.

Then more substantial residential pockets can be identified, formed by a cluster of buildings and not individually arranged on the territory like the houses just analysed.

These small settlements are made up of buildings resulting from the phenomenon of polikantikia and were born in parallel with the settlement of the first industrial activities and here the first workers found refuge.

The last type, the least widespread as it occurs only on time, are projects of social housing. One of these is the Stamatakis, a complex built following the Asia Minor Catastrophe of 1922 to house the various refugees who arrived from Turkey.

Another social housing complex is the one in Makrigianni, also built to accommodate refugees.

In addition, there are still several residential buildings in the area that are in a complete state of neglect. In addition to these types listed above, it is important to underline that Eleonas is subject to the phenomena of informal settlement of Roma camps and since 2015, the year of the refugee crisis, it hosts a refugee camp made up of containers.

- Roma Settlements
- Single House
- Housing
- Public Housing
- Refugee Camp

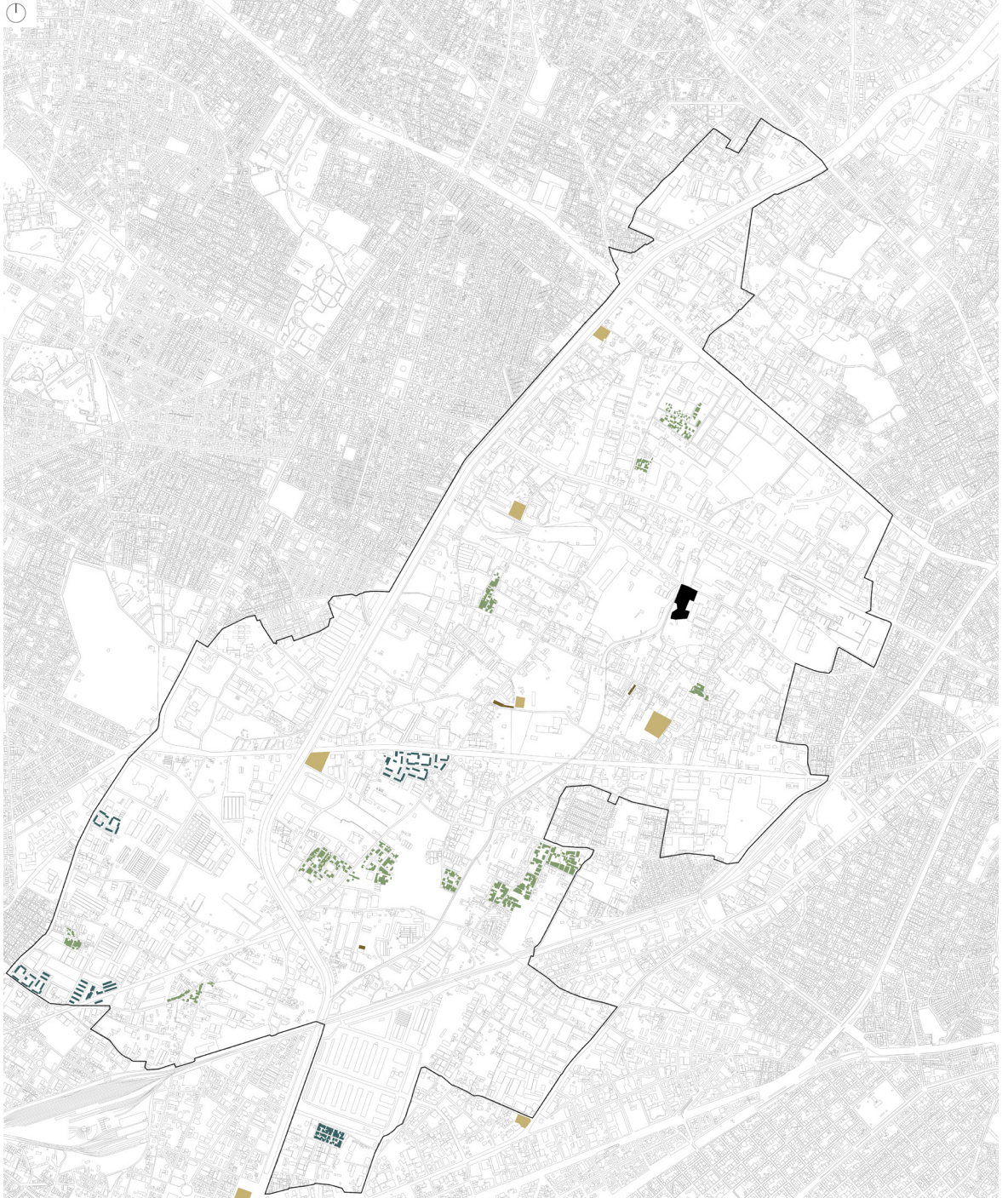


Figure.4
 Title: Residential pockets in Eleonas.
 Source: Author



D.2.3 Commercial

-10% [949 404m²]

Following the deindustrialization processes that affected Eleonas from the 1980s to the 2000s, the area was subject to a new transition linked to the ongoing changes in the Greek and Western economy in general. In fact, from the 2000s Eleonas became a logistic centre and tertiary pole of activities related to transport thanks to its strategic position and easy accessibility to the infrastructures that connect the district with the rest of the region and the state.

In the 1980s, the companies present in the area linked to the world of logistics were estimated at a number equal to 320 up to an approximate number of 1000, but this figure is not confirmed as many of these activities are illegal and therefore not possible. quantify an exact number. [3]

The conversion from an industrial hub to a logistics hub had consequences on the internal levels of traffic congestion and the already mediocre road network in the area.

Furthermore, it is necessary to explain how alongside the activities related to transport, today commercial activities dedicated to consumption are established more frequently and this is due to the Double Regeneration program whose implementation has stimulated these new settlement processes.

In any case, different types of buildings related to trade and retail can be identified in Eleonas. There are office buildings arranged on several floors, “boxes” made to accommodate sales and commerce activities that require storage and then there are design architectures created to attract investments and activities within the area.

D.2.4 Unbuilt spaces

-8% Auxiliary spaces [759 523 m²] and built areas -42% [3 987 507 m²]

Eleonas is the only area in the heart of the city that stands out from the typical urban fabric of Athens thanks to the strong presence of free and unconstructed spaces.

Very often accessibility to these spaces is not always guaranteed or at least clear as many of the lots are fenced or the entrances are difficult to find as they are surrounded by large industrial complexes. The free areas are the result of incorrect urban planning, the subdivision of the land, the attribution of land use, it is the residual space of the activities established over the years. Some main non-built spaces within the neighbourhood can be identified with common characteristics. They coincide with “*natural*” spaces or small public gardens and vacant residual spaces of manufacturing and industrial activities.

In the area there are some public spaces dedicated to urban parks. The main ones are the Iron park in the eastern area, a green space located in the southern area of Agias Annis and the most important, located in the immediate vicinity of Eleonas are the gardens of Plato where the Platonic academy once stood.

In addition, the Botanical Garden belonging to the Agricultural University of Athens and the Cemetery of Athens can also be identified as a green space. This space is used for preparatory and educational purposes by the institute. These spaces appear to each other as a large mosaic that largely constitutes the area of Eleonas.

3 Wassenhoven L., “*Urban Organization and Reform of the Eleonas Area, research program*” Athens, NTUA, 1922.

These voids were rarely thought to be such and their succession, together with the buildings built and often kept in a state of decay if not neglect, combine to give the area a character of desolation and abandonment.

The Presidential Decree of 1995 was of great importance as it was the first decree that tried to give an answer to how to fill these gaps within the Eleonas fabric.

The answer given was to transform these large open spaces into urban green to be able to change and consolidate the landscape of the neighbourhood along with the remaining industrial activities, a position that aroused great amazement in the residents.

The president of the Markoni Association of Eleonas Residents said during a meeting

“We used to think of big changes ourselves, that Eleonas should become green. But how would that be possible? 9km² to become greenery? Of course, Athens needs a large “Green lung”. “

In fact, the plan to completely convert all the remaining spaces to green areas thundered as something unthinkable and difficult to achieve because the application of greenery in such a massive way, before the Double Regeneration program, did not ensure the improvement of the economic fabric of the activities present on the territory.

D.3 Urban density

Eleonas still leaves an evident mark in the Athenian urban fabric, [Figure.5] both in terms of structures and infrastructures and is well defined by the Kifissos River, where the Kifissos highway now runs, the railway line and the Piraeus Road. All elements that can be considered as insurmountable barriers.

Walking to west from the heart of Athens, crossing the great roads, one perceives a clear interruption of the repetition of the small compact blocks that characterizes Athens, and one is catapulted into a completely different spatial dimension.

The two parts of the city intertwine with each other almost arbitrarily.

In fact, a visual and perceptual difference in the urban context can be immediately noticed.

The blocks that characterize the compact city are well defined and circumscribed, small on which rise residential buildings with a maximum height of 6 floors determined by the phenomenon of polikatokya (Cf. D.3.1.).

Instead, the Eleonas blocks are poorly defined and the buildings, dispersed like an archipelago within the area, reach a maximum height of five floors. Only in the north-eastern part of Eleonas it can be noticed how the compact fabric of Athens has also spilled within the boundaries of this area whose morphology creates a transition space between the compact city and Eleonas. [Figure.6-7] A sort of balance between the built and unbuilt space. [Figure.8-9]

This feature is inherited from the history of Eleonas. This neighbourhood has never had a residential character but has had an agricultural character since ancient times.

The subdivision of the land in the industrial age, therefore, had as its basis the subdivision that followed and distinguished the various crops.

The abandoned industrial buildings present, depending on their orientation, shape an urban landscape of concrete and metal skeletons. Sometimes it is possible to find small residential pockets, with buildings of two or three floors high and whose dimensional scale is completely



Figure.5
Title: Eleonas as urban void within Athens
Source: googlemaps.com

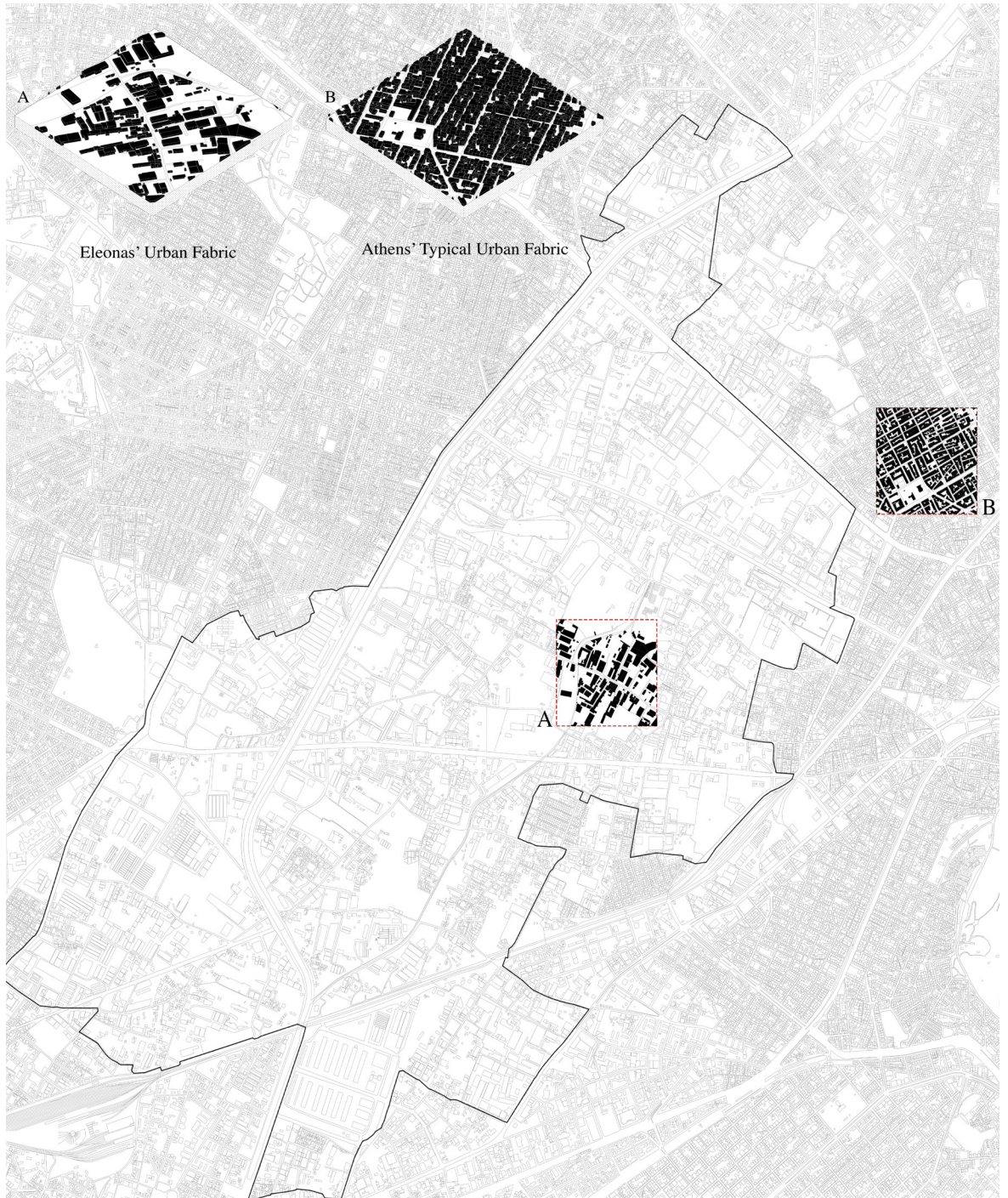


Figure.6-7
 Title: Urban Fabric Types-Comparison between Eleonas' urban fabric and Athens'. (Point A-B, Figure.6)
 Source: Author



■ Built Environment

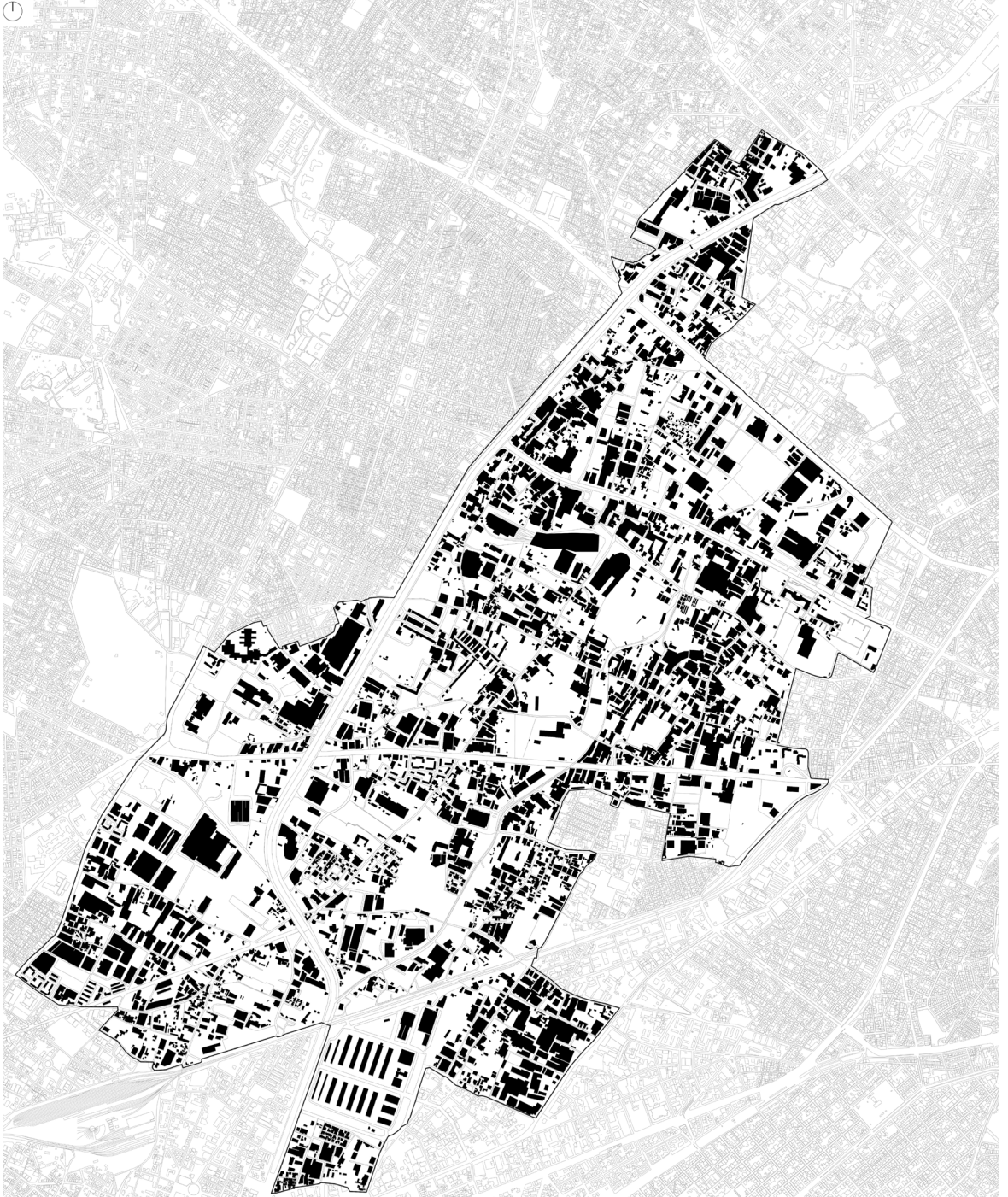


Figure 8
Title: Built Environment in Eleonas
Source: Author

0m 100m 250m 500m
50m 100m

■ Unbuilt Environment

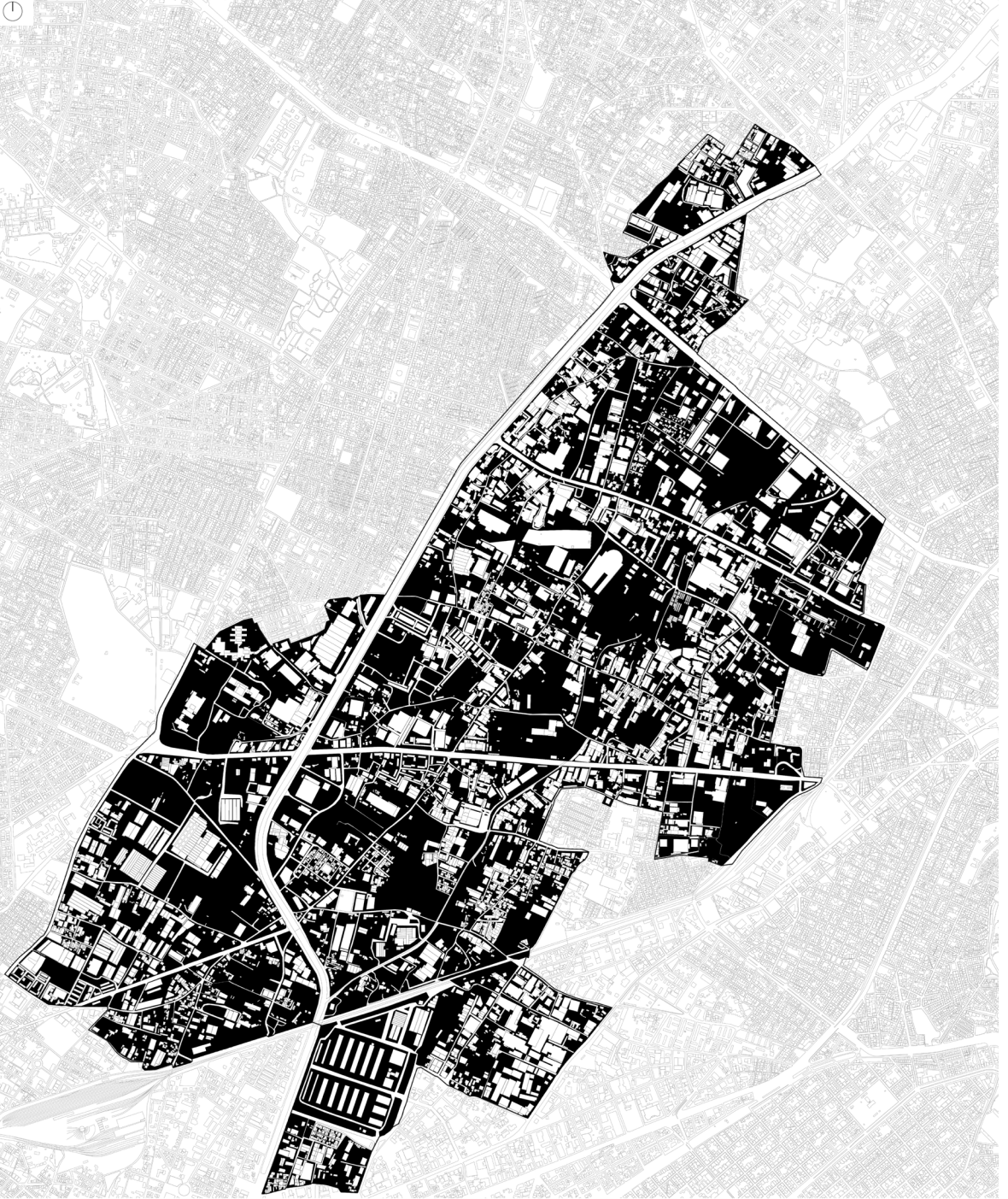


Figure.9
Title: Unbuilt Environment in Eleonas not considering the road axes
Source: Author



hidden by the surrounding industrial landscape whose size, together with the present infrastructures, generates obvious visual disconnections.

The large open spaces, unlike the urban fabric of the city, are therefore a characteristic of Eleonas and are the result of an incorrect subdivision of the land and use. These areas, together with large, abandoned plants, are often subject to phenomena of informal settlement of vulnerable social groups.

“In the twentieth century, planning tended to define and enclose boundaries; has created static territories in the city, which have decreased exchanges between social, economic, religious and ethnic groups by creating gated communities.” [4]

The succession of abandoned, closed, free, degraded spaces induce a strong sense of decay and decline.

Another large urban void, of a certain impact, is today due to the interruption of the construction of the Panathinaikos Athlitikos Omilos stadium project and is one of the largest free areas in the city. Other large voids present, however in terms of soil permeability, are those few lots dedicated to agricultural activity.

Furthermore, it is necessary to underline that Eleonas was excluded from the zoning plans until 1995, the year in which she was introduced into the zoning plan through a Presidential Decree.

Therefore, it can be considered Eleonas as a great urban void resulting in an urban and social discontinuity as Eleonas today appears largely as an abandoned area due to the economic decline that has hit Athens.

D.3.1 “City Piece by piece”: the phenomenon of polykatoikia and the informal extension of the periphery

The substantial increase of the resident population in the urban agglomeration of Athens was followed by a lively urban spatial growth. The demographic increase led to a high demand for residential spaces to be able to establish new settlements.

To cope with this growth, a strategy was implemented that focuses on individual private property and is put into practice through small-scale interventions linked to building speculation and the exploitation of small plots of land to favour the densification processes of the urban fabric.

Thus, it was that in the 1920s a plan was developed that was based on the construction of small-scale buildings; timeshare housing units called “Polykatoikia”. [Figure.10] These residential units, like the urban typology of the condominium, in their repetition and multitude have defined the homogeneous and compact character of the fabric of the city and have determined its urban landscape in the cultural and collective imagination, and represented the maximum expression of private property, a key element of capitalist economic culture.

Polykatoikia is based on a standardized construction system [Figure.11], built at low cost with intensive methods, with brick infill and light internal partitions. Other architectural features are the concrete floors, the terraces and the wooden shutters and, with the structure, they can be considered as an expression of modern Greek vernacular architecture. [5] [Figure.12]

4 Burdett R. and Sudjic D., “*Living in the endless city: the urban Age Project of London School of Economics and Deutsche Bank*”, New York, Phaidon Press, 2011.

5 Philippides D., “*Was Le Corbusier guilty or not? Architecture in Greece 21*”, s.l., s.n., 1987.

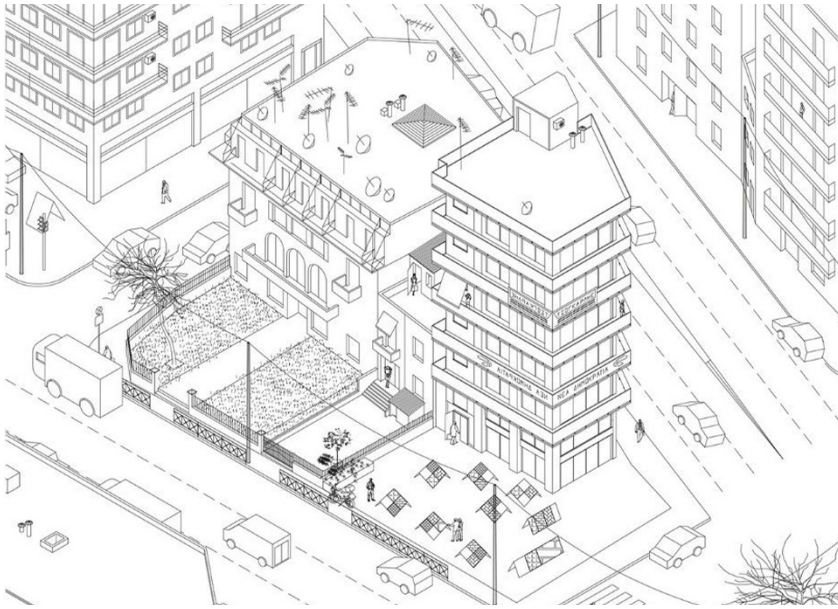


Figure.10
 Title: Polikatokia
 Source: Courtesy of Dimitris Philippidis' Archive

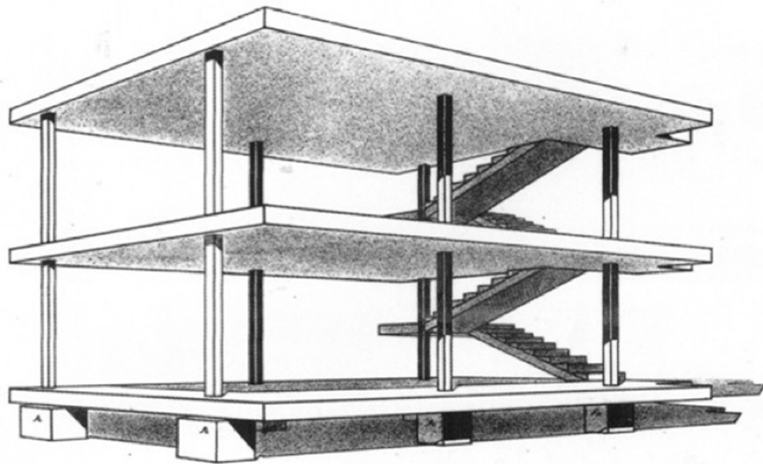


Figure.11
 Title: Dom-ino House
 Source: Le Corbusier, 1914-15

The construction of these condominiums, in fact, is a direct effect of a bottom-up policy and Polykatoikia has been used as an administrative planning tool. Polykatoikia becomes an essential element of an administrative, economic and political strategy fully incorporated into the city building processes. These units are components of a political mosaic of space design



Figure.12

Title: Polikatoikia buildings

Source: Invisible cities: Athens by Aris Minaretzis' archive

where many small landowners can build a housing unit thus managing to control social reproduction within the city and to tame the population to an urban lifestyle. The construction of these units is the manifestation of the different forms of cooperation and knowledge within the urban space. The fragmentation of property and well-being are direct consequences of these policies which arise as an evolution of the self-built and informal development techniques that were taking hold in the city as a result of migratory phenomena.

In the city, the block becomes the fertile ground for developing the unity of Polykatoikia. A small-scale property on which the state's economy will be built. This phenomenon was intensified through the facilitation of mortgages or with the reduction of taxation. In Greece, especially in Athens, in the post-war phase of the Second World War the number of inhabitants will grow further, in a context where, however, there is an almost absence of projects for the construction of public housing. In fact, in Greece the amount of residential production stood at 3% compared to 20% in European countries. The Polykatoikia was the direct consequence of a lack of large-scale planning. Thus, emerged a common construction practice based on the use of local materials, economic construction methods and manual labour and was the key to urban development of Athens in the reconstruction processes after the Second World War. In the wake of this socio-economic practice, an informal contract was born, defined with the term "Antiparochi" which allowed owners to enter into an agreement with local builders to develop the construction of a residential unit in their lot. Contract that was based on the tax-free exchange of land ownership with some of the housing units within the future condominium. Practice not regulated by the state but stipulated between private citizens and which will be a great success, becoming the most used practice from the 1950s onwards for the construction from scratch of residential buildings.

The expansion of the city was promoted not only through the practice of Polykatoikia but also through the founding of private suburbs. These settlements were the result of the market

needs of pressure from entities such as the Refugee Settlement Commission (RSC) and the Ministry of Welfare which identified their optimal location in the west of the city, near the production areas.

In any case, even this practice oscillated between formality and informality and had as its goal to intensify the activity of land use in those areas where migrants and workers who arrived in the city had previously settled and built their own homes.

This was an “*informal right*” given by the authorities to migrants and refugees to build their own residential units. It therefore legitimized itself to build or expand a given territory within the city independently. This approach was used in the foundation mechanisms of new neighbourhoods and the expansion of existing ones.

This practice can also be seen as a tool to absorb all the informal activities of the low-income classes of society in a systematic way to gradually achieve the legalization of land occupation and the construction of informally born households.

In parallel with the occurrence of these practices, three specific laws, introduced by liberal governments within the regulatory regulation, were issued to formally include what was happening in Athens and in other cities in an informal way.

The laws are:

- July 27, 1923 “*Plans for Cities, Towns and Settlements of the State*”;
- April 3, 1929 “*The General Building Regulation of the State*”;
- 3741/1929 “*On horizontal Property Division and other provisions*”.

because of these practices, it was possible to give a home to the thousands of migrants who arrived daily in the capital and moreover, it could be affirmed the creation of the first-middle class that finds itself “*improvised entrepreneur*” and owner of properties from which it will be able to remunerate, for example, through their rent.

This way of making the city, “*Piece by piece and section by section*” as claimed by Dimitris Philippides had beneficial consequences in the building and construction sector as the industries that provided the building materials have the possibility of accumulating a certain type of capital.

It can therefore be said that this informal practice was decisive for the generation of economic well-being as it encouraged the production of small-scale residential artifacts involving small and medium-sized construction activities, favouring the creation of a solid socio-economic fabric within the country. The only problem, however, linked to a real planned planning of the territorial expansion of the city is manifested in the urban space through the absence of open spaces, proper development of public transport and infrastructure.

Furthermore, the phenomenon of polykatoikia never really took place in Eleonas because this area followed another direction and was never implemented as residential area since it was considered as a protected productive land according to the official statutory plan (Bofilias, 2005) and the phenomenon of subdivision of land and their expropriation never took place. It must be underlined that the phenomenon of polykatoikia instead generated a certain type of urban fabric with direct consequences on the urban density of the residential areas that surrounds Eleonas.

D.3.2 Eleonas and its walls

Although Eleonas stands out from the Athenian urban fabric due to the large availability of undeveloped plots, it appears at street level as a sort of fortress.

In fact, one would expect a porous territory where visual continuity is guaranteed by the flat morphology of the land and the low urban density with not very impressive buildings scattered over a large area. Instead, the perception that one can have, walking around Eleonas's surroundings, is exactly the opposite of the idea of a high porosity understood as "*A large fraction of space, in which displacements can take place*". [6]

First, there are large transport infrastructures, such as railways and highways, which literally represent large opaque walls that interrupt the visual continuity between the various parts, increasing the sense of fragmentation of the blocks. [Figure.13]

Penetrating instead into the heart of Eleonas, the sense of fragmentation and anguish increases as it enters the narrow streets that separate abandoned lots with buildings of which you can only see the upper part as the element of the opaque wall is a constant that can be found practically everywhere. [Figure.14-15]

In fact, most of the areas are completely fenced with opaque and high walls that define the limits of the area by circumscribing it and giving us an idea of the spatial construction of this area of the city. There are different types of walls, made with different materials and with different techniques, accentuating the fragmentation of the various blocks belonging to different owners.



Figure.13
Title: Railway in Eleonas
Source: Author

These walls do not guarantee visual continuity and perception of the whole but accentuate the sense of closure and disorientation together with the blind and narrow alleys that characterize the capillary system of the internal streets of Eleonas, transforming these parts of the urban fabric into a labyrinth. The continuous succession of opaque walls thus gives an element

6 Secchi B. and Vigano P., "*Le ville poreuse, a project for the great Paris and the metropole de l'après-Kyoto*", s.l., Metis Presses, 2011.



Figure.14
Title: Opaque Wall_1 in Eleonas
Source: Author



Figure.15
Title: Opaque Wall_2 in Eleonas
Source: Author

that accentuates the character of Eleonas' enclave, transforming each area into an independent enclave completely detached from its context. These analysed properties thus favour the proliferation of illegal activities and the creation of informal settlements as they become difficult to reach for outsiders and thus, escape the control of the state.

D.3.3 Urban landscape of Eleonas

The area around the borders and along the large infrastructures of Eleonas is characterized by a less dense urban fabric than the classic Athenian pattern but much more consistent and denser than the one in the heart of Eleonas. In fact, the landscape of this district can be summed up in the scattered constellation of low-density industrial buildings still active and skeletons of production plants that are no longer in operation. [Figure.16]

In fact, the plants present are characterized by a greater horizontal spatial extension and low heights. It is possible to find three types present mainly where the building itself acts as a separator element with the road and partially or entirely reconstructs the road curtain occupying the entire lot or where the building is vacant within the area and enclosed by opaque walls. Not only the buildings contribute to the construction of the urban image of Eleonas, but they are flanked by the different systems used to fragment the properties

The landscape of Eleonas, therefore, consists of the constant repetition of these built elements and their alternation with the large residual spaces, sometimes green but in a strong state of decay.



Figure.16
Title: Eleonas areal view
Source: Φωτογραφία Ν.Α., 2006

D.4 Accessibility

D.4.1 Cars Accessibility

The strategic position of Eleonas with respect to the urban context of the capital, between the heart of Athens and the commercial port of Piraeus, has favoured the implementation of road and railway infrastructures since ancient times, in order to connect the two urban poles.

Today, these large infrastructures, from large to small scale, cover 8% of the total surface for an area equal to 71 hectares and represent real physical barriers that define and marginalize Eleonas from the city, transforming the area into a space completely detached from the context, like an island.

“Although railway lines and highways are links with the city [...] they also constitute barriers at the neighbourhoods level. The dual character is the high connectivity but also the low accessibility on a neighbourhood scale” [7]

In fact, it must be considered that despite these factors represent elements of discontinuity in the urban fabric, they are fundamental, still today, to guarantee the city a fast connection with the rest of the country and gave the opportunity to Eleonas to be able to evolve as a logistical hub of the capital because of its excellent vehicular accessibility. Thus, these infrastructures literally determine the boundaries of the neighbourhood. [Figure.17]

The Leoforos Kifisou axis, North-South axis, delimits Eleonas on the western side along with Thion Avenue. The north side is instead delimited by the Leoforos Anthinon axis while the east-south sides are delimited by the passage of the railway. In any case, three types of roads can be defined within Eleonas depending on their area of use, size and state of decay.

It can be therefore brought into analysis:

A) The main highways of Leforos Anthinon and Konstantinopoleos Kifisou NS [Figure.18] (the latter foreseen by the evacuation program for the 2004 Olympic Games and built in 2008 with 8 lanes) which allow a direct connection between the city and the region of Attica. These axes act as a membrane that keeps Eleonas' structure and mass compact and as a wall that hides the heart of the neighbourhoods from view.

B) The large urban arteries, with several carriageways, which circumscribe Eleonas and among these there are back Iera Odos ring road to the north, the Petrou Ralli avenue to the south, the Piraeus Road to the east and the Thivon avenue to the west and as the backbone of the neighbourhoods instead there is the avenue Agias Annis.

Observing the area, it is possible to notice the scarce presence of East-West connections and the almost complete lack of connection axes along the North-South axis East-West axes thus bringing together traffic, about 10,000 to 40,000 vehicles daily (Data of transport of the Attica region), in the few avenues present and causing important phenomena of congestion and pollution.

7 Kotsikou E.A., “*De-fragmenting Athens: Drosscape as a device for integration between the metropolitan and the local scale*”, Delft, TU Delft, 2010.

- Primary Road
- Internal Road System
- Secondary Roads

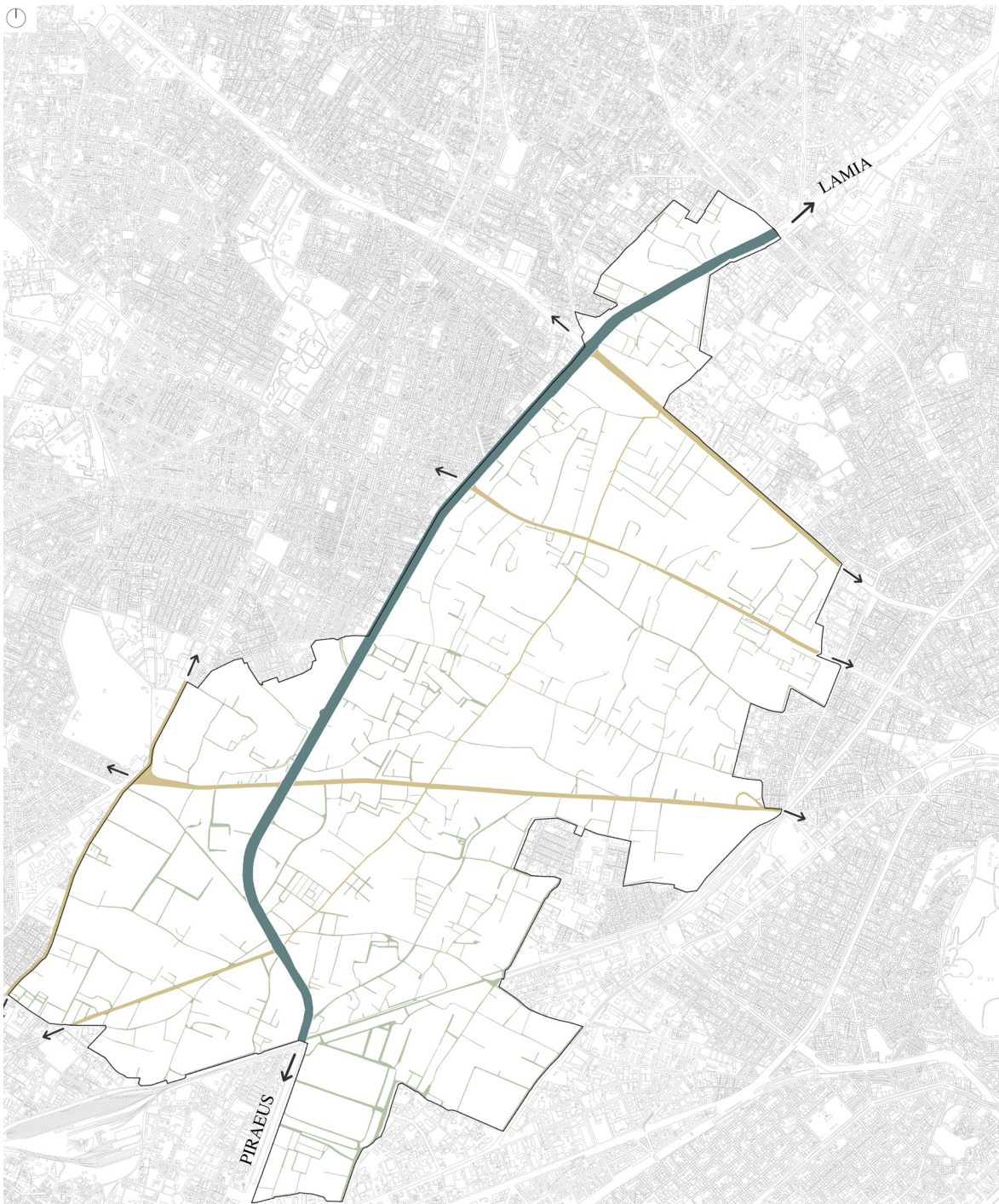


Figure.17
 Title: Road Network, Eleonas
 Source: Author





Figure.18
Title: Konstantinopoleos Kifissos NS 2021
Source: Author

These roads on a supra-local scale represent the nuclei of entry to Eleonas and allow the connection of the neighbourhoods with the rest of the metropolis, attracting various urban functions within the area.

C) The capillary system of roads that cross the neighbourhoods instead is in a high state of decay.

The roads in most cases have no sidewalks, thus preventing pedestrian accessibility safely, they are not maintained and have a road surface in poor condition and are often disconnected from each other.

As you can see, much of the road system belonging to the local and capillary network within Eleonas are blind and narrow streets.

This internal road network is the informal result of the accessibility needs of manufacturing and industrial activities to allow them a connection with the existing road system.

These factors make this system unsuitable for hosting heavy vehicular traffic, aggravate the level of discontinuity that exists between the blocks of the district, further conferring an enclave character with respect to the city which results in heavy traffic congestion during working hours.

In addition, the inaccessibility of the internal parts of Eleonas has prompted the area to host informal and non-regulated activities as they are completely detached from the reality of the city.

Strategic planning linked to the implementation of the internal road axes system is therefore a must to allow greater use of the area at the neighbourhood's scale and to make it more accessible to heavy vehicles operating for companies in the area.

D.4.2 Public transport Network

In terms of public transport, on the other hand, Eleonas can be reached thanks to the network of local and super-local buses, the underground and the railway. [Figure.19] The local bus system rarely crosses the heart of Eleonas but on the contrary, it circles it on its borders, except for five points where it enters the area. Exactly they serve the centre of Polykarpou Street, to the north in the vicinity of Plato's Gardens, to the south always serving Polykarpou Street, at the end of the Agias Annis road and to the south where buses serve the residential area belonging to the municipality of Tavros. Therefore, buses mainly serve the few residential areas present and hardly enter Eleonas' body, thus leaving different areas uncovered and forcing people to use their own car to arrive to work, aggravating vehicular traffic.

The main base instead of buses with supra-local and international destinations, KTEL, it is supposed to be realised in the North Area of Eleonas and this would be the starting and ending point of many connections with the rest of the country. Eleonas is served by the railway that connects the region from North to South, in two main stations within the district: Tavros and Rouf.

In addition, the area is served by a further three metro stations, one located in the heart of Eleonas between the Iera Odos and Agias Annis axes whose toponym is Eleonas [Figure.20] and the other two stations are located on the outer edges of the Eleonas and are the stations of Kepameikoy to the east and Aigaleo to the west.



Figure.20
Title: Eleonas metro station entrance
Source: Author

The latter service is mainly used by residents and students at the Agricultural University of Athens.

In terms of sustainable mobility, the area does not have any cycle paths, cycling stations or services related to the share economy such as bike-sharing.

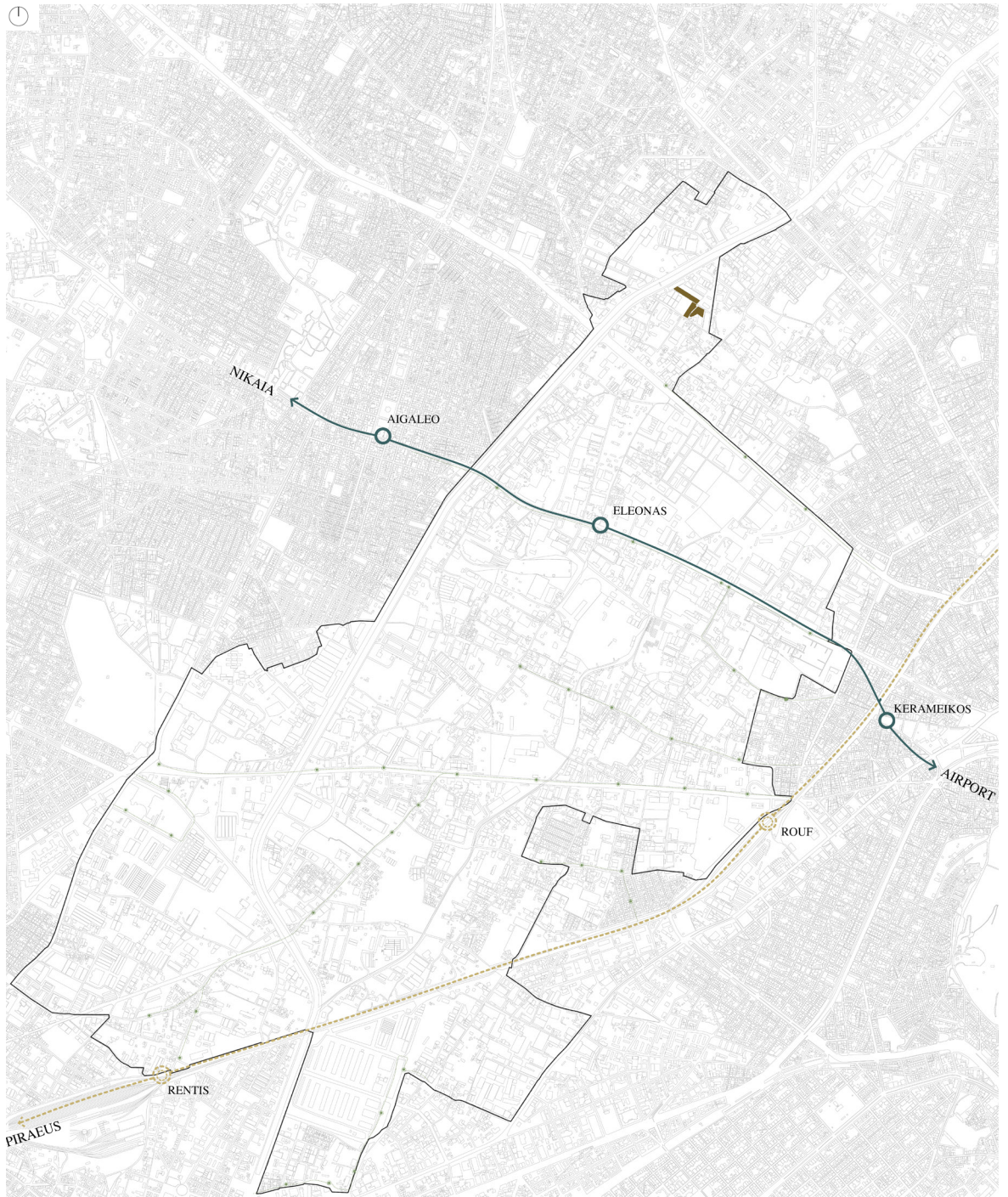
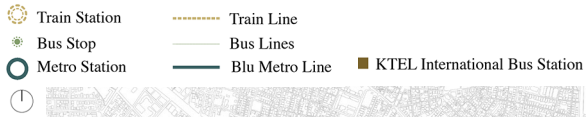


Figure.19
 Title: Public transport network, Eleonas
 Source: Author



D.5 Eleonas' Symbolic places

Some architectural and natural elements stand out within Eleonas due to their symbolic, cultural and historical values. [Figure.21]

Some of them are considered by the local population as landmarks since they stand out because of their architectural and morphological dimension within the urban fabric whose is characterised by a large availability of open spaces, a flat morphology and by a low height of the buildings present. So, some of these architectures or natural become points of reference and recognition for those who live daily and not the area.

Of these landmarks, they can be identified two categories, one linked to human production and therefore, buildings of a certain importance that have a socio-economic attractive power and the second, on the other hand, can be reunited with natural elements characterizing the territory where Eleonas stands.

D.5.1 Natural elements

-The Kifissos River, together with the Ilisos River, crosses the western region of Attica until it crosses the heart of Eleonas. [Figure.22]

It finds its origin between Mount Pentelico and Mount Parnete and then flows into the Falereo bay.

This river has a regular flood and dry regime throughout the year, and it lay on a single bed until the first human alterations, to allow the irrigation of the fields and olive groves, partially diverted its path. The river has a total length of approximately 24km in total. Subsequently, to allow the construction of the Kifissos Highway, the river was almost put underground.

To date only a part has remained uncovered and is in the southwestern part of Eleonas, near the Central Market of Athens.

This river had a great symbolic and practical importance for the Athenians and to allow the prosperity of the Eleonas district and is now used as a reference point by the citizens.

-The Prophet Daniel channel [Figure.23] is today a tributary of the Kifisos river but in the past, it flowed into the Ilisos river.

The change in the path of the bed of this canal was due to the need for irrigation of the fields and then, in industrial times, it was used for the discharge of polluting waste from industrial activities in the area.

It is located in the heart of Eleonas and part of its path is still visible as it was not completely sealed off. In fact, you can still visibly see where it joins the main river Kifissos. The other part is instead completely underground and was serving as a sewer and received all the polluting discharges from the factories.

-The rock of the Acropolis of Athens can be seen from almost every corner of Eleonas [Figure.24], as opposed to other areas of the metropolis where building speculation has generated high rise buildings that have cancelled the visual relationship between the Acropolis and the city.

It must be considered that the heart of Eleonas is just over 2km from the center of

- Agricultural University of Athens
- Iera Odos
- Kifissos River
- Gardens of Plato
- Athens' main Cemetry
- Acropoli
- Botanical Garden
- Central Market of Athens
- Prophet Daniel
- Mosque

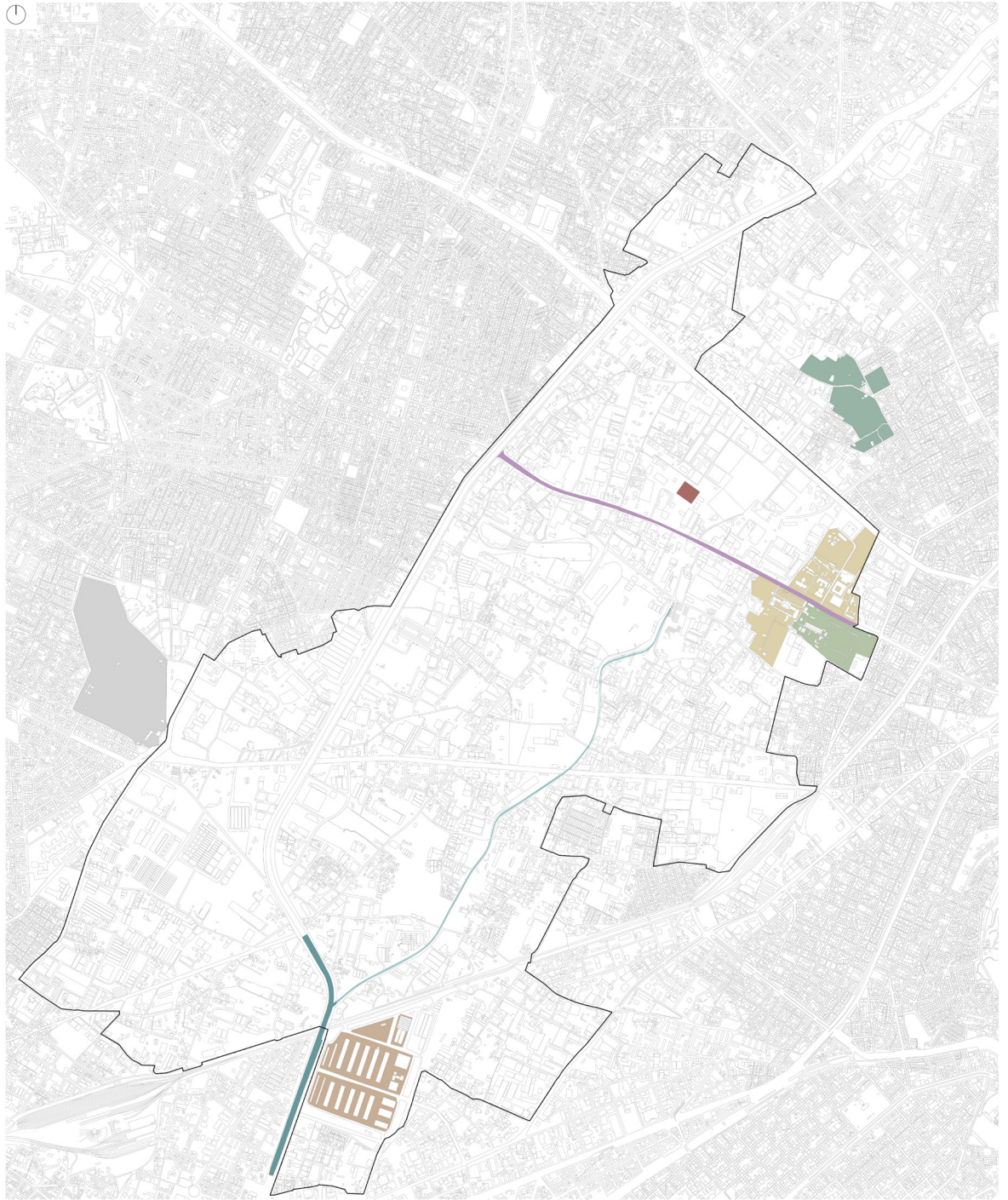


Figure.21
 Title: Eleonas' Symbolic places
 Source: Author



Figure.22
Title: Kifissos River
Source: ΔΕΥΤΕΡΑ, 15 ΙΟΥΝ 2020ZNEWSTEAM



Figure.23
Title: Prophet Daniel Channel
Source: Author

Athens and thanks to the flat morphology of this district it is therefore still possible this direct connection with the Acropolis and with the imposing architecture of the Parthenon that stands out over the whole city, creating suggestive optical cones that contribute to the spatial perception of the area.



Figure.24
Title: Acropoli view from Eleonas
Source: Author

D.5.2 Architectural elements

-The Agricultural University of Athens, Γεωπονικό Πανεπιστήμιο Αθηνών, is a historic university institution in the city. [Figure.25].

The architectural body of the University is inseparable with the open spaces dedicated to didactic learning which are used as agricultural fields for educational and training purposes, thus bringing back to life the agricultural landscape that characterized Eleonas in the past and now disappeared, thus maintaining a strong bond with its own historical roots. [Figure.26]

-The Botanical Garden in Eleonas belongs to the Agricultural University of Athens and it is used by the University for educational and preparatory purposes for the students. It is a green area open to the local community of Eleonas and of the city. [Figure.27]

-The gardens of Plato represent one of the archaeological areas of the city. [Figure.28] Here, in 387 BC, the Platonic Academy was founded, one of the philosophical schools of the ancient world and here Plato walked and gave philosophy lessons with his students. [Figure.29]

Subsequently, the academy was first damaged and destroyed in 88 BC by the Romans. It was only restored almost five centuries later, in 410 AC thanks to the Neoplatonists and remained in business until 529 AC, the year in which

Emperor Justinian I decreed its permanent closure by imperial decree. Today very little remains of this institution. The Gardens of Plato are used as a park and as an archaeological site which, however, is in a severe state of decay, almost in a state of neglect.



Figure.25
Title: Main building of Agricultural University of Athens
Source: Stathis Mamalakis

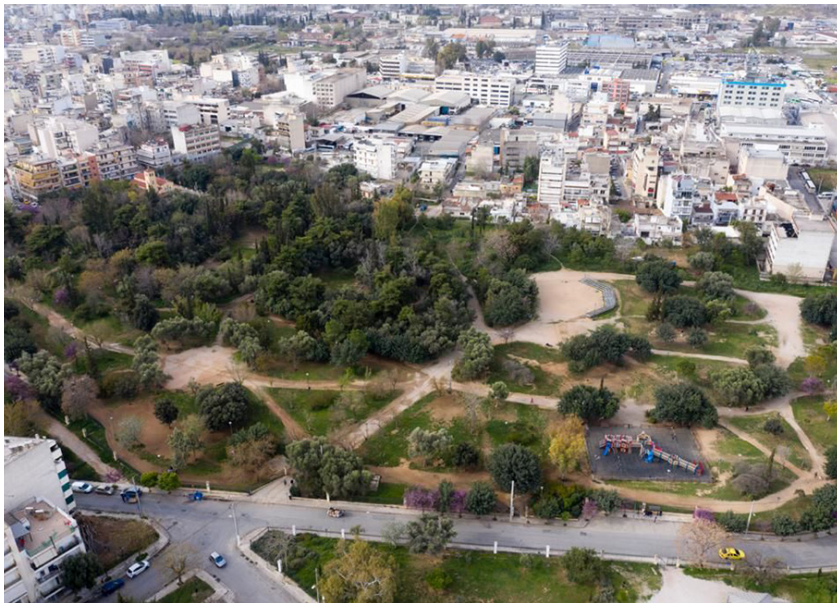


Figure.28
Title: Gardens of Plato, Areal view
Source: <https://www.athina984.gr/en/2021/04/15/anadeiknyetai-i-akadimia-platonos-dimioyrgeitai-to-archaiologiko-moyseio-athinas/>

-The Central Market of Athens with its location, close to the railway and the Kifissos highway in the south-eastern part of Eleonas, makes this market one of the most important throughout the metropolis, a place for buying, selling and trading goods. [Figure.30]



Figure.26
Title: Agricultural University of Athens
Source: googlemaps.com



Figure.27
Title: Botanical Gardens
Source: googlemaps.com

-The Athens cemetery is one of the historic and most important cemeteries of the city of Athens and is in the western area of Eleonas and today represents one of the largest green areas in the area despite its funeral function.



Figure.29
Title: Illustration of Plato's Academy , XIX sec.
Source: World History Archive



Figure.30
Title: Entrance of Central Market of Athens
Source: Author

-Iera Odos, or sacred road, is today one of the most important road axes of Athens and part of them crosses the district of Eleonas.

The toponym has its roots in a sacred procession that took place in ancient Greece, the procession where the mysteries of Elusi were celebrated.



Figure.31

Title: The beginning of Iera Odos inside Kerameikos cemetery

Source: Iera Odos – Following the sacred road of Ancient Athens by Tony TSAP on 2 May 2021

The mysteries of Elusi were religious rites linked to an ancient agrarian cult that were celebrated annually in the sanctuary of Demeter in the city of Elefessina and part of the celebratory act consisted in the transport of religious items and in the path led by the priestesses from the temple of Demeter to Elusi up to the Agora of Athens through the current Iera Odos which at the time was one of the longest roads in all ancient Greece (about 22KM). [Figure.31]

D.6 Urban Greenery

The traces of the agricultural past that marked the fate of Eleonas have now almost completely disappeared.

In fact, the last specimens of secular olive trees belonging to the Sacred Olive Grove of Eleonas are today considered as a common heritage and are kept and maintained within the Campus of the Technological Educational Institute of Pireaus and may be found some traces in the Botanical Garden of Athens that belongs to the Agriculture University of Athens. [Figure.32]

In any case, the urban green in Eleonas consists of small and medium-sized parks within the urban fabric. Among the most prominent are Plato's gardens and Iroon Tavros park and these two parks represent the largest green areas in the neighbourhood. [Figure.33]

However, it can be must remembered that traces of mainly "*spontaneous*" vegetation can still be read, especially outside and on the borders of Eleonas. [Figure.34]

The present and widespread flora can be understood as urban and local vegetation with species typical of the Attica region. In fact, you can find examples of more recently planted olive

- Urban Park
- Urban greenery
- Sport infrastructure
- Unbuilt and permeable Areas
- Agricultural Fields

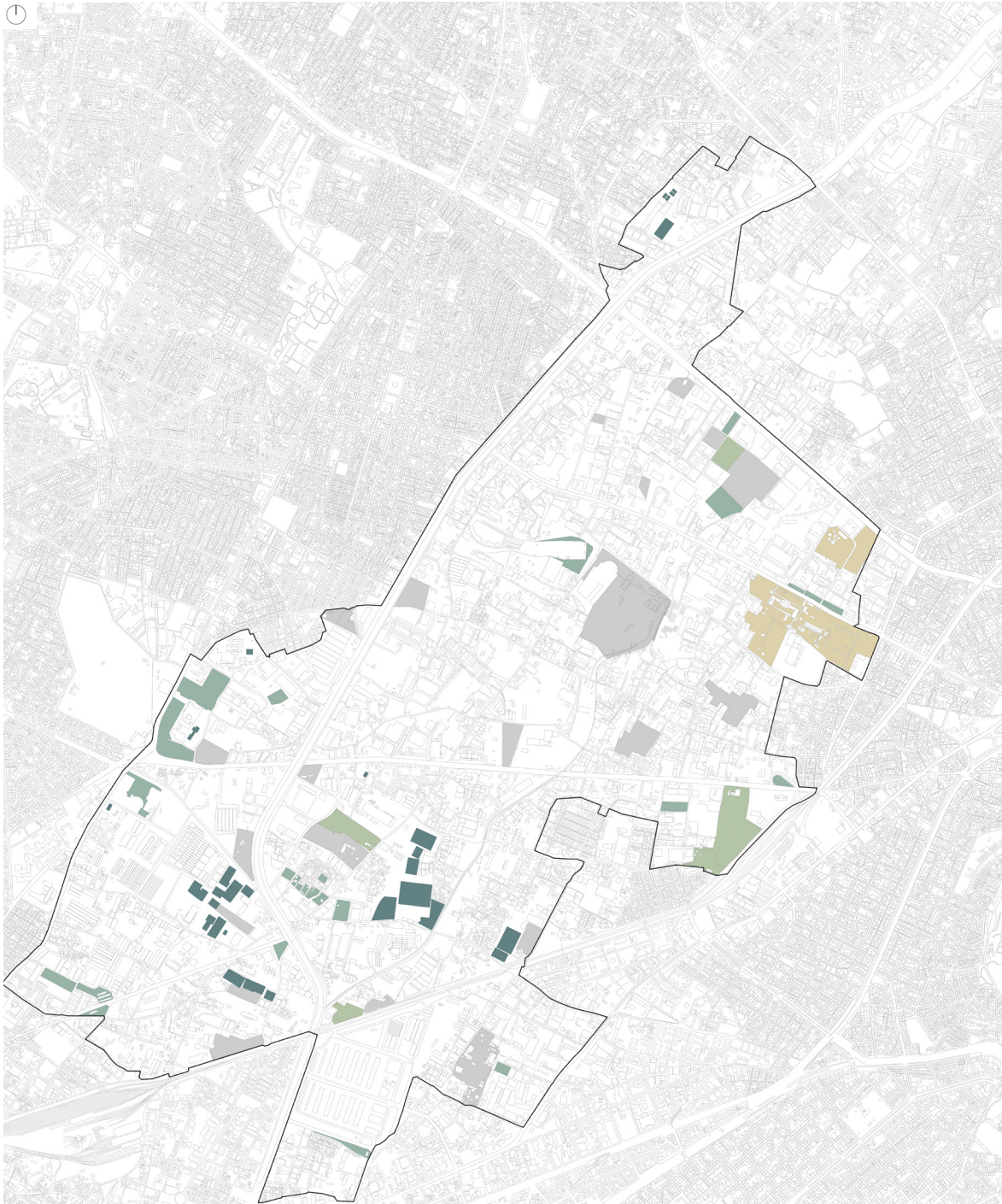


Figure.33
 Title: Urban Greenery within Eleonas
 Source: Author



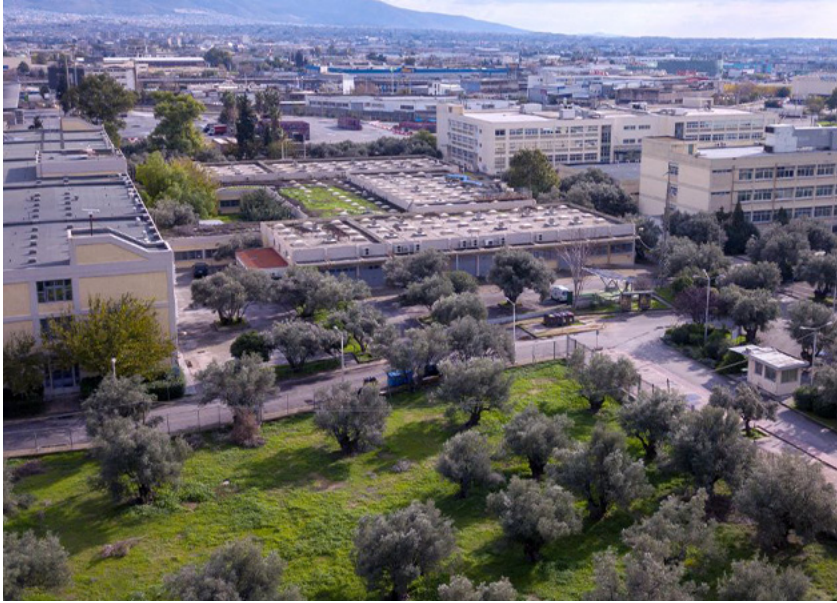


Figure.32

Title: Campus of the Technological Educational Institute of Pireaus' Olive grove, areal view
 Source: <https://www.uniwa.gr/en/the-university/infrastructure/ancient-olive-grove-campus/>



Figure.34

Title: Olive trees in Eleonas

Source: Iera Odos – Following the sacred road of Ancient Athens BY TONY TSAP on 2 MAY 2021

trees, pines and elms.

Furthermore, it is interesting to note that there is instead a denser vegetation, poorly cared for by weeds, high grass and various types of bushes along the non-trenched part of the Kifissos River and the Prophet Daniel Stream channel.

D.7 Water Basins

Water is vital for the prosperity of an area and each context has its own urban water cycle which is determined by many factors.

In fact, human activities and settlements generate different needs over time which result in the alteration of the natural conditions of a territory, for this it can be defined an urban and non-natural water cycle as the natural elements are modified and shaped according to needs through processes of canalization, drainage, discharge or retention and therefore with the construction of water works such as sewers, drainage systems etc.

The Eleonas neighbourhood is no stranger to these artificial processes of control and management of water resources. This district is characterized by the presence of some water basins of extreme importance for Attica [Figure.35], represented by the Kifissos and Illisos rivers, two water resources that have influenced the development and shape of the city and its infrastructure over the centuries. [Figure.36]

The uncontrolled growth of Athens in the 1960s resulted in an increase in the impermeable soil to water and this factor had direct consequences on the events of flooding and flooding in the various areas of the city as a result of a water runoff problem. These phenomena mainly affect the areas located in the western area of the city, not surprisingly in the vicinity of Eleonas and close to the Kifissos and Illisos rivers. In fact, Eleonas is placed above some

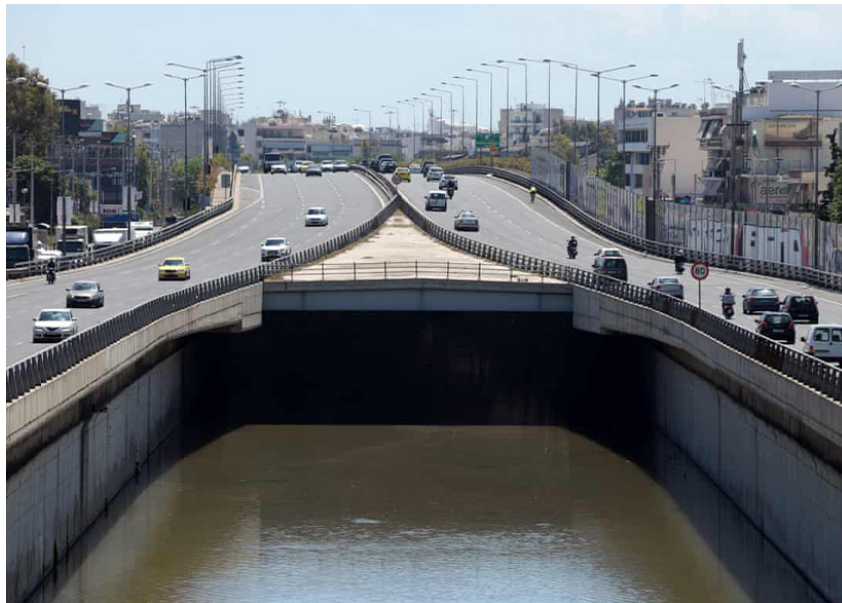


Figure.35
Title: Urban Greenery in Eleonas
Source: Author

of these areas subject to floods and this may lead us to think that these phenomena are not purely natural manifestations but that instead they are closely linked to human activity and the shape of the city. At one time these floods represented a kind of blessing for human activity as the fields and olive groves were thus irrigated and fertilized.

In the XX century with industrial development [8] which resulted in an uncontrolled and unplanned growth of Eleonas until 1995 [9], the year in which a presidential decree was issued to include this district in the master plan. This is to be able to affirm that Eleonas is today, compared to other areas, disadvantaged in terms of water management and its infrastructures related to discharge and drainage as regards its urban development, hydraulic works have never been implemented and this has a direct impact on the limitations of human activities with consequent water contamination for industrial waste.

Inside Eleonas, compared to the Kifissos and Illisos river, there is a water channel of lesser importance, the Prophet Daniel which was once a tributary of the Illisos river but due to the latest industrialization processes that involved Eleonas, the river has been diverted to flow into Kifissos. [Figure.37] The Prophet Daniel channel plays a vital role in ensuring a good level of biodiversity within Eleonas. This stream is the last element of natural water left within the neighbourhood from the days when it flooded the neighbourhood and irrigated the areas along with the floods of the Kifissos River.

In any case, this canal to be used to irrigate the fields, in the industrial age it was used as a support infrastructure for the development of manufacturing and industrial activities, guaranteeing a constant flow of water to the activities. Subsequently, the companies will pour their industrial waste into the river in the absence of a real drainage system, thus transforming the Prophet Daniel into a sewer. It is essential to pay a good sensitivity to the issue of water management as the correct planning, integrated and flexible, has an impact on a larger scale and can improve the environmental quality of the metropolis in the long term. For this reason, it is

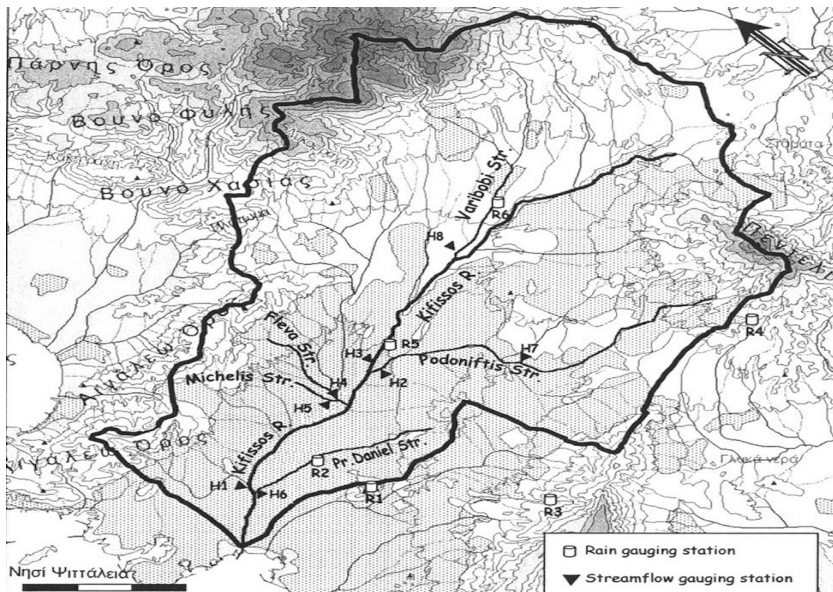


Figure.36
Title: Terrain morphology of Attica inset and Kifissos basin, with monitoring network: rain gauges cylinders and hydrometric stations triangles
Source: Antonis D. Koussis

essential to pay attention to and rethink the water management and control works in Eleonas. To be able to respond to the challenges of the city such as floods or droughts and to be able to achieve a balance between demand and real distribution on the territory by considering the different events that may occur within an urban context.

8 Biris K.H., "Athens: from the 19th to the 20th century", Athens, Melissa, 1966.

9 Sapountzaki P. and Wassenhoven L., "Spatial Discontinuities and Urban Transformation: The example of Eleonas in Athens", Siena, ATINER, 2004.

- Kifissos River
- Underground Kifissos
- Prophet Daniel Stream
- Direction of water flow

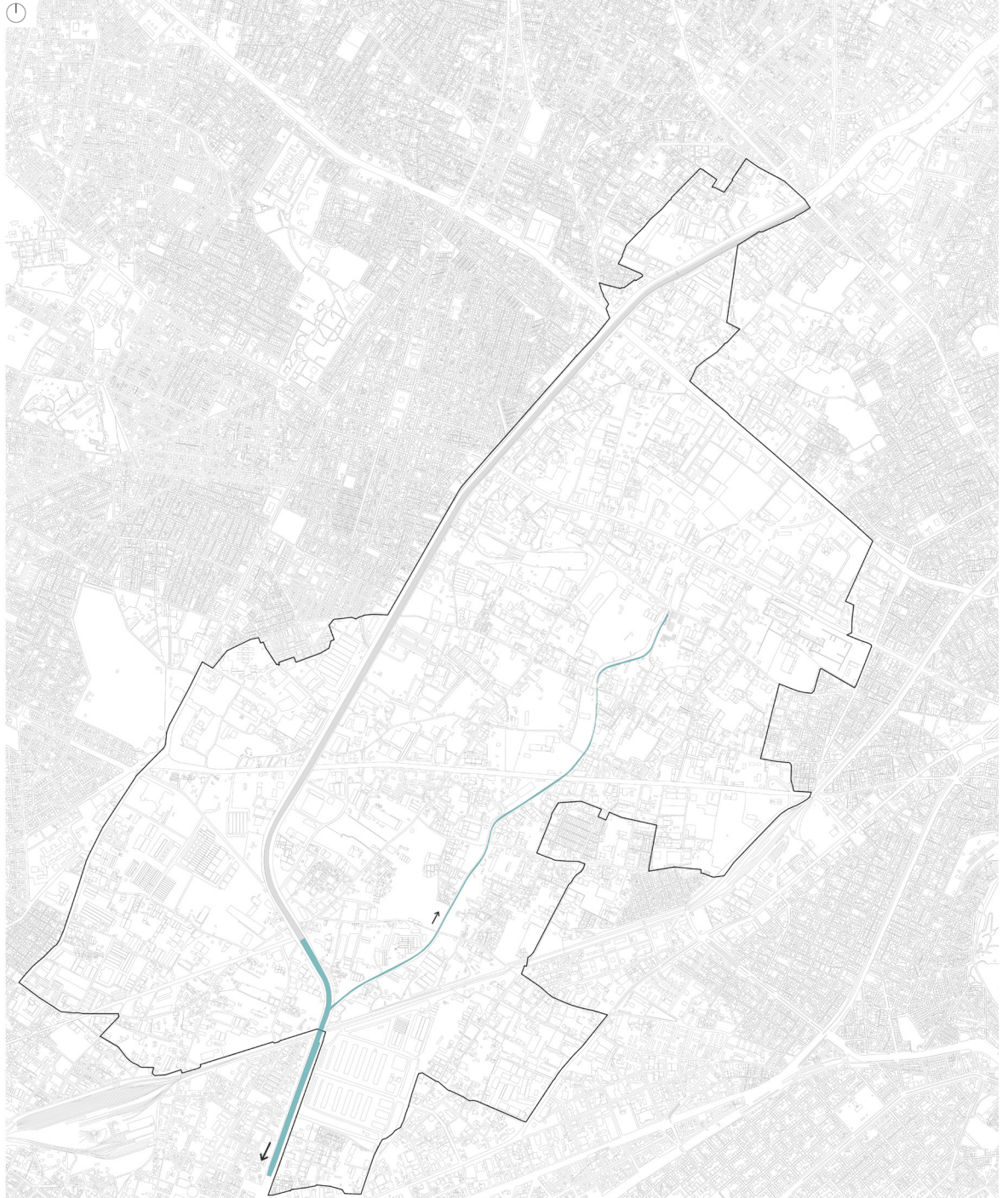


Figure.37
 Title: Kifissos River and Prophet Daniel in Eleonas
 Source: Author



D.8 Environmental Pollution

In Eleonas over the years the hundreds of industries and manufacturing activities have poured into the territory tons of liquids, solid waste and gas. [Figure.38]

In fact, this area is very degraded and polluted, especially along the main flow axes and near the banks of the water channels present. In any case, there is also a substantial problem of atmospheric pollution related to the massive use of private cars and trucks, remembering that the area is the fundamental logistics hub of Athens.

In fact, about air pollution, it must be considered that the large arteries surrounding and delimiting Eleonas are often congested and used intensively by heavy transport vehicles that intensely pollute the area with tons of emissions per year.

But not only along the major roads, in fact due to the random distribution of industries on the territory, the mediocre and poorly connected internal road system the situation worsens further. Air pollution by transport vehicles is the main problem of the area as pollution at street level remains trapped within the urban fabric.

It is possible to be said that vehicular traffic is the major cause of carbon monoxide production.

The problem of atmospheric pollution, however, is also attributable to manufacturing production where the production plants have never been implemented and have poor technologies and the absence of preventive systems to reduce air pollution due to production processes.

For example, large industries of the past, such as ETMA and the Athenian Paper Mills were some of the major sources of pollution and alone produced about 50% -60% of the CO₂ emissions in the area and therefore entered a monitoring system. [10]

The presidential decrees of 1991 and 1995 had set some guidelines to encourage the exit from Eleonas of some of the industries in order to improve the quality of the air inside the city.

In Eleonas is also possible to find inside of the blocks, mountains of solid waste [Figure.39], remains of combustion processes linked to the illegal activity of extraction of metals by the Roma populations or other undeclared illegal activities.

In fact, thousands of tons of metal waste flow into the warehouses and fields of Eleonas every year, which are recovered and reused by industries or nomadic populations who treat them to be able to resell them.

In any case, the production of pollutants causes significant problems related to the health of those who work and live in Eleonas and this problem is also accompanied by the presence of very strong odours linked to manufacturing activities, a phenomenon that get worst in the summer period.

In fact, this problem is attributable to some industrial units such as the tanneries that dump their liquid waste into the area, to the combustion processes of oil and wood conducted by illegal activities that operate exclusively at night and are therefore difficult to identify and to water collection which, when stagnating, generates badly nauseating odours.

In fact, many industries, for their production processes, need tons of water and in the absence of a capillary water distribution system, the water is supplied through tank systems. The collected water is then altered through chemical treatments to then be used in the production processes but causing a contamination of the state of health of the water itself.



Figure.38
 Title: Soil Pollution and Water Contamination, Eleonas
 Source: Enveco SA, Atlas of Eleonas, Attica





Figure.39
Title: Illegal rubbish dump
Source: Author

Furthermore, the absence of substantial green islands in or in the immediate vicinity of Eleonas does not help improve air quality.

This is supported by the research thesis conducted in 1992 by the NTUA [11] and a study later conducted for Double Regeneration SA 2006. The latter intended to analyse the environmental impacts of the future project related to the current situation.

The problem of air quality can therefore be considered the main problem in terms of pollution, but not the only one: the levels of water and soil pollution are also worrying and worthy of further study.

The soil is contaminated like the water, both surface and wells.

The problem of pollution and contamination of natural elements, such as soil and aquifers, is due to the direct discharges on the territory of residues from industrial production processes as there has not been sufficient development of sewage and discharges.

The construction of a sewage system should be a priority [12] but no system has yet been implemented and Propther Daniel has been used for decades literally as a sewer.

The Prophet Daniel which serves an area of about 19.66 km² of which only 7.33km² of the Votanikos area inside Eleonas and has a maximum width of 5-6m was used as a sewer of the city with the “*New Great Pipeline*” project and then, in followed in the 1950s and 1960s as an outlet for industrial activities.

The natural connotations have been permanently lost.[13]

Only 10% of the industrial activities present have control over water management and the treatment of liquid waste produced. The remaining 90%, on the other hand, does not and thus dumps the waste directly onto the territory causing substantial contamination.

Therefore, for a future reuse of the area it is necessary to consider the reclamation of the land where it is needed.

11 NTUA., “*Study of Recording and Sustainability of its Industrial Activities in the Olive Grove*”, Athens, NTUA,1992. 12 Vounatsis P., “*The problem of the Olive Frove and Industrial Activities that Load with liquid waste*”, Athens, University of the Aegean, 2009.

13 See Report Double Regeneration SA 2006

D.9 Living Eleonas

Following various inspections in the different areas of Eleonas and at different times of the day, it is possible to trace and describe the first impressions that may have.

In the morning Eleonas wakes up to the sounds of horns and vehicle engines congesting the streets.

From here all the goods leave early in the morning to be distributed throughout the region and throughout the nation. Hundreds of trucks pour into the street clogging it while thousands of workers arrive with their private cars to start their shifts together with the students who arrive from the Eleonas metro station to be able to go to the University, considering that the flow is less than in the usually due to the current pandemic situation of COVID19.

Eleonas, therefore, wakes up to the noise of the engines and the people arriving there.

During the afternoon, however, Eleonas appears as a lively neighbourhood.

There are people coming and going, there is a great movement around the refugee camp and around the Athens General Market. The gardens are on average crowded with people strolling and engaging in physical and recreational activities. The hours are marked by the noise of the machinery of the production plants. Therefore, the area, although it may be seen as a degraded and abandoned area, is experienced by many people and shows its shy integration with the social fabric of the city. However, as evening falls, the neighbourhood is completely transformed. In fact, during the night the area appears as a ghost and metaphysics. [Figure.40] There is no trace of people, and everything appears motionless as if frozen.



Figure.40
Title: Eleonas by night
Source: Zissis Varsamakidis' archive

The effect is very distressing as you find yourself walking in dark alleys, as there is almost no effective and narrow lighting public system. You do not walk quietly feeling safe, and you tend to continue to look around, a sensation stimulated by the sense of fear and disorientation due to the spatial construction of Eleonas.

E. Athens' and Eleonas' normative framework

E.0 Introduction

There is a complex relationship between the spatial evolution of the City of Athens and its neighbourhood such as Eleonas and the institutional framework used.

By institutional framework it is meant the set of rules, regulations and decrees adopted for territorial planning, making a distinction between the strategic and regulatory tools used.

In this chapter it will be explored and systematically index the presidential decrees and laws that had a direct impact on Eleonas and have accompanied the urban growth of Athens, which in turn was directly influenced by local social practices and dynamics.

In fact, the recent expansion of the city had to confront, in addition to the current institutional framework, with the reality of a well-determined urban fabric, whose definition began with the occupation and domination of the Ottomans in Greece up to the processes of intended development and urbanization periods of the post-war era. The urban growth of the modern city was therefore characterized by a mosaic of factors that shaped the economic and social context of urban development, including the strong presence of the domain of private property, a growing housing demand in the 1950s and the emergence of the construction sector as the main economic activity. All aspects that were reflected in the large infrastructural projects within the city, projects that however were affected by experiences from outside Greece, such as the models and experiences related to the reconstruction of urban voids that had been carried out in other European metropolises and which had had a direct influence on the future of Eleonas.

E.1 Vision for strategic planning of the City Centre

In 1983 the Organization for the Regulatory Plan of Athens (ORPA) was established [1], the institutional body that accompanies the planning of the 1983 Regulatory Plan of Athens (RPA). [2] [Figure.1] The new Master Plan had to deal with a city whose centre had been subjected to a “distortion” of its historical character, an alteration linked to the savage development due to the high urbanization rates and the construction coefficients allowed in the post-war period up to the years ‘70. The intent of the RPA was to guarantee a quality of life and urban regeneration to those parts of the city already consolidated, taking into consideration the environmental aspects of protection of the existing heritage in a significant way.

Therefore, the 1983 RPA had as its objectives the enhancement and decongestion of the historic centre through a strategy of decentralization and redistribution of activities in the area. [Figure.2] The plan was based on specific projects linked to the decentralization of the logistical and administrative offices of the public administration, to the discouragement of the opening of activities dedicated to wholesale, the construction of a connected pedestrian network, the closure to vehicular traffic and the construction of a surface transport system on rails. Furthermore, a policy of reducing and controlling land consumption, decreasing building coefficients and granting office space and commercial activities through well-defined constraints was adopted. Through the creation of a polycentric city, the development of new urban centres outside the downtown was encouraged. For example, the partial decentralization of the Ministries from the Centre to more peripheral areas were carried out, with the concentration of activities dedicated to wholesaling outside the city and with the dispersion and transformation of industrial areas into residential areas.

1 Law 1515/1985 Government Gazette Issue

2 See at the previous zoning plan, Sargiannis (Σαρηγιάννης), 2010



Figure.1
 Title: Regulatory Plan of Athens 1983's cover under the title: "Athens once again Athens".
 Source: RPA's Archive

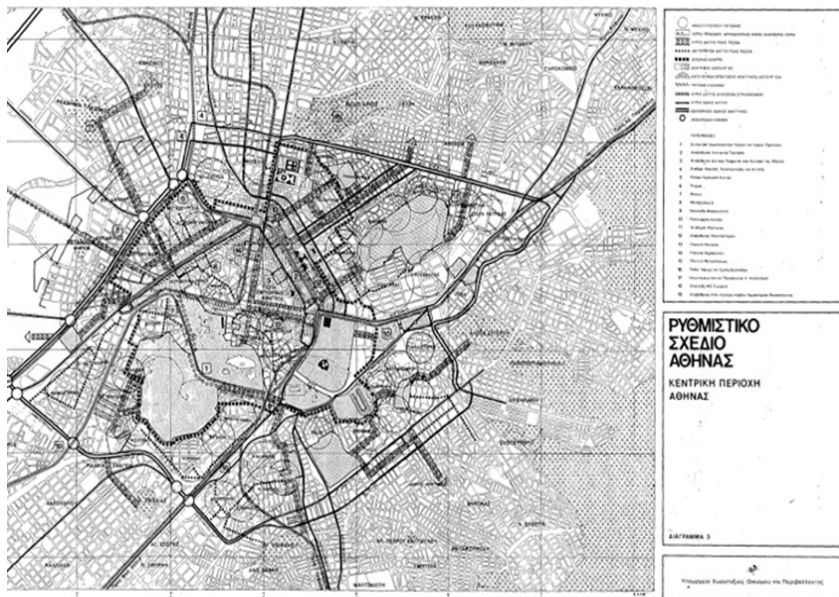


Figure.2
 Title: RPA's 1983 strategic development provisions for the city of Athens
 Source: RPA's Archive

The Athens Town Plan of 1983 therefore aimed at stimulating the urban fabric and strengthening the centralities outside the Historic Centre, a centre defined by decree (ΦΕΚ 567Δ / 1979), but within the metropolitan administrative boundaries (According to the Urban Plan General).

However, it is necessary to highlight some indirect consequences that the RPA 1983 had on the historic centre.

In the long term, this has contributed to the weakening its multifunctionality and generating problems related to social inclusion and the inactivity of entire buildings have arisen as the decentralized functions from the 1983 RPA were never replaced by other activities, leaving entire blocks in a state of abandonment.

However, these important urban changes were not only directly influenced by the RPA1983.

Indeed, it is necessary to consider general factors such as the imposition of new cultural and consumption models, the change of urban scale and the processes of external urbanization and sprawl that occurred not only in Athens, but on a global scale. [3]

The RPA has been of great importance in large-scale urban operations.

An example is the construction of the pedestrian area and the “*Walk under the Acropolis*” [Figure.3], a project managed by the Company for the Unification of Archaeological Sites of Athens (UASA), or projects for the rehabilitation of some areas such as the interventions carried out in Panepistimiou Street, the Plato Academy, the Interwar Refugee Complex in Alexandras Avaneue and the Eleonas area.

The 1983 RPA remained almost completely unchanged and in force for over thirty years, until it became obsolete due to the new needs of the city, even in delicate phases for the city such as the Olympic Games of 2004, the year in which the Plan underwent targeted changes.

The 1983 RPA was to be replaced with a new and recent Master Plan that addressed the new problems of the last decade, such as the decrease in the urban resident population, the increase in urban poverty, the increase of vulnerable groups and a real estate market declining. [4]

Thus, in 2011, the first law proposal (RPA / 2011) [Figure.4] was drawn up with the aim of drawing up a New Master Plan that would address the new urban dynamics of the turn of the century.

In the same year, within a new institutional context, took place the abolition of the ORPA. In 2014 the final version of the New Town Plan (RPA / 2014) [Figure.5] was voted, appointed as RPA “*Athens-Attica 2021*”[5], with a second bill (law 4277/2014, ΦΕΚ 156Α / 2014). In the last version of the plan a more complex strategy with a vision of the whole Attica region was developed and including the area of Eleonas, providing new direction for its further development.

Athens-Attica 2021 represents a regional and strategic plan to determinate the direction and planning objectives for the next decades in the region of Attica.

The first version of the plan, RPA 2011, preserved elements already present in the 1983 RPA Plan, among which the interest in the stimulation process of the city centre, the enhancement and regeneration of the existing heritage with a model of a compact city stands out.

In the final version, RPA 2014, however, a vision contrary to RPA 2011 emerges, an idea that takes shape in the identification and implementation of some development axes outside the city centre.

3 Soja E., “*Postmetropolis, Critical Studies of cities and regions*”, Oxford, Blackwell, 2000.

4 Mantouvalou M., Skoufoglou M. and Paliou X., “*The Historic Centre of Athens*”, Athens, Melissa, 2011.

5 The debate to create a new regulatory plan for Athens started in the end of the 2000s and its first draft was released in 2009 and never applied



Figure 3
 Title: "Walk under the Acropolis"
 Source: <https://www.likealocalguide.com/athens/dionisiou-aeropagitou>

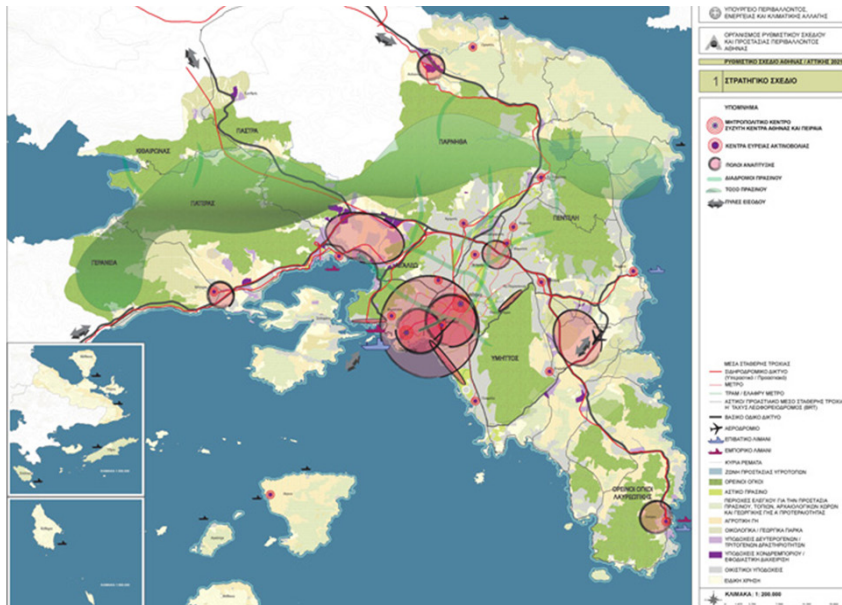


Figure 4
 Title: RPA/2011, first strategic proposal
 Source: <http://www.organismosathinas.gr/Default.aspx>

The two concepts are opposed to each other and represent the cultural divergence of those involved in these processes, from the political class to professionals. Furthermore, these visions reflect urban spatial development challenges that are subjected to economic and technocratic pressures.

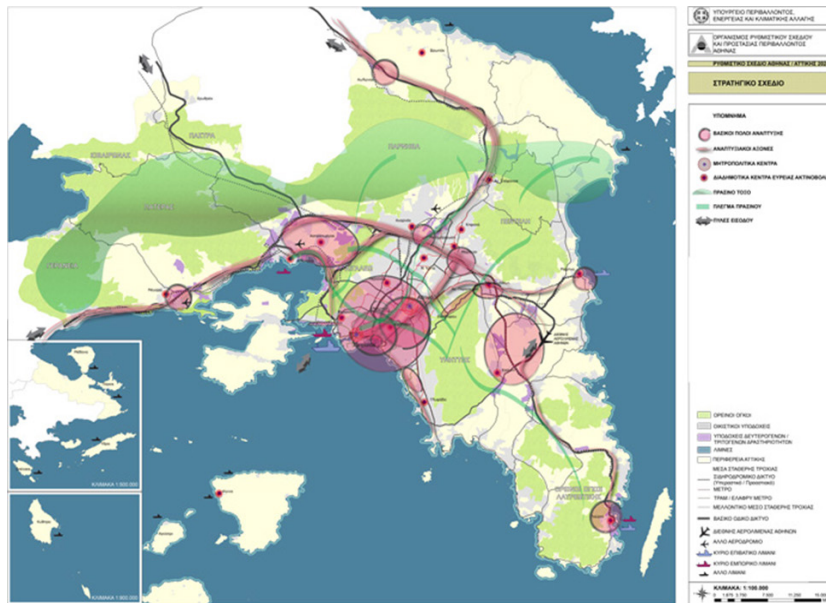


Figure.5
 Title: RPA/2014, Athens-Attiki 2014-2021 final version proposal
 Source: <http://www.organismosathinas.gr/Default.aspx>

E.2.1 Land use and regulatory planning

The 1988 General Urban Plan (GUP) of the Municipality of Athens (Ministerial Decision 255/45/1988, Government Gazette Issue 80D / 1988) specified a series of general planning and direction rules taken from the 1983 RPA. [Figure.6]

The GUP defined and outlined what is then defined as the “Metropolitan centre”, that is the administrative boundaries of Athens and the “Commercial Triangle” of the city, an area inherent between Omonia square and the road axes of Akadimias, Stadiou, and Panepistimiou. At the urging of the 1988 GUP, various presidential decrees were decreed in the 1980s with the aim of decongesting the central area and once again enhancing the historic centre through the control of land uses and the gradual reduction of building coefficients. [Figure.7]

These decrees remained in force until the 2000s and had a strong impact, through the zoning of land use and the evolution of entire central Athens districts. [6]

In fact, these decrees were used to outline the establishment and protection of certain activities in each area.

The most important Presidential Decrees include:

- Presidential decree indicating the land uses permitted in the central and old areas of Plaka (ΦΕΚ 617Δ / 1980, ΦΕΚ 1329Δ / 1993) and Thesseion (ΦΕΚ 60/1989).
- Presidential decree for the Exarcheia area (ΦΕΚ 1075Δ / 1993).
- Presidential decree for the Mets area (ΦΕΚ 1150Δ / 1993).

6 See fn. 4

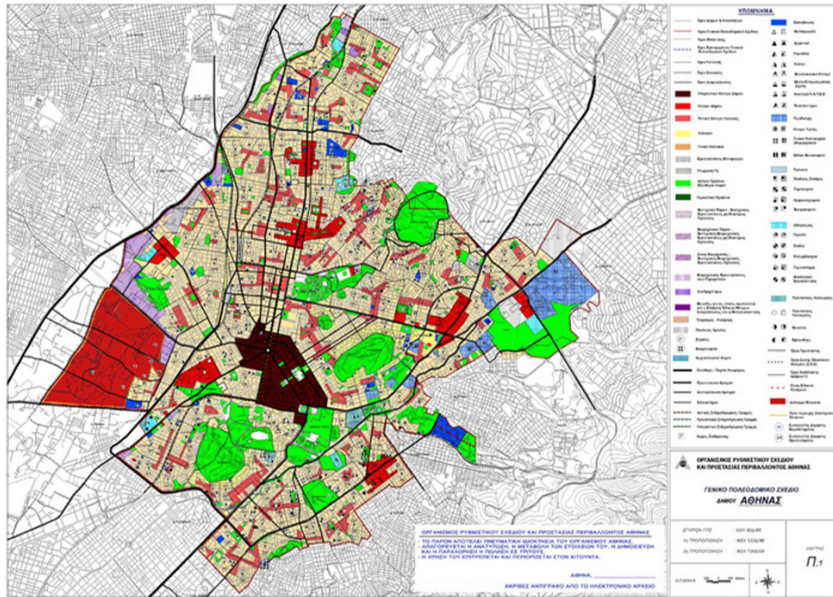


Figure 6
 Title: Athens' general urban plan 1983
 Source: RPA's Archive

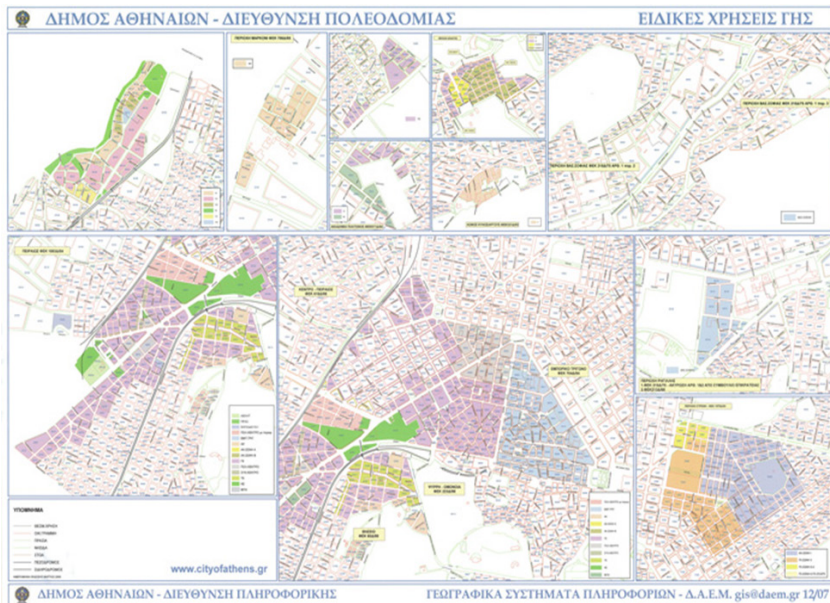


Figure 7
 Title: Athens' general land use
 Source: Athens' social atlas' archive

- Presidential decree for Eleonas (ΦΕΚ 74Δ / 1991)
- Presidential decree for Eleonas (ΦΕΚ 1049Δ / 1995, 30.11.1995).

- Presidential decree for the central area also known as the “*Commercial Triangle*” (ΦΕΚ 704Δ / 1994), Psyrri and Omonia (ΦΕΚ 233Δ / 1998) [7]
- Presidential decree for the Metaxourgeio area (ΦΕΚ 616Δ / 1998).
- Presidential decree for the Gazochori industrial area (ΦΕΚ 1063Δ / 2004)

The decrees stipulated and decreed therefore had the objective of protecting the settlement, implementation and protection of cultural, residential and public activities in the various districts of the city.

E.2.2 Manufacturing

The various presidential decrees issued, with particular attention to the one dedicated to the “*Commercial Triangle*” (ΦΕΚ 704Δ / 1994), Psyrri and Omonia (ΦΕΚ 233Δ / 1998), had direct consequences on manufacturing, processing and trade activities at wholesale.

Although this decree had positive effects on the rational control of land use and in respect of the cultural and architectural heritage of the city centre, it weakened the multifunctional character of these areas and accelerated a process of displacement of the population and the increase of the unused and vacant building stock as there were no new activities that could replace decentralized ones. Furthermore, this decree together with the changes that were taking place in the 1980s, from the new production systems to the trends of deindustrialization and the subsequent accession to the EU and the Eurozone, encouraged the decline of manufacturing production and the abandonment of entire areas, such as the Eleonas neighbourhood.

E.2.3 Housing

The presidential decrees listed in the previous paragraph E.2.1 included among their objectives that of encouraging the residential sector. However, these policies had a positive response only in some areas of the city, especially in Plaka and Mets. These neighbourhoods were subject to a process of gentrification, a process driven by these decrees and by the dynamics of the real estate market and short-term rentals that have changed the way of living in the City Centre and due to the decline of the real estate market caused by low demand. In other areas, such as in the “*Commercial Triangle*”, residential activities were not strengthened, also because the decrees excluded the transformation and change to residential buildings and land that had previously been used for other functions. Today, in the area around Omonia, a strong phenomenon of informal living and illegal occupation of existing buildings by vulnerable social groups such as illegal migrants is taking place.

E.2.4 Recreational activities

Despite the regulation, the establishment and birth of recreational activities seems to be an

7 NTUA., “*Commercial triangle of Athens City Centre*”, Athens, NTUA, 1989-1991.



Figure.8
Title: Avdi Square in Metaxurgio
Source: Georgios Makkas's archive

uncontrolled phenomenon and partially escaped from the Presidential Decrees issued. An interesting case that can be taken into consideration, however, is Metaxurgio, a district in which instead they settled and opened various recreational activities thanks to the facilitations of the Decrees. [Figure.8]

The City Centre has also been subject to this phenomenon and the commercialization of spaces. Since the early 1990s, the Centre has been characterized by an intense development of recreational activities, a phenomenon not only linked to the facilitation of the Decrees, but also thanks to the new consumption models that became established globally and to new social phenomena such as mass urban tourism.

E.2.5 Challenges and questions on space

In the current situation, from an urban and social point of view, the city of Athens is characterized by very different needs compared to the previous situation of the 1980s and therefore changes are also needed from the point of view of strategic and regulatory planning.

There is a new institutional framework which must redefine the new objectives of urban spatial design with new tools that support planning, from strategic to operational ones such as Integrated Urban Intervention Plans (IUIP) and Integrated Spatial Investments (ISI).

Furthermore, there are several actors who have an important influence and who play a fundamental role in the urban development of the city. Among these, the Municipality of Athens, cultural institutions, the Region of Attica, private foundations and public charities stand out. On the other hand, organizations that previously had a key role, such as ORPA and UASA, were abolished.

However, the new planning tools adopted do not completely replace the previously issued decrees and plans but coexist despite the different concepts and priorities of their own era. Sometimes the plans are placed in contradiction with each other, and the Council of State is called to clarify the ambiguities present in the legal framework. Obviously, under political and economic pressures and when the previously decreed plans are considered in the new regulatory framework as obsolete and may undergo changes.

However, no body, including technical associations, central or local government, market forces, professionals, has opened a real public debate on the Planning framework for the City Centre until now, despite the great variety of actors, objectives, planning tools and purposes.

The absence of a real confrontation and debate generates a difficulty in taking a position and following a strategy for the planning of the City Centre.

This situation has a direct consequence on small- and large-scale interventions: on residents, owners and real estate entities that are still obliged to follow and move old regulatory provisions and are sometimes forced to circumvent them through informal practices.

There are therefore several contradictions on land use, problems on the multifunctionality of neighbourhoods and social inclusion. All elements that hinder the development of the central and semi-central areas.

It is therefore necessary to have a far-sighted look in terms of urban planning, in order to guarantee prosperity and to understand which city is wanted in the short future and implement and clarify the tools adopted so far.

E.3 Policies in Eleonas

Over time, the Eleonas neighbourhood has been subject to the application of various regulations with the aim of protecting its character and to define its future development. In the following paragraphs the intent is to collect the policies and decrees that had a direct influence on the planning state of the Eleonas district, starting from its ancient times up to the last decades.

E.3.1 Ancient Times till 1950s

In terms of planning and protection, the first form of legislation in force to protect the Eleonas area dates to the ancient period during the reign of King Peisistratus (561-527 AC) who issued a decree that legally protected the Eleonas olive grove from building construction.

The area remained untouched until the dawn of the XIX century. [Figure.9-10]

Only with the advent of the industrial revolution in Greece and with the increase of the population did Eleonas undergo radical changes that have transformed it into the most important industrial centre in the Attica region.

The transition was slow, until the 1930s-1950s Eleonas was still engaged in agriculture, mainly horticulture and provided food for the local population.



Figure.9
 Title: View of Athens from Eleonas (1817-1818), watercolor by William Page
 Source: Athens, Benaki Museum

E.3.2 From the first planning attempts in the '50 to the 1985 RSA plan in Eleonas

Only from the 1950s with the explosion of the industrial sector, the area will host large and medium-sized manufacturing and industrial companies, erasing all traces of agricultural activities and of the olive grove of its past. [Figure.11]

In the XX century there was not regulation regarding the neighbourhood of Eleonas and this was only taken in account in the planning plans at the end of the century.

In fact, Eleonas' design and definition attempts date back to 1947 when the Ministry of Reconstruction funded an Eleonas study in order to understand its possible potential. The 1954 land use plan, which did not become a legislator, provided for the construction of low-density residential pockets with a population density of 30 inhabitants per hectare. In the area there were several industries that exceeded 100 employees each and a few houses built by Social Housing projects and carried out by the Organization of Workers for the Home and the Ministry of Welfare. In 1965 there was another attempt to provide for an organization of industrial areas and vacant lots, but even this plan was never applied and used. [Figure.12]

Subsequently in 1979 the principles of the Masterplan for the General Plan of Athens were formulated, called Manos Plan, by the Prime Minister Stefanos Manos. In 1979 it was approved with the law 947/79 and published in the Official Gazette. [8]

The document consisted of a text of eighteen points in which some objectives emerged which focused in the balanced development of the city of Athens with respect to the rest of the country and the improvement of the living conditions of the inhabitants and of production. In addition, the intention was declared to organize and consolidate areas with a strong presence of industrial activities trying to protect the environment. However, this favours the



Figure.10
 Title: Eleonas 1875
 Source: Karten Von Attika, Johann August Kaupert



Figure.11
 Title: Eleonas 1945
 Source: Enveco SA

unification of industries in specific areas such as the Eleonas area. Based on what has just been described, the Presidential Decree 791/1981 [9] was issued in which the policies relating to the secondary sector are explained in detail and the maps of the manufacturing activities and sometimes their relocation areas including the Eleonas district. In 1983 Eleonas was



Figure.12
Title: Eleonas 1969
Source: Enveco SA

included in the city's regulatory plans and its boundaries were delineated for the first time ever.

This decree will be followed by another, more restrictive, decree 84/1984 which limited the processes of settlement and relocation of industrial units in the Attica region. The 1984 Presidential Decree, following the very high levels of pollution in the city, established the intent to remove all industrial activities from the city to decentralize them to areas outside the urban fabric in order to guarantee a better quality of life.

Only in 1985 will the Athens Master Plan be released with the law 1515/1985 which promoted the creation of the Agency Regulatory Planning and Environmental Protection of Greater Athens. This plan defines the development and organization of the great city of Athens within the region. The strengths of this strategic vision correspond to finding a balance in order not to create social disparities or accentuate those present between the different areas of the city, to improve the quality of life and the environment, to promote the historical physiognomy of Athens and to implement the central area, the provision of recreational and entertainment activities in the different areas of the city and the protection of residential areas.

It is interesting to report article 3 of this plan "*The improvement of the environment and quality of life through the redistribution of functions and activities, the removal of nuisance facilities*" and "*Redistribution of jobs in manufacturing throughout the prefecture and the organization / regeneration traditional areas of industrial concentration in industrial parks, with the provision of the necessary common green spaces.*" This reported in the 1985 RSA lays the guidelines and foundations of what will later be enacted in the presidential decree of 1995.

E.3.3 1991-95 Presidential Decree: key points for the future development of Eleonas

It is necessary to wait until 1991, when the first Presidential Decree was issued and attempted to include Eleonas in the city's planning plans.

This presidential decree was the first move aimed at encouraging the diversified development of Eleonas, assigning for the first time the use of the land to the different lots and proposing a massive densification of the area trying to guarantee a functional mix not only limited to industrial sector. This proposal, however, did not find a wide consensus but rather, a wide opposition from the locals and entities linked to Eleonas who firmly opposed to this plan and so it was never implemented. The following year, in 1992, a research study by the NTUA University [10] will be published in which analyses of the built environment, infrastructures and all the activities that were carried out in Eleonas were collected.

Only in 1995 a second Presidential Decree (Official Government Issue No 1049D / 30.11.1995) was published, and it was the first document to include officially Eleonas in the city plan trying to define the future strategy for the development of Eleonas through the attribution and control of land use and improvement of greenery areas.

This decree provided for a substantial increase of about 30% of the green areas [Figure.13] considering the existing greenery belonging to The University of Agriculture, the Technical Institute of Pireus, the Stadium of Panathinakos and the training field of Olymakos.

It was required that any new construction on site should include spaces dedicated to greenery as well or to renovate existing infrastructures as streets with the aim to improve the general environmental state of the district. The number of industrial activities was drastically reduced while on the other hand, the number of companies in the tertiary sector was encouraged to settle in Eleonas. The Municipality of Athens was able to make the 15% and the other municipalities didn't make any effort at all. Only the Municipality of Agios Ioannis was able to cover the 30% as requested.

E.3.4 Post-Olympics Games 2004 and The Double Regeneration Program

In 2004 the city of Athens hosted the Olympic Games [Figure.14], and this involved the construction of important infrastructural works and two of these directly involved the Eleonas area.

The legacy that the Olympic Games left in this neighbourhood was the construction of the Kifissou highway which was only finished in 2008 and the construction of the Eleonas metro station.

In 2006 the proposal was made to carry out, in a very large project, the construction of the new stadium for the Panthinaikos F.C football club on the thrust of the Double Regeneration program which consisted of an agreement between private investors and the public administration. In addition, the construction of sports-related services and a shopping centre were planned.

The low cost of the land and the great accessibility of the neighbourhood compared to the city made Eleonas a fertile field for the attraction of investment and the construction of infrastructure despite the area being protected by the Presidential Decree of 1995.

10 Wassenhoven L., "Urban Organization and Reform of the Eleonas Area, research program" Athens, NTUA, 1992.

■ Communal Garden according to PD 1995

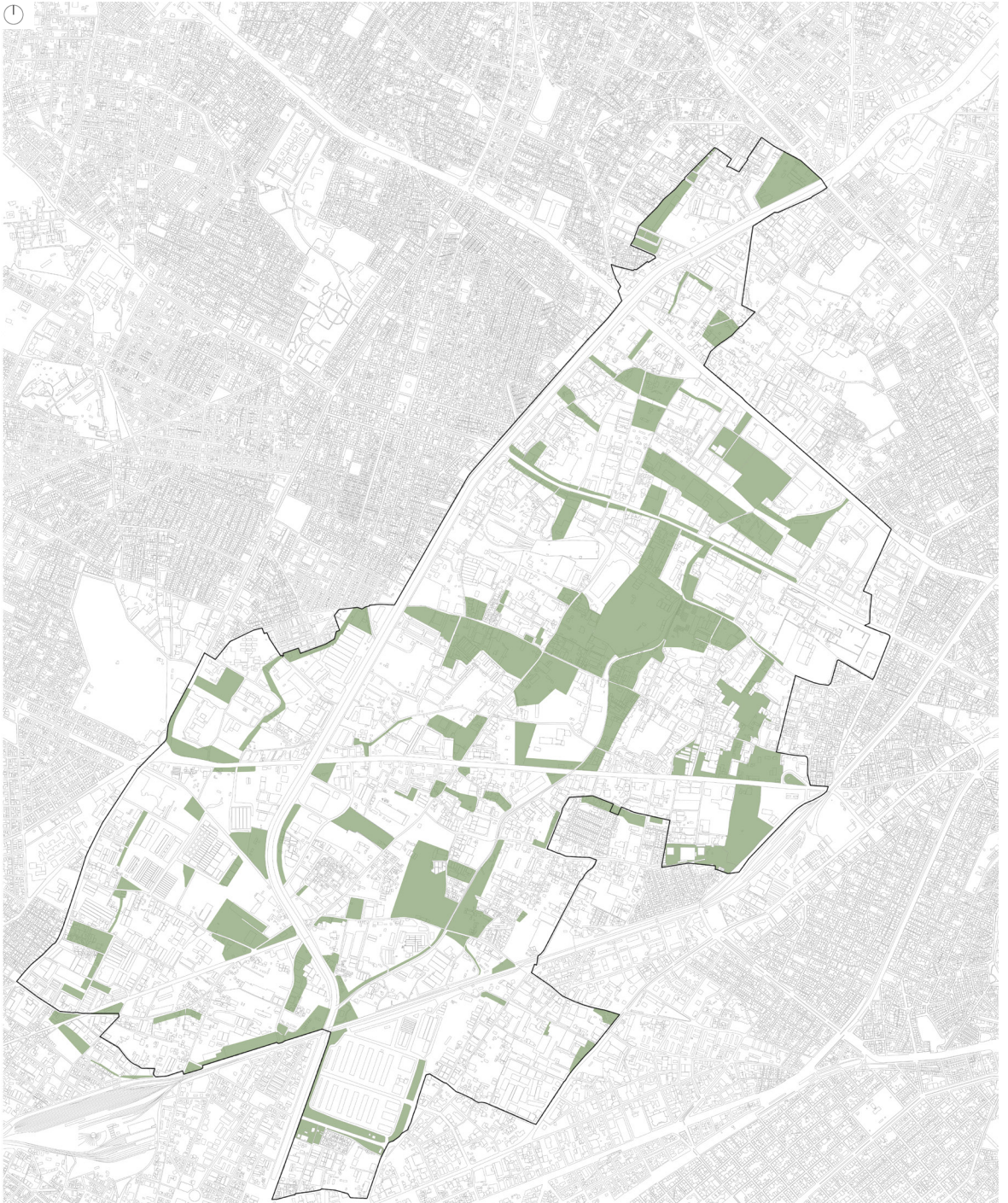


Figure.13
Title: Communal Green in 1995 PD, Eleonas
Source: Enveco SA



The works thus began in 2010 but in 2013 due to the economic crisis the project was stopped due to lack of funds to be able to carry on the Double Regeneration program as some investors bankrupted like VOVOS.

E.3.5 Athens-Attica 2014-2021

In 2014 the definitive version of the New Plan for the city of Athens (RPA / 2014) was published, defined as “*Athens-Attica 2021*” which includes some directives for the development of the Eleonas neighbourhood with the aim of making the neighbourhood grow and make it attractive again through the creation of a “*business park*”.

In fact, this plan expressed the desire to reform the industrial and tertiary sector and to implement the road network. Subsequently in 2015, following the humanitarian refugee crisis, it was decided to build a refugee camp in the easter area where part of the Double Regeneration project was to be built, which is currently open. To date, none of the five municipal and administrative entities that govern Eleonas, except for the Municipality of Agios Ioannis Rentis, has applied the plans of the Presidential Decree 1995 and the Athens-Attica 2021 Plan if not only partially decreasing thus the immobility of growth of the area.

However, there are several projects planned for the implementation of the area. In fact, in addition to the stadium and the Mall provided for by the Double Regeneration program, the intention is to encourage the future establishment of new activities such as, for example, the construction of a crematorium, recycling plants, a mosque and the bus terminal in Athens.



Figure.14
Title: Open Cerimony, Athen 2004
Source: ANSA photo

The possible establishment of these activities caused the reaction of the local communities as they argue that the construction of these works would have a strong impact on the socio-economic fabric of the area as it would cause the relocation and closure of the last remaining activities and would have great impacts in terms of road and traffic congestion.

F. A new life for Eleonas: The Double Urban Regeneration program

F.0 Introduction

The most recent transformation process of Eleonas is linked to the social dynamics of Athens and the processes of consumption and the recovery of large areas with massive regeneration interventions is expected, especially in Votanikos Area, such as the construction of a shopping centres, a stadium and other infrastructures [Figure.1] dedicated to consumption thus pushing Eleonas to the process of extreme outsourcing of the commercial activities present.

The public debate on the future of Eleonas has its roots since the 1980s, a discussion that led to the enactment of the presidential decree in 1995 which will have direct consequences on Eleonas.

Eleonas is today, after the deindustrialization processes of the area that took place in the last decades, a neighbourhood that has various informalities, former abandoned and sometimes illegally occupied industries.

However, some key factors such as the large availability of space, the recent construction of Line 3 of the Metro and the semi-central position make the neighbourhood of Eleonas a much debated area in the political context as an attractive area for possible scenarios of urban regeneration.

In fact, the district in recent decades has been carefully observed by the Municipality and the Hellenic Government to be subject to studies aimed at regenerating the area through infrastructure system implementation projects to facilitate and attract new businesses to settle in the area and to recover those abandoned skeletons.

One project, that will be presented in the next paragraphs, is based on the construction of a new sports and commercial facilities, which is said it would represent a key point for the recovery process of Eleonas.

This project consists of two main elements: the construction of the stadium of PAO Panthinaikos, a multi-sports club based in Athens and the creation of a mall in the area of Votanikos in Eleonas.

F.1 The Double Regeneration Program

In 2000 the Panthinaikos company had first informally expressed the intention and the need for the creation of a new stadium.

In 2001 they made a formal request, through a letter to the Prime Minister, for the desire to create a new stadium for 35 000 spectators in the Goudi area, in the immediate vicinity of the Polytechnic and Papagos, thus requesting the concession of approximately 200 acres.

The request was shelved and the Municipality made a counteroffer proposing and indicating as the ideal area for the construction of the new stadium that of Eleonas in Votanikos.

A few years later, in 2003, the Panthinaikos revived the debate by first proposing the demolition of the existing stadium with its replacement with a project for 50 000 guests, a solution rejected by the administration due to some urban planning constraints, and then the construction in Alexandra. Avenue of a stadium with a capacity of up to 30 000 spectators. In 2005 the possibility of considering Eleonas and Votanikos again as potential areas of interest on a land of 100 acres, owned by the ETMA and ELLATEX Industries and partly by the State, was evaluated again.

- VOVOS' Shopping Centre Project
- PAO's Stadium Project

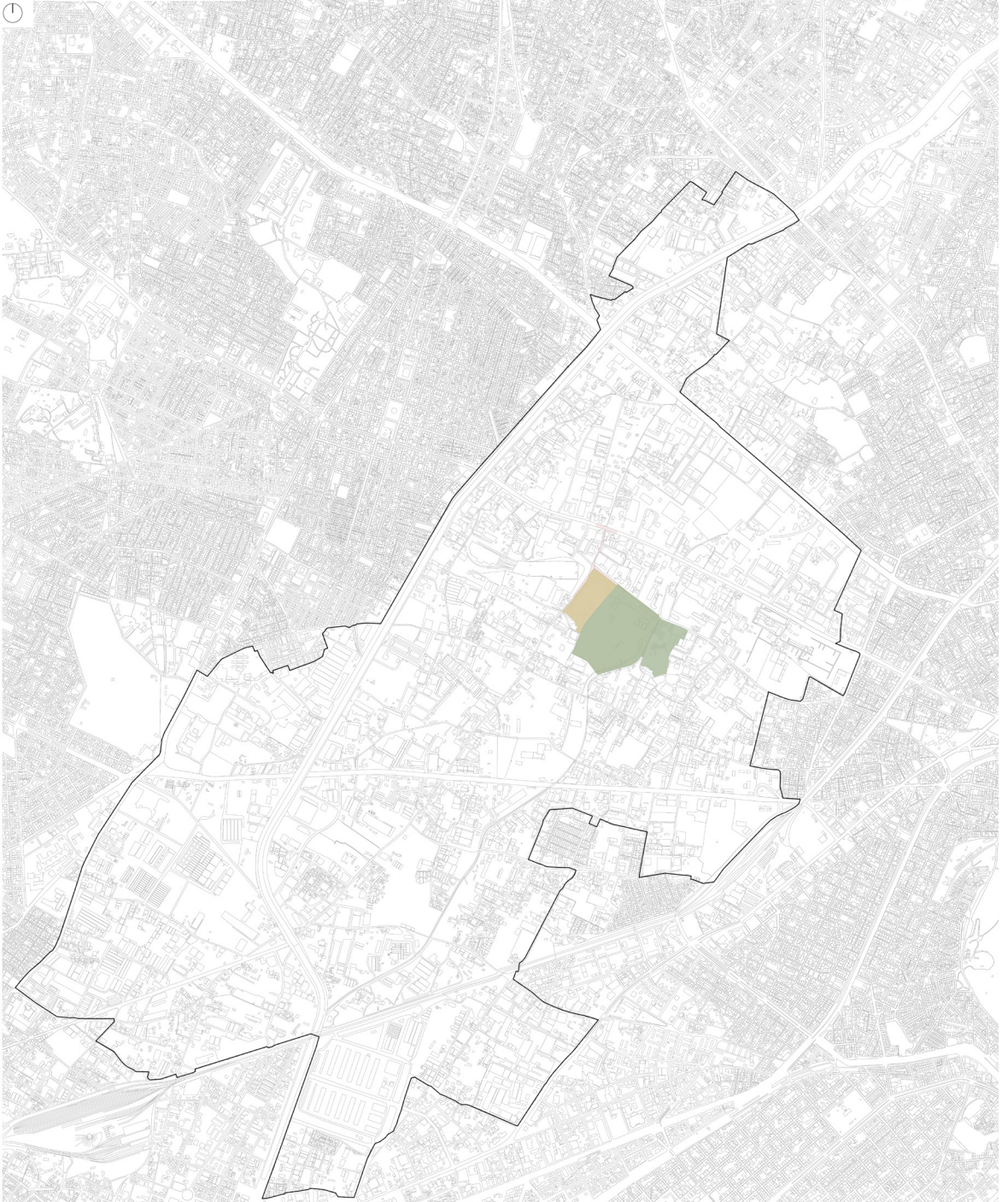


Figure.1
Title: Regeneration projects in Eleonas, Votanikos
Source: Author



Thus, a first draft of the double regeneration program was defined which consisted in the creation of an urban park and an underground parking in the current area of the existing Panathinaikos stadium in Alexandras Avenue [Figure.2] and in the construction of another urban park in the area of construction of the new Eleonas Stadium in the vicinity of the Prophet Daniel stream and the Iera Odos and, in addition, the construction of local infrastructures and structures for recreational and commercial use is planned.

So, in 2005, the then mayor of Athens, Dora Bakoyannis, gave the green light to the Double renovation program for the construction of the stadium in Votanikos with an agreement between the Panathinaikos Company and the Municipality of Athens to include the renovation of Alexandra Avenue [Figure.3] and the Botanical Garden.

In the same year the company (ESA) was founded, which was committed to the construction of the new stadium and the following year, in 2006, a further agreement was signed between Panathinaikos and the Municipality of Athens which led to the start of the project and the allocation of 117 million euros.

The Municipality of Athens, the National Bank of Greece, PAE Panathinaikos and Panathinaikos Amateur Club and the Hellenic state are the main investors and financiers of the project.

The responsibilities related to the intervention are:

- The concession by the Municipality of Athens to the Special Purpose Company for 99 years of the use of the areas A of 58 600 m² in Votanikos (Partial ownership of ETMA),

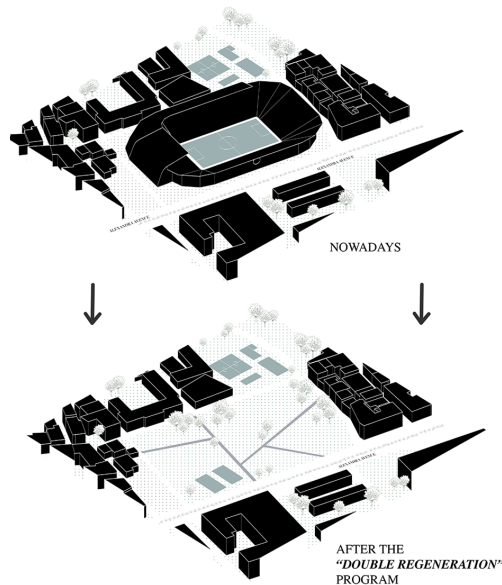


Figure.2
Title: Transformation project of Alexandra Avenue Stadium
Source: Author

B of 74 560 m² in Votanikos (Acquisition by private entities), C of 19 000 m² in Alexandra Avenue (Assigned for the construction of an Urban Park) and D of 63 000 m² in Votanikos (Property of the National Bank of Greece).



Figure.10

Title: Eleonas 1875

Source: Karten Von Attika, Johann August Kaupert

- The Panathinaikos Amateur Club must return to the Municipality of Athens the rights to use the area in Alexandras Avenues that had been granted.

- To PAE Panathinaikos the use of the new Stadium for 49 years and to guarantee, through banking criteria, a part of the annual proceeds of the project.

- The Hellenic State must partially finance and then take care of the maintenance of infrastructure implementation projects (road networks, sewage systems, etc.) and green areas, under the supervision of the Ministry of the Environment, Planning and Public Works.

At a later stage, on 30 June 2006, at the ETMA Ordinary General Assembly it was decided to sell the property to Votanikos.

The lot is on sale to the company VOVOS, a company interested in the construction of a shopping centre in the area, for a sum of 50 million €, with a preliminary contract stipulated and signed on August 14, 2006.

In the same month, Law 3481/2006 was approved to proceed with the double restructuring program in the areas of Eleonas and Ampelokipi with articles 11 and 12.

Subsequently, the company will acquire the area (100 acres) in 2014.

Under the agreement, VOVOS will pay for the purchase of ETMA's 75-acre property in Votanikos located between Agios Polykarpos and Agias Annis a sum of € 31.2 million and a sum of € 18.7 million for the property. 25-acre adjoining ELLATEX Company at 11 Agian Annis Street. The company will take care of the demolition of the old ETMA headquarters in order to obtain the free space to be able to build a shopping centre.

Following the purchase of the area, VOVOS enters into an agreement with the public, donating part of the lot to the Municipality of Athens in exchange for doubling the construction coefficients, thus making them rise from 0.8 to 1.6 causing the reaction of the local community.

In 2007 the first master plan and projects for the construction of the Panathinaikos stadium were presented by A&A Architects, a design studio who took in charge through a private commission the design of the project. [Figure.4-5]

The following year, in 2008, an agreement was signed between the Panathinaikos company and AKTOR for the construction of the new complex for an indicative cost of 88.35 million € (excluding IVA) and the time schedule of the project which estimated its construction in 19 months from the date of issue of the permit to build.

Subsequently, in 2008, the masterplan for the double regeneration of the areas of Votanikos and Akexandra Avenue was approved.

On March 27, 2009, the permit to begin excavations was issued and work began on May 8, 2009. Later, the CoC was resorted to with the consequent modification of the project up to its freezing. The legislative changes implemented were made with article 23 of law 398372011 and then with law 4117/2013.

The CoC will later express itself arguing that the implementation of the project with new works is not contrary to Article 24 of the Constitution.

Subsequently the Panathinaikos club will undergo major new directions such as the change of management of the company. The change of management will involve an economic reassessment of the financial feasibility of the project. The 2008 economic crisis had also put the VOVOS company in difficulty, which had bought the land from ETMA and ELLAX for the construction of a shopping centre. For the acquisition of this land, the company had requested a substantial loan and due to the freezing of the double regeneration project and the financial



Figure 4
Title: PAO'S first draft of the Masterplan
Source: A&A Architects' archive

crisis, the company found itself on the verge of bankruptcy before resorting to Article 99 of the Bankruptcy Code (Law 3588/2007).

The works for the implementation of the Double Regeneration program began and lasted until 2013, due to the bankrupt of Investors such as VOVOS. In any case, to date a part of



Figure.5
 Title:Areal view of PAO Stadium
 Source: A&A Architects' archive

the shopping centre has been built including the foundations and the first floors. [Figure.6] Today it stands as a complete ruin, a concrete skeleton [Figure.7] that has become a landmark within the neighbourhood. Its foundations are literally submerged by water collected over time due to bad weather and floods and today it is surrounded by wild flora Access is now denied.

The land on which the stadium is supposed to be built according to the presidential decree of 1995 had to be converted to green space and then, later, and because of some modifications, the land use was changed to ensure the creation of these massive entertainment complexes. The realization of this project consists in a sort of investment based on the collaboration of the private and public sectors, an unusual collaboration in Greece due to the lack of proper bureaucracy and a legal regulatory framework.

On 2 July 2014, VOVOS filed a lawsuit against the Greek state for compensation of 475 million €. [1]

In the meantime, the shopping centre project was abandoned, which was then acquired by Alpha Bank, the bank that had financed the company VOVOS and the realization of the whole project.

The information collected so far, shows that this area is subject to a strong interest since, as explained above, Eleonas is an area with a great potential for development, especially following the construction of the Eleonas station of Metro Line 3 at intersection between Agia Anni and Iera Odos Street and because of the cheap cost of the land.

This regeneration intervention is part of a larger plan by the Government that pushes the growth of Eleonas to be able to expand the offerings within the Attica Region..

1 Art.99 of the Bankruptcy Code (law 3588/2007) allows company to appeal to courts in order to conciliate with their creditors avoiding bankruptcy.



Figure.6
Title:VOVOS' Shopping mall, areal View
Source: Stefania Souki's Archive (Στεφανία Σούκη)



Figure.7
Title:Votanikos Areal View
Source: Stefania Souki's Archive (Στεφανία Σούκη)



Figure.8
Title: Wild flora in the level foundations of the VOVOS' Shopping Mall, 2021
Source: Author

F.1.1 Interview with A&A Architects, Athens 23/07/2021

The dates for the start of construction of the Stadium are still uncertain and complete economic coverage for the implementation of the various services and structures present in the overall project is not yet ensured. In order to understand the point of development of the project it was important to deal directly with the architecture studio A&A ARCHITECS, the studio to which the PAO's Club was entrusted directly for the realization of the Masterplan and the project and to understand the approach they had in dealing with a complex area such as Eleonas.

Author: *“What were the biggest difficulties you encountered in the Eleonas area in approaching the project?”*

Arch. Nikolaos Siapkarakas (Νικόλαος Σιαπκάρης):

“First, the project of regeneration of Eleonas, it is a complicated project. Initially, PAO had explored several and different areas in the region of Attica to understand where to proceed with the realization of the new stadium. Eleonas was one of the four areas were studied to build the new stadium.

Eleonas was one of these areas like the Elliniko Airport was another option. PAO decided to move to Eleonas was easier to have a new law to allow PAO to have sport facilities in this specific area. Eleonas has a very strict regulation. A new law was voted to allow this construction in there. After several meetings with the governments the Government decided Eleonas was the best option to insert the new facilities. IN 2006 was voted this law to give PAO the possibility to design the new stadium in there and to get a building permit.

The decision to focus on Eleonas had to do 100% with the possibility to have a new legislation in this specific area incorporated with the context of Eleonas. Regarding the masterplan of Eleonas, the first phase of the design started in 2006 and ended in 2009 with a budling permission to build the stadium. The second phase started in 2011 and it is still on going and we are in the process in order to have a new a building permit according to the new legislation that was established by the new law in 2013.

So, the first legislation was in 2006 and then with 2013 it was changed.

The masterplan and the stadium must be re-designed according to the new legislation.

Then the plot belongs to the municipality, so it was easy to negotiate between PAO and municipality regarding this urban regeneration. The location of the stadium came because the municipality owned this specific plot.”

Author: *“How you faced with Prophet Daniel channel, and did you consider greenery implementation? Are these elements considered in your project development?”*

Arch. Nikolaos Siapkarakas (Νικόλαος Σιαπκάρης):

“ First of all, the masterplan of the stadium is on-going and so far, there is only a preliminary studio. A new study is going to be hold and it will be much different from the masterplan of 2006. So, it will be completely different from the previous one.

There was a preliminary study that came from the municipality and this study was incorporated in the new law and we had to make new arrangements to integrate and to face these changes. A lot of things will be changing. Some of them will face the new legislations and the other came from the function of the stadium.

The ending proposal will be much different from what we have now, and people know though press.

Masterplan face different aspects of the projects.

The channel of Prophet Daniel is something that we cannot do a lot of adatoms because we have many restrictions and go close to the channel 10 meters distance between the new arrangements and the channel in order to build something. This is a close channel the approach in this specific area can have access and design something different. We can have some bridges, but we cannot make landscape design to the channel Profit Daniel. As I said before the masterplan is on-going. The green areas are important. According to Greek legislation you have 30-40% of your free area need to be covered by green areas.

The green areas are important for the design. Till now there is not much done about the greenery area. What we are doing now we are designing the areas that are not accessed by people and we are designing between public-and private- area of the stadium. We are not officially appointed with the final masterplan yet. The masterplan will be re designed according to the new legislation and laws.

We are not designing the whole area (the whole Eleonas), but we are designing the area just inside of the plot of PAO.

Votanikos is a complicated project. We are trying to satisfy the legal requirements and we are trying to satisfy PAO and Municipality.

At the same time there are some studies about the interior road network. These studies do not consider the development of the new installations, facilities and of the stadium.

We are not free to design whatever we want. We are trying to design in a way to satisfy different parties and the need of PAO and Municipality.

We are in a negotiation period. And these may change the outcome of the future. Before 2021 we should get the permission of building and the realisation of stadium is in May 2022. Agreement between Greek government- PAO- municipality just agreed orally but not written contract so far to understand the schedule will be respected. In order to have the stadium we must finish the masterplan. We are only doing the concept design f specific area.”

Author: *”After everything will be done, do you think the stadium will be a new landmark in the area?”*

Arch. Nikolaos Siapkarakas (Νικόλαος Σιαπκάρας):

“As you know this is an abandoned area and the industries in there are leaving the area. It is a new occasion to build a new facility for the city. Votanikos area after the finalization of the area it will be a new open area with a lot of sport facility. I’m not sure if it will be a Mall or a Office. Not commercial centre anymore. The decision will be made by the bank that own now the commercial centre. This will be a major open area for the city of Athens. In 15-30 mins by foot, you can get there from the centre. This is a big project for the centre of Athens. We need to create an attractive area.”

From the confrontation with Mr. Nikolaos Siapkarakas (Νικόλαος Σιαπκάρας) mainly the bureaucratic and legislative difficulties emerged to which they had to comply for the realization of the project, which, as claimed on several occasions, is still nearing completion and there is still no Master Final plan. The strategic importance of the Eleonas area has emerged thanks to its accessibility and proximity to the center. However, it must be said that, despite the question of the social impact on the area itself and on the population that lives Eleonas every day, no clear and definite answer has been received.

The construction of the stadium is considered as a possibility of recovery by Eleonas for the creation of a new landmark without, however, having considered the socio-cultural fragility of the area, its historical importance and without involving the local population in the least. So, the question that arises is: exactly, regeneration for whom?

F.2 Regeneration for whom?

Cities are subjected to a constant process of spatial and demographic evolution. Large-scale projects applied to the built environment are defined as “*urban regeneration*” interventions. [2]

For the urban regeneration of Eleonas was chosen the project presented in the Double Regeneration Program. The area intended for redevelopment was designed by A&S ARCHITECTS who outlined a project that proposes the construction of an important infrastructural work, a stadium, exactly in the area of Votanikos, whose construction will certainly have a great environmental and social impact on the context.

Although this project can improve the image of the district and accompany it in the phase of economic transition to make Eleonas a commercial centre for the city of Athens. It cannot however be considered as the most suitable and sustainable option that respects the heritage

2 Evans J. and Jones E., “*Urban regeneration in the UK*”, s.l., Routledge, 2013.

and conditions and needs of the area but aims to serve the economic interests of investors. Currently, the realisation of the stadium is considered by the actors as a decisive work in order to regenerate and revive Eleonas. In fact, the Municipality of Athens and the investors who financially support the construction of the work claim that:

“The creation of sports infrastructure is promoted with special emphasis on the functional characteristics that contribute to the upgrading of football and its active reintegration into the family recreation of the citizens. From the above, it is concluded that the renovation concerns a specific area of about 200 acres in Botanical Garden, but the radius of influence of the plan far exceeds the demarcated building blocks of this operation. Concerns the construction of sports facilities and commercial and administrative centers, but in modern cities it is precisely these kinds of projects that have the power to chance the fate of large, degraded urban areas”.

and then:

“As a large-scale building for the typical Athenian measure, it will also function as a landmark in Eleonas”. [3]

Therefore, the project of the stadium is told to the public as a key work that will become the landmark of Eleonas and its rebirth, making the new infrastructure to become a new attraction that meets the needs of the local population who “proclaim” the lack dedicated spaces for recreational and sports activities.

Through studies, analysis of the area and a direct experience in Eleonas lived by person, the priorities described to support the construction of the stadium don’t meet the real needs of the neighborhood at all.

Eleonas doesn’t need these kind of speculative interventions but needs a complete sustainable development that respects its history, heritage and people.

The construction of the stadium for the PAE Panathinaikos Soccer club is told to be a key element of a broader strategy that under the term “regeneration” aims to permanently change the characteristics of an area in order to profit from the increase in the value of the land and through the construction of works, such as the shopping centre financed by VOVOS, which are absolutely unnecessary, objectively not useful to the local community; thus showing a speculative nature at the base of the project and the pitfalls of a system that, instead of taking the opportunity to be able to enhance Eleonas and really improve the situation and the lives of the inhabitants, chooses to sell the last spaces of land available in the city to real estate investors.

As David Harvey (Harvey 1985) points out:

“Under capitalism there is [...] a constant struggle in which capital builds a material environment suitable for its own conditions at a particular time [...] only to have it destroyed usually in the event of a crisis, in a following point in time.”

Furthermore, there are some legal proceedings ongoing as for the approval of a project of this size, detached from the context and whose construction will have important impacts on the local ecosystem and its biodiversity.

3 See ΣΜΙΕ 2007, <https://www.ependyseis.gr/sub/strategic/diavouleuseis.htm>

This is because the area according to the 1995 Presidential Decree is protected and the only foreseeable development is that of not invasive infrastructures and green spaces and therefore, it was necessary to proceed with ad hoc legislation for the approval of a large-scale work such as the Stadium. These were the bases on which the local Citizens' Committee for the rescue of Eleonas rose by proclaiming and then acting through legal actions to interrupt the construction of this project.

From an environmental point of view, the construction of these works, according to the last Masterplan Relised in 2006, does not observe the ecological conditions and biodiversity present in the area, also not respecting the transformation of 30% of the area into a green area as required by Presidential Decree 1995.

It is also necessary to imagine the possible future scenarios and impacts that may be following the construction of such important infrastructural works and the consequences that will occur from a social, economic and environmental point of view. The implementation of the Double Regeneration Program would represent the starting point of a gentrification process which can lead to an important alteration of the already weak social fabric present in Eleonas.

The Refugee Camp present since 2015 is also located exactly in the East area of Votanikos where the stadium will be built and therefore this would lead to a problem of relocation and destruction of the social relations that have developed over the years between the residents of Athens and the refugees, damaging the weak network of social relationships built over time. Furthermore, the problem of relocation and removal of all informal clusters present in the area of Roma groups who live in Eleonas since the beginning of the XX century would arise.

From an economic point of view, the construction of these works would mean the closure of many small-medium local businesses, already subjected to the pressures of the 2008 financial crisis. Their closure will involve very important economic damage on a local scale, thus altering the fragile economic balance of the families residing in Eleonas and it will have negative effects on the social relations developed between local consumers and sellers. Small businesses will not be the only ones to suffer from the construction of this new hub but also the few medium-sized industrial, manufacturing and logistics businesses that will be forced to further decentralize their offices in other areas of the region.

These are just some critical observations inherent to the actual situation and to the Double Regeneration Program which have the intent to reinvigorate the public debate on the transformation, or rather regeneration of Eleonas and to generate alternative and more sustainable responses for the implementation and reintegration of Eleonas within the urban fabric of Athens to meet the real needs of citizens rather than the whims of real estate investors.

F.2.1 The citizens' committee for the rescue of Eleonas

In 2007 the citizen committee of Eleonas, also known as the "Citizens' Committee for the rescue of the olive grove", [Figure.9-10] presented to the CoE an interruption of the works because the provisions of the DPR 1995 on the protection of the green and the removal of uses were not respected since the Municipality of Athens, on a specific amendment, approved the doubling of the construction coefficients for the realisation of the mall, rising them from



Figure.9

Title:April 30 2008, Mobilitation of Citizens' Committee for the Rescue of the Olive Grove [1]
Source: Citizens' Committee for the Rescue of the Olive Grove



Figure.10

Title:April 30 2008, Mobilitation of Citizens' Committee for the Rescue of the Olive Grove [2]
Source: Citizens' Committee for the Rescue of the Olive Grove

0.8 to 1.6. They proceeded with legal actions and protests to stop the implementation of the project with these new construction values. This committee was born with the intention of attracting the attention of public opinion to what was happening in Eleonas and to fight for the protection of the little tangible heritage left over from the time when Eleonas was exclusively agricultural and to implement the DPR of the 1995 and because in Eleonas, today, there are species protected by law such as cormorants and therefore the aim was to protect the natural and environmental aspect. Thus, the DPR 1995 was modified with new objectives in order to support urban planning taking into consideration new environmental aspects such as environmental sustainability, quality of life and the implementation of greenery areas throughout the Eleonas.

F.3 Development trends

Eleonas, despite the large availability of space present, is interested in the realisation of few major projects that have been carried out to encourage its development. The only interventions planned and carried out are mainly related to the Double Regeneration Program, which was stopped in 2013 following the bankruptcy of the main investor VOVOS.

This limited number of new projects is a direct consequence of the 1995 decree which protected the area and provides specific land uses of its plots. To remedy to this problem, as long as the needs have changed today, in the last decade, several amendments were decreed to provide a more adaptable and suitable land uses.

This need has been reiterated on several occasions:

“There has been no global implementation act in the area, with the result that the current situation has changed profoundly since the approval of the 1995 Presidential Decree [...] For these reasons it is necessary to redefine the uses of the land” [4]

This need had arisen for example already in 2010, when the first amendment was issued (Government Gazette 169 / A / 27-09-2010) to modify the boundaries of the Votanikos area, the area involved in the stadium project, and to change the green uses of land shared with other functions such as, for example, to allow the construction of an Islamic Mosque. In addition, according to the official proclamations of the Municipal Council of Athens on 09 November 2017, the city incinerator and the station of KTEL, a private bus company, will be realised in Eleonas. These are just some of the interventions that will be implemented, and which will be placed side by side with timely green restoration projects. In 2017, following a meeting between the prime minister and the ministries of the environment, infrastructure and economy, the study *“Landscaping of Common Areas in Eleonas”* was approved (ADS 2010/14/12/2017) for a total budget of 8.6 million € (Evmolpidis, interview 12/12/2018). [5]

F.4 Eleonas as dead organ within the urban fabric

Cities, in their phases of growth and spatial expansion, generate spaces that can be interpreted as waste from the overall urban product. Athens is not exempt from these processes and as a result of its demographic growth, horizontal spatial expansion and new economic production

4 Central Council of Urban Planning Issue and Disputes, conference 2018

5 Evmolpidis and Konstantatos interviews, 06-06-2018

regimes, it has given birth to impurities and among these there is the Eleonas.

Eleonas, despite its centuries-old history, is today perceived by Athenians and by politics as an area with mainly negative connotations and understood as a rejection of the city of Athens. The perception of Eleonas as a wound occurs especially in this transitional phase that began in the 1980s, where was taking place the transformation from an industrial pole to a tertiary and commercial pole, carrying the aftermath of the skeletons of abandoned and unused buildings as the first manifestation of centralization of goods and products. [Figure.11]

Following a process of attraction, as there was a concentration of economic power in this area, an accumulation and stratification of human activities was achieved that were manifested their presence on the territory through these large industries, warehouses that represent signs and the scars on the territory.

Nowadays, following the phenomenon of deindustrialization, all these constructions became abandoned buildings in a high state of decay and that denote the modern urban landscape of Eleonas.

This process may be metaphorically defined as a process of self-harm where the city afflicts itself and injures itself by tearing its own body.

Eleonas was born as a rural and agricultural area that has been raped, exploited and polluted by industrialization processes and today hosts empty boxes with almost no human presence. Thus, Eleonas becomes an inactive landscape, dynamically almost dead and characterized by



Figure.11

Title: Votanikos district, Eleonas

Source: <https://4minister.wordpress.com/2012/04/29/βοτανικός-ντοκουμέντα/>

great urban and social disconnections as a result of a new process of polarization of political and economic powers. Furthermore, its urban, social and economic characteristics make this neighbourhood one of those waste produced in response to a rapid expansion, a lack of planning apparatus and due to a change in the economic regime and mechanisms of production.

These events are still present in the landscape of Eleonas with architectural and engineering bodies. In fact, the landscape of Eleonas can be considered a transitional one, due to the properties produced by building speculation and then abandoned, the infrastructures, the railway, the great arteries and highways, and contamination as Eleonas is dotted with skeletons of production plants that are no longer active. [Figure.12]

In any case, it is essential to recognize and identify these urban spaces within the city in order to implement direct and targeted actions to recover these spaces. This is because urban centres, in a capitalist and globalized economic system, are in competition with each other in order to attract investments, capital and large companies.[6] Therefore, cities try to improve their image in the global scenario, with the aim of climbing international rankings [7] and these are the reasons why it is extremely important to identify that inactive urban residue, to be able to redevelop it in order not to improve the image that a city tries to give to the world. The consequent question to the recovery of spaces is related to the direction to take to reclaim certain areas in order to re-insert them into the active mechanisms of the city. For Eleonas, the answer certainly cannot be hidden behind large-scale projects as there is in every way a substantial building stock even if abandoned that can be recovered as long as this is not a completely empty area that can be filled with human activities from scratch. Furthermore, a large-scale intervention should first address the division of properties that are fragmented among thousands of owners and furthermore, given the precarious economic situation in Greece, it is difficult to predict the completion of the work in its entirety as it can be conceived or designed and then you must run into the risk of designing a project that when



Figure.12
Title:Eleonas, Areal view
Source:Iefimerida's Archive

completed may be obsolete and that does not meet the needs of the area that will be changing over time. The answer to how to recover large spaces like this could instead be through punctual small-scale works that follow common general rules, projects that together can build a coherent landscape and that their harmony can guarantee continuity.

6 Koács Z., *"Cities between Competitiveness and Cohesion: discourses, realities and implementation"*, s.l., IJURR, 2009.

7 See fn.2

Strategy

#DP1995 #Greenery #Revitalization #UrbanAgriculture #SustainableDevelopment

The analysis carried out in the previous section have revealed several key aspects that characterize Eleonas. In fact, Eleonas, or Athens' Olive Grove, is distinguished by a post-industrial landscape that has almost completely obscured the agricultural character that has always connoted it since Ancient Times.

Eleonas appears as a dead organ within the urban fabric, detached from the city, characterized by the presence of a few residential pockets, isolated from each other, and lived by minorities such as refugees, Roma communities and mainly immigrants.

The problems related to the absence of adequate or never implemented infrastructures and the informal responses that have come to life to fulfil these shortcomings have emerged.

Only with PD 1995 (N. 1049D/ 30.11.1995) Eleonas was taken into consideration by political and public bodies with the aim of decongesting the area from industrial and logistic activities, protecting its biodiversity and history and with the intention of implementing green areas by 30%, however, works never carried out.

In this macro-chapter it is intended to understand if the implementation of PD 1995 today, after almost 30 years, is still a valid and feasible solution, considering however the current needs of the city of Athens in terms of green so as to be able to propose an urban strategy aimed at integrating Eleonas with the rest of the urban fabric through the implementation of green infrastructures, the recovery of disused areas and the establishment of various human activities to create a functional-mix useful for the enrichment of the territory, having as a basis the PD 1995 but adapted to the needs of contemporary Athens.

Therefore, in this macro-chapter, the different facets of the Athenian urban green theme are addressed and, with the awareness of the possible economic constraints for the implementation of an infrastructure of such importance which will then follow a future maintenance, of Urban Agriculture in Greece as a possible tool for local management and planning of the territory with the aim of providing an alternative solution of a green that can produce income, fight urban poverty and return space to the community, almost completely managed by organizations and individuals without having economic repercussions on the State coffers.

G. PD 1995 as direction for the sustainable implementation of Eleonas

G.0 Introduction

Green areas and more generally natural elements are fundamental and necessary factors for cities.

In the specific case of Eleonas, however, the complete whole transformation of disused areas into green areas might be the definitive solution for the complete recovery and revitalization of the area if then accompanied to a functional mix that meets the local needs.

The recovery of abandoned area and their conversions in Greenery Spaces can represent an element of integration to a larger and more objective vision that reconnects with the urban landscape of Eleonas today, through a thoughtful solution between green areas that integrate with the industrial character of the area today.

The Presidential Decree of 1995 (N.1049D/30.11.1005) provided for a substantial increase in green areas within the district and represented an extreme vision of the implementation of green spaces. Only in the municipality of Rentis efforts were applied to reach the guidelines established by the PD 1995, instead the other municipal realities never managed to achieve these pre-established objectives. Furthermore, although this decree favours the creation of parks and green infrastructures, it does not absurdly protect the few specimens of centuries-old olive trees still present that can be cut down and damaged as there is no law that protects them and here the absence of a bureaucracy aimed at protecting those remains of a landscape that has almost disappeared.

It is necessary to separate two different types of approaches: the one aimed at the complete reconstruction of the Olive Grove and therefore, of a landscape that no longer exists almost completely and which denies the modern industrial history of Eleonas and the more rational approach of conversion of some areas, connected to each other, of green areas that include archaeological sites and those permanence of centuries-old olive trees still present in the territory and that are integrated in the new project proposal together with the establishment of new activities and functions for the local and supra-local community .

These spaces must be defined and designed to be able to respond to real local needs and that they can fit into the landscape of daily life in the neighbourhood, otherwise they can become empty spaces without substance.

In order to understand if the implementation of the PD 1995 is still a valid option that meets the needs of the contemporary Athens and of the reality of the neighbourhood, through a large-scale strategy primarily for the further gradual implementation of green infrastructures, it was therefore necessary to deal with the state of facts in terms of greenery, from a planning point of views to the tools applied for the implementation of the green Spaces in Greece and in Athens as it will be better explained in the following paragraphs to have a completed overview.

G.1 Environmental urban green planning in Greek cities

Compared to Northern European urban centres, the cities of Southern and Eastern Europe, in terms of availability of green areas within the per capita urban agglomerations, are disadvantaged and have a very limited presence of green spaces.

1 Karen F, Quentin S., “*Loose Space: possibility and Diversity in Urban Life*”, (Routledge, 2006)

The first green spaces within the urban agglomerations were created with an aesthetic and beautifying purpose for the city.

However, there was a large availability of green spaces outside the cities, especially in tourist resorts such as the Greek spa towns (Papageorgiou, 2009).

Following the 1922 Asia Minor disaster, waves of refugees arrive in the largest Greek cities and settle mainly in Athens and Thessaloniki.

The urbanization rates were very high and all the open spaces present were transformed in a short time into a compact urban fabric, leaving no space for a possible green areas. Even in the post-war phase, urbanization rates remained high and there was an over-exploitation of the territory which resulted in the conformation of the extremely compact and dense urban fabric [Figure.2] and leaving no space for other functions, thus neglecting the needs of green areas that they will only be taken into consideration in the 1960s through small planning attempts. In fact, in the Masterplan produced in the 1960s, which was never adopted, however, there is a greater sensibility to the theme of green areas and these, in urban design, play a role of order and balance.

This interest in implementing cities through the creation of green areas materializes a few years later, in the 1980s through the enactment of the law 1337/1983 and the presidential decree of 23.02.1987 in which the obligation to implement and increase the presence of greenery within Greek cities in spatial planning plans.



Figure.1
Title: National Garden of Athens, areal view
Source: Twitter account by @CityOfAthens

Laws as “*Zone for Urbano Control*” and “*Zone of Extraordinary Natural Beauty*” were also approved, which protect the landscape outside the cities from urban sprawl phenomenon. [2] It can be said that the first attempt to enrich cities with green spaces, however, was made in

2 To spread irregularly and without restraint.



Figure.2

Title: The compact urban fabric of Athens, areal view from Lycabettus
Source: Author

1983 by the Ministry of the Environment through the “*Urban Reconstruction Operation*” program.

Subsequently, in order to guarantee enough green areas within the city, new values will be applied to raise the minimum standard of greenery within the city which stands at 8m² per inhabitant.

G.2 Green Planning in Athens

The rise in living standards and air pollution have led to a deterioration in the quality of life in Athens.

Nowadays, the designers must find solutions to improve the dysfunction and absence of greenery within the city, in a context where residential development and spatial expansion took place on a large scale without real planning control. [Figure.3]

Greek cities seem to have evolved detached from the natural element and creating an apparently hostile and unsustainable urban environment as never been before in history.

The planning history of the city in Athens has been taking place with some trials never adopted since the 1950s-1960s. In fact, the Athens’ Master Plan will only be implemented in 1985 with the approval of the law 1515/1985. This Master Plan sought to combat air pollution and improve the environmental situation of Athens.

The priorities in the Master Plan were ecological reconstruction, the reduction of land, soil, water and air pollution, the protection of agricultural territories at the edge of the city and the preservation of forests and mountains within the urban fabric.

In the 2000s, with the support of the “*Attica SOS*” program, further importance was given to green spaces and environmental design with the consequent approval of the “*Strategic and*

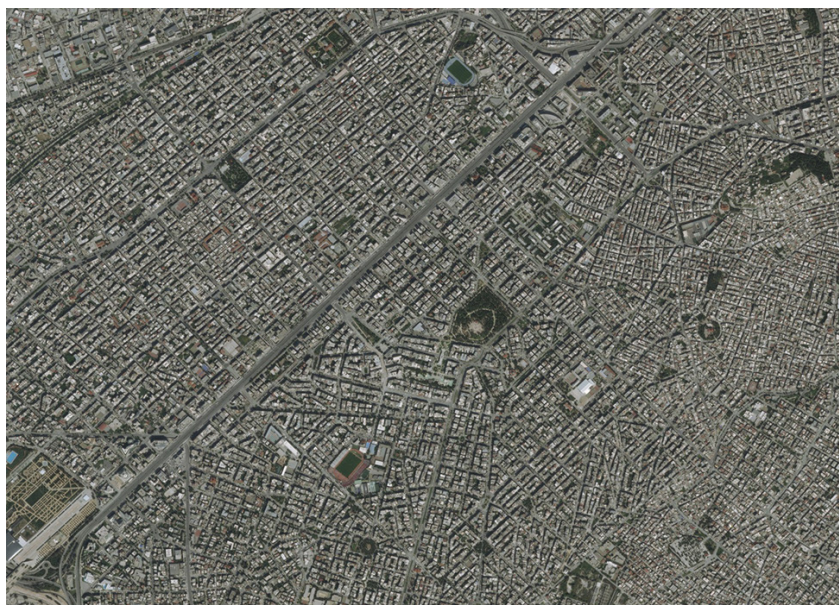


Figure.3
Title: Nea Smyrni District, Areal view
Source: googlemaps.com

Operational Plan for the Upgrade of Green Spaces” studies, however never completed but which introduced, for the first time in Greece, the concept of Green Infrastructures as tools for urban planning. [Figure.4]

In 2014, with the “*Athens-Attica 2014-2021*” plan [Figure.5] it is possible to spot similarities with previous plans where the themes of green space and the urban environment have a certain relevance.

The “*Attica-Athens 2014-2021*” regulatory plan provides objectives and priorities including environmental protection and urban planning management, social, territorial cohesion and cultural heritage conservation protection.

Strategic proposals are formulated for the sustainable development of Attica.

In fact, the priority in this plan is the quantitative and qualitative increase of green spaces, the development of a network of green areas interconnected with each other and which include strategic architectural projects such as the Acropolis area and protected areas. In addition, some attention is paid to the protection and preservation of the urban and natural landscape and the protection of water resources in the area.

Therefore, taking into consideration the plans described above, it is possible to understand the importance that is attributed to green spaces and the role they can have in improving the quality of life and for the implementation of green infrastructures.

The Greek urban planning rules, in the ministerial decision n.10788, proposed minimum standards concerning the density and green areas present that can be used in the Urban General plan for development.

According to the regulatory decision, the minimum national standard per capita area is set at 8m² per citizen, and this implies a necessary implementation of the green systems present in Athens. Thus, the foundations are laid, for greater attention by the public and politics to the subject and to the increase of green spaces and their landscape protection.

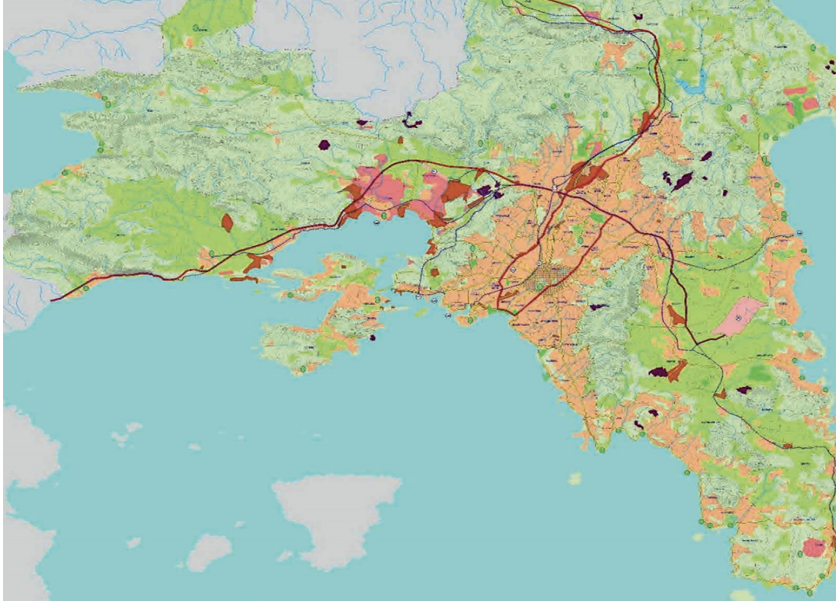


Figure.4
 Title: Athens' green spaces in the metropolitan agglomeration
 Source: Master Plan Agency of Athens (2002)

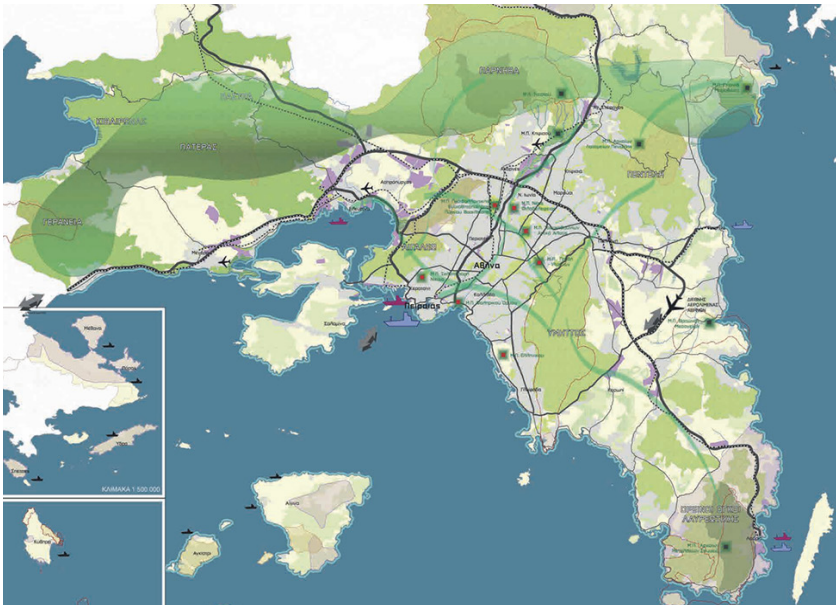


Figure.5
 Title: Green Athens vision, 2014
 Source: Official Gazette 156/A/2014

In addition, the “*New Building Regulations*” approved by law 4067 dating back to 2012, also named NBR, specifies the mandatory points to be observed in the execution of the various projects regardless of the size of the intervention.

A project, to be approved, according to clause 10.7 of the NBR must have green spaces that



Figure.6
 Title: Ellenikos' Airport regeneration, Athens
 Source: <https://www.ertnews.gr/eidiseis/ellada/epesan-oi-yopografes-gia-to-elliniko-ependysi-8-dis-eyro/>

can be used by the public, thus increasing the quality of the project and in response is provided to builders and investors up to a 20% indemnity of construction allowed. There is also clause 33 which refers to compensation payments for expropriations involving the owners of these undeveloped areas in the urban fabric. It is also defined as the “*Active Block*”, in Greek urban planning systems it means the unification and redevelopment of external common areas, the creation of links between open urban areas and spaces, the creation of common spaces etc. In the contemporary age, in Athens, there are some large scale projects of conversion and recovery of huge spaces, as the abandoned airports Ellenikos' Airport [Figure.6], industrial lots, military camps or area of the city as in Kallithea with Stavros Niarchos [Figure.7] or Drapetsona's area [Figure.8] that are converted into large urban parks. But it is also possible to intervene on a small scale by recovering the single lot where an industry once stood and converting it into a small park also defined as a pocket park, which is another tool that can be used to build the foundations of a greener complex network on a metropolitan scale that allows nature to enter the urban fabric.

G.2.1 Green spaces in Athens

The city of Athens has been the capital of Greece since 1834 and it is in the central continental area of the country, in the region of Attica. Its metropolitan area is equal to 3 808 km² and has a population of about 3.1 million people with a demographic density of 16 814 inhabitants / km². The city overlooks the Aegean Sea and is bordered by the presence of the Egaleo, Penteli, Himittos and Parnitha mountains. In fact, they represent containment and contrast barriers to the phenomenon of sprawl. [Figure.9-10]



Figure.7
 Title: Stavros Niarchos Foundation Cultural Center and Stavros Niarchos' Park by Renzo Piano
 Source: <https://www.snfcc.org/en/snfcc/stavros-niarchos-park>



Figure.8
 Title: Drapetsona park regeneration project, 2019
 Source: Io Karidi's Archive (Hó Kapóδη's archive)

Furthermore, they represent at the same time very substantial green areas for the city and their role, in these terms, was only recognized in the 1960s. Mount Parnitha was transformed into a Natural Park [Figure.11] and instead, the others were recognized for their landscape importance. These mountains represent a sort of buffer zone that contains the Athens



Figure.9
Title: Mount Egaleo, 2014
Source: <http://AthensWaöler-blogspot.com>



Figure.10
Title: Theatro Petras, Petroupoli, Athens 2014
Source: <http://AthensWaöler-blogspot.com>

Basin [3] and for this reason, since 1990s they have been protected by a specific legislation that identifies these areas as “*Zone for urban Control*”, or areas subjected to restrictions and constraints to limit human impact and the construction of buildings and indirectly protect activities related to agriculture and leisure.

3 Beriatoe E., “*Suburban Forests -the green walls of Greek cities: protection and enhancement issues*”, Athens, City Park Forum, 2014.

It must be remembered that unfortunately, several more recent disasters such as the 2009 [Figure.12] fire destroyed about 20 521 km² [4] and that, in recent decades, despite the legislations, about 18 414 km² have been converted and used for the spatial expansion of the city. Furthermore, these mountains are not the only morphological alterations of the territory of Attica. In fact, in Athens there are three more other hills of relevant importance that can be identified in Mount Lycabettus [Figure.13], Mount Filoppapo [Figure.14] and that of the Acropolis. [Figure.15] In any case, green spaces within the city began to be designed with an aesthetic purpose from the XIX century [5] up to the XX century where instead, these green spaces were integrated into the urban implementation plans of Athens which was growing both spatially and demographically to increase the quality of life.

However, the parks present are few and could not satisfy the needs of the city.

Many of the parks that Athens enjoys today were only established in the early 2000s through the “Attica SOS” program, a project that was established in 1994 with the aim of increasing the green present in the capital and achieving at least the standard of 5m² per capita and to increase the multifunctional spaces within the urban fabric.

To date, however, the green spaces present are scarce and represent a minimal percentage of the total if compared to the built building heritage. There are only about 35 km² of green areas in the Athens basin. [6]

In the historic centre the situation is even worse as the green spaces cover about 0.4 km², which corresponds to 2.8% of the total area of the city and this means that the 5m² per capita is not reached at all as here every citizen has just 2.5 m². This figure could be increased if all



Figure.11

Title: Mount Parnitha National Park

Source: <https://peakvisor.com/park/mount-parnitha-national-park.html>

the abandoned or disused areas present would be converted, increasing the surface to 3.84 m². [7] In 2004 when Athens hosted the Olympic Games and the city lost the opportunity to transform many areas that were then occupied by the infrastructures built for the event. [Figure.16] A missed opportunity to increase the green per capita by an additional 1.23 m². [8]

4 WWF HELLAS., “Fire in North Attica”, Athens, WWF HELLAS, 2009.

5 Papageorgiou M. Venetas, A., “Three gardens, two visions and a presence in Attica land, the Historical and Ethnological Society of Greece”, Athens, Menandros, 2016

6 NTUA., “The planning principles for the Metropolitan Green Park of Athens Elliniko Airport”, Athens, Geografie, 2011..



Figure.12
Title: Wildfiew burning Rafina, Athens
Source: Angelos Tzortzinis/AFP/Getty Images



Figure.13
Title: Mount Lycabettus
Source: <http://www.viator.com/it-IT/Athens-attractions/Mt-Lycabettus/d496-a24455>

In addition, there is a clear difference in the percentages of green spaces between the central area and the one to the west, where Eleonas stands compared to the reality in the northeast where the middle class of the city lives and the percentage of greenery is higher. It must be stated that the city of Athens has green spaces and parks of different sizes but in the end

7 Belavilas N. and Vatavali F., “*Green and Open urban Spaces*”, Athens, WWF Hellas, 2009.

8 Belavilas N., Vatavali F., Soureli N. and Prendou P., “*Open spaces, urban and suburban green spaces in the metropolitan area of Athens*”, Volos, University of Thessaly Press, 2012.



Figure.14
Title: Mount Filopappo
Source: © TChareon / Getty Images



Figure.15
Title: Acropoli of Athens
Source: Storico.org

the total surface is small if compared to the built environment and the urban density of the capital [Figure.17] and it is therefore necessary to intervene with a strategy aimed at the implementation of the green spaces to improve the quality of life of residents.



Figure.16

Title: Athens Olympics Sport Complex, 2004

Source: <https://visibleearth.nasa.gov/images/4739/athens-olympics-sports-complex>



Figure.17

Title: Compact Urban Fabric of Athens, no green areas

Source: © Bo Lovschall

G.3 Master Plan agencies

The Athens Masterplan agency, established by law 1515/1985 in 1985, joins the issue in the same year of the first effective Athens Master Plan.

The 1985 plan represents a key turning point that for the first time intends to protect, enhance and implement urban greenery within the capital.

The 1985 Plan aimed at reducing the city's air pollution and was a promoter of the protection of natural areas and agricultural land outside the urban centre.

Furthermore, the Master Plan was aimed at increasing the 5m² of green space per inhabitant. To be able to implement this, in 1994, through the "*Attica SOS*" project, a program funded and founded by the Ministry of the Environment.

Through this project, several green spaces have been developed within the capital giving a positive contribution to the overall situation.

In 2014, the new Athens Master Plan was approved with law 4277/2014 which in turn constitutes the plan for the entire region of Attica.

In any case, the Athens Masterplan Agencies have proved to be fundamental in introducing environmental policies to improve the situation of green areas within Greek cities, especially in Athens. In recent decades, the activities promoted by these agencies have been limited only to the protection and creation of bonds and zoning of existing areas without however creating new ones.

The agencies were dissolved in 2014 before the approval of the new Masterplan.

G.4 The "*Green*" experience in Greece

The history of design and planning of green spaces in Greece is relatively recent as the consideration of urban green as a factor that brings an ecological value and improves the well-being of citizens where it is implemented.

Once their importance was recognized, in the 1980s, there was a race to recognize them at a legislative level in order to be able to integrate them into urban plans.

It must be emphasized that the first attempts at protection date back to the 1960s, but concrete actions were only implemented through the drafting of the 1985 Master Plan.

Since the approval of this Master Plan, the priority for the Agencies was to redevelop the urban and suburban environment and greenery and these actions were fully integrated into the city planning processes.

However, from a practical point of view, very little was then implemented both on a large scale and on a local scale as the Agencies had to deal with the fiscal crisis of 2008, with the lack of bureaucratic tools to recover and with the fragmentation of the private ownership of the land within the city.

Therefore, the Agencies focused mainly on the zoning and restriction processes of existing green spaces without creating new ones.

The existing ones have been threatened by the reforms that the economic crisis has brought in the environmental planning of the territory and through processes of privatization of public land. There is still a lot to do and the implementation of greenery in Greek metropolitan areas, in Athens, is necessary to be able, at least, to reach national and European standards.

Precious space has already been used for the construction of infrastructures for the 2004 Olympic Games and it is therefore necessary to put all efforts to prevent the residual open spaces from being converted and used for the construction of other speculative works and to focus on conversion instead of them to green spaces. Especially the centre of Athens is lacking in green spaces as the building regulations allow the construction of tall buildings with maximum coverage of the lot and leaving almost zero space for green areas. The green spaces present are in poor condition and for this reason it is important to increase their connectivity in order to make them more accessible and attractive to the public.

Today, across Europe, there is a tendency to place the various interventions to make our cities sustainable at the centre of public debate. One of the tools that can be used to achieve this is the implementation of existing green spaces and the creation of connecting networks between the different spaces with the aim of making the urban environment more liveable and ecological. In fact, the existence of open and green spaces within an urban agglomeration can be used as an index to ascertain the quality of the urban environment.

Many areas that have been subject to rapid urbanization phenomena today are very dense, with few green spaces and characterized by environmental, economic and social degradation. It has been witnessed the commercialization of public space and its privatization, depriving citizens of the usufruct of spaces that would belong to them by right.

The streets are crowded and congested, the squares have become extension spaces for bars and restaurants, constantly eating up the residue of the urban public space. [Figure.18]



Figure.18
Title: Dimopratirion Square completely covered with tables and chairs, Athens 2021
Source: Author

Furthermore, it must be stated that in Athens, although there is an evident lack of green space, there is a constellation of free spaces within the compact urban fabric that are in a high state of decay and are sometimes inaccessible thus losing their potential to become public spaces used by the community.



Figure.19
Title: Menandrou-Pireaus Crossroad, parking lot
Source: Author

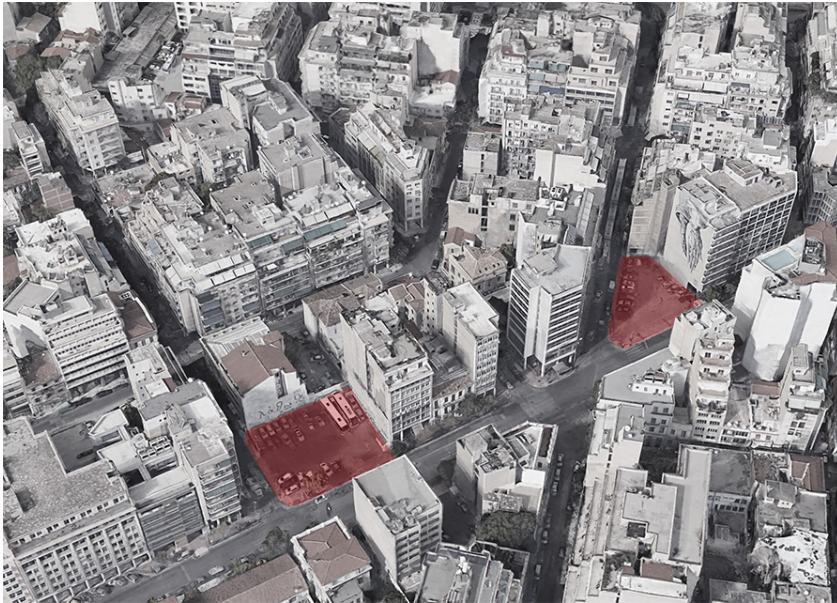


Figure.20
Title: "Empty spaces" within the city
Source: googlemaps.com

Many of these open spaces in Athens have been converted and used to be transformed as parking spaces, also making the ground impermeable. [Figure.19-20] Their potential recovery, within the limits of property rights, would represent a possibility to give citizens usable spaces that enrich the vision of the urban environment by improving the quality of life of the

neighbourhoods.

In fact, the identification of these potential areas that may be developed in subsequent phases, with well-defined and common rules, can take place with the bottom-up governance approach, where social groups of the local community identify a place that is harmful to the neighbourhood which has however of potential and value if subject to transformation.

Through the identification of this spaces, they can take on a social and ecological function if transformed and can host recreational and sports activities for the improvement of the urban habitat to the residents' different alternatives and improving the value of the adjacent properties. Their potential recovery, within the limits of property rights, would represent a possibility to give citizens usable spaces that enrich the vision of the urban environment by improving the quality of life of the neighbourhoods.

It has also been witnessed the transformation of areas that today are meaningless and that only worsen the living conditions of an area in meeting places, thus balancing the artifice-nature relationship without going to recover territory in peri-urban areas.

G.5 Green infrastructure: definition

Green spaces, within the urban fabric, play a key role in environmental, social and economic well-being. The city of Athens is lacking in these spaces because, following the city's demographic growth and the phenomenon of Polikatoikia, the available land has almost all been completely occupied by the new residential buildings that are the result of building speculation and the absence of monitoring by the government.

Currently there are few green spaces and an almost complete absence, if for many exceptions, of green infrastructures that must be used as catalysts for the sustainable development of the contemporary city. The concept of green infrastructure was born only recently, in the 90s and with this term it is meant: (COM / 2013/0249):

*“A well-planned system of natural and semi-natural areas with other features designed and managed to provide a broad spectrum of ecosystem services.
This system incorporates green spaces and other physical territorial and marine features.
Green infrastructures are present in rural areas and within urban settlements.”*

In any case, green infrastructures must not only be conceived as a tool for achieving environmental objectives but also as a planning tool that concerns socio-economic aspects.

Green infrastructures can be at different dimensional scales, from the neighborhood to the urban scale. [9]

Green Infrastructures make use of and constitute through two main elements [10] which are:

-The *Hubs* which include parks, residual lands, agricultural lands, forests, open spaces, vegetable gardens, sports fields, urban farms on the metropolitan scale, on a regional scale could also include reserves and protected areas.

-The *Links* that instead constitute the connecting elements that connect the hubs and can be understood as green corridors and that can exploit the natural presence of factors such as canals, rivers etc.

9 City Parks Forum paper., “How cities use parks for green infrastructure”, Chicago, American Planning association, 2003.

10 Benedict M. and McMahon E., “Green Infrastructure: Smart conservation for the 21st century”, s.l., Renewable Resources Journal, 2002.

The implementation of green infrastructures within the urban fabric can have great benefits. In fact, it can contribute to improving air quality, influencing the microclimates present within the city, lowering temperatures and contrasting heat islands, ecological conservation, improving the aesthetic standards of an area up to its social and economic revitalization. Furthermore, their presence constitutes a source of wealth to improve urban biological diversity, to cope with river flooding phenomena and to generally improve the landscape and its perception.

Basically, green spaces play a role in environmental planning and land management with the aim of improving the quality of life within a city.

The environmental planning of green areas is of vital importance within a city as it brings environmental benefits to the inhabitants and brings about a social and economic improvement also from the point of view of the health of the residents. [11]

In Greece, projects related to urban green planning and green infrastructures have been poorly implemented and today more than ever due to the fiscal crisis.

Green surfaces within the urban fabric or in the immediate vicinity help to improve the quality of the environment and well-being.

Some of the positive aspects are: [12]

- They improve the microclimate of the area in which they are inserted;
- They act as green lungs and contribute to the improvement of air quality by acting as filters;
- Mitigate noises by acting as acoustic filters;
- They promote biological diversity within the city;
- Having the surface purely for susceptible to water, they avoid and reduce the phenomenon of floods and water accumulation;
- They are places for recreation and social interaction;
- They help improve the aesthetics of the urban landscape;
- They act as places of concentration in case of disasters.

Green spaces can be classified according to various criteria, including the size, the quality that it brings, the intensity with which it is used by the public and the status and function of the owners (whether it is public or private places).

In turn, green spaces can be divided into spaces within the city or outside, in continuity with the urban fabric but located outside the urban agglomeration.

G.6 Assumptions

The analysis carried out revealed a weak general frame in terms of the presence of green infrastructures within Athens. The fabric of the city is extremely compact and demographically dense, reaching a population density of 16 814 inhabitants per km² in some districts.

This is due to the huge housing demand of the early XX century which was accompanied by high rates of urbanization, leaving almost no space within the urban fabric that could be dedicated to other functions, including the conversion of green areas, which they were conceived at the time unnecessary.

The situation is decidedly dramatic when compared to the cities of Northern Europe as long as each Athenian citizen has about 2.5 m², numbers below European and national standards that set 8 m² per capita as the minimum standard to be achieved in urban centres.

11 Van Kamp I., Leidelmeijer K., Marsman G. and Hollander A., “*Urban environmental quality and human well-being: towards a conceptual framework and demarcation of concepts; a literature study*”, s.l., Landscape Urban Plan, 2003.

12 See fn. 10

The municipality of Athens, since the 1990s, has tried to run for cover by transforming the great mountains surrounding the Athens basin into natural reserves and parks through the “*Attica SOS*” plan, but in fact, within the built fabric little has been done on the neighbourhood scale in terms of green spaces that can be used by citizens in their daily lives.

The study conducted in 2009 by Belavilas N. and Vatavali F., “*Green and Open Urban Spaces*”, demonstrates how necessary the conversion of residual spaces not yet built and despite the applicable efforts, through the recovery of these areas, the green space per capita per citizen would be increased to 3.84 m², improving the ecological and environmental conditions of the city, but still below national standards.

In the last decade some areas have been recovered, such as the Stavros Foundation, the Ellenikos airport recovery project and the Drapetsona park, but most of these projects are located far from the centre, where the situation is even more dramatic where the green per capita is only 0.4 m².

These data underline the necessary implementation of green infrastructures within Athens as the city, today, is still lacking despite the efforts made.

For this reason, the implementation of DP 1995 (N.1049D/30.11.1005) concerning the 30% increase of green areas in Eleonas is absolutely necessary in order to improve the quality of life of the people who live in the semi-central areas of the capital and it is also possible to overcome the bureaucratic difficulties faced in the past, due to an overall vision of the various administrations that are divided spatially by Eleonas, and which are now overcome thanks to the new instrument of the “*Athens-Attica 2014-21*” Strategic Plan which raises the question of environmental protection and implementation of greenery as founding elements. In addition, it is necessary to implement ad hoc laws that protect the preservation of the areas selected and converted into green areas from speculation and interventions decided by the trend of the real estate market which sees these areas as eligible spaces for the construction of new building works.

Therefore, it can be stated that pursuing an implementation strategy of urban green in Eleonas, based on PD 1995, is based on the needs of a local and supra-local scale of an environmental, ecological and social nature in order to improve the living conditions of the inhabitants of Athens; implementation work which must however be accompanied by correct bureaucratic tools for the protection of the new green areas. It is also necessary to specify that the conversion of potential areas must alternate and integrate various attractive functions, linked to local needs, which can make the new spaces more usable and new socio-cultural hubs within Eleonas in order to improve the demand of spaces for socializing.

Furthermore, the economic impacts associated with the realisation of this green infrastructure and its future management and maintenance must be considered. For this reason, it is necessary to think of a strategy that works gradually between time and space, based on a careful hierarchy of what is necessary to achieve in order to improve local living conditions compared to what is secondary and possibly achievable in a second phase.

In order to cope with possible economic constraints and scarce financial resources of investors, in a scenario of “*Athens recession city post Covid19*”, it is possible to hypothesize the inclusion of urban agriculture as a tool for the management and revitalization of the territory that can generate income, fight urban poverty, create new areas of sociality and experimentation and whose maintenance falls on private entities that have usufruct on the areas rather than on the public.

H. Urban Agriculture as a tool and possible direction to recover parts of the city

H.0 Introduction

The previous studies, presented in the previous section *Analysis*, have brought out the different facets of Eleonas including the indissoluble relationship of the neighborhood with agricultural activities, a population characterized by a weak socio-economic profile not very integrated with Athenian society and at risk of extreme poverty, and from the regulatory point of view the various presidential decrees that have followed one another have emerged, among which the Presidential Decree of 1995 stands out, where the gradual conversion to green of the different areas of Eleonas is pushed in order to protect its character, landscape and biodiversity.

Subsequently, it was proceeded to study the state of the “*Green*” in Athens, an analysis which revealed the need to increase the public and green spaces that can be used by citizens and necessary to ensure a greater state of general well-being to the city.

This set of factors can be the basis of a potential urban regeneration strategy, where greenery plays a fundamental role in reintegrating Eleonas within the urban and social fabric of Athens. Considering the economic and precarious state of health of the Greek capital, the creation of new green areas, although extremely necessary, would have an important impact from the economic point of view for the creation of these new infrastructures and for their maintenance.

For this reason, it was decided to continue the work considering urban agriculture as a possible tool to be adopted for the implementation of the project. In fact, the implementation of a strategy that allocates the different areas to be recovered to agricultural functions, is an excellent compromise for the creation of new green spaces which, if managed by organizations such as ONLUS, universities and directly in the hands of citizens, would have residual economic impacts and indeed, the possibility of generating income would be given as the fields used would become precious sources of production in order to fight urban poverty and create new spaces for socializing within Eleonas.

In order to proceed and have a greater awareness of the state of things, this chapter deals with the theme of agriculture and urban agriculture in Greece, with particular attention to the capital city, with the aim of understanding the importance that it plays in the economic fields for thousands of small and medium-sized enterprises and at a social level for families who constantly work and support their activities, both in rural and urban areas.

H.1 Metropolitan Agriculture: socio-demographic dynamics, urban growth and food-city relationship in the Mediterranean context

Urban and peri-urban agriculture is now used and applied in the sustainable management strategies of the contemporary city, as a tool to balance the territorial relationships between the urban and rural environments.

The spatial expansion of urban agglomerations has witnessed a phenomenon of extension of areas at the extremes of the cities that have a dual character linked to the peripheral and “*rural*” position but at the same time in a state of coexistence with the environment itself and therefore “*urban*”. [1]

Thus, the countryside around the cities presents a semi-industrial landscape and the continuum of cities instead takes on semi-rural connotations, thus merging the urban landscape with the agricultural one. [Figure.1]

1 Salvati L., “*Neither Urban or Rural: Urban growth, Economic functions and the Use of Land in the Mediterranean Fringe*”, London, Esmerald, 2016.

2 Jacobs J., “*The economy of cities*”, New York City, Random House, 1969.



Figure.1
Title: Cultivated fields in Peristeri, Athens 2021
Source: Author

This coexistence on the same territory is fundamental to give life to new possibilities of socio-economic interactions and new market perspectives, of actors involved in agricultural production processes and of new technological tools for the management and production of goods. [2]

In 2007 the FAO (*Food and Agriculture Organization*) association defined urban and peri-urban agriculture as the set of all agricultural practices or small-scale animal breeding that are carried out within and in the immediate vicinity of an urban agglomeration and that provide goods and services for the urban population. [3]

The activity of urban agriculture, therefore, is a set of functions related to the social, environmental, economic, ecological and symbolic sphere and can be used as a tool in city management, planning and development plans.

The city of Athens, in recent decades and driven by the economic crisis of 2008, is experiencing a process of recovery and use of traditional agricultural practices with the aim of protecting and safeguarding the landscape and experimenting with it within the urban context. [Figure.2]

The proposals implemented relating to agriculture go beyond the production of material goods as they are a source of social, environmental and economic values. In fact, projects related to green areas and infrastructures within urban agglomerations and along territorial borders become places of rediscovery of the natural, bucolic but also recreational and aggregation world. In addition to the creation of a rural landscape, the application of agriculture in the city creates revenues that turn into jobs, production of cultural and social services and the possibility of generating income for the weakest classes of the population. The FAO association also identifies agricultural practices linked to the urban world as an opportunity to get out of a state of poverty.

2 Jacobs J., *“The economy of cities”*, New York City, Random House, 1969.

3 FAO, *“Profitability and sustainability of urban and peri-urban agriculture”*, s.l., Agricultural Management Paper, 2007.



Figure.2
Title: Allotments garden in Athens, Peristeri, 2021
Source: Author

In fact, during the great wars' agriculture was used as a tool to produce self-consumption and self-sustaining goods for families. [Figure.3]

According to a study conducted by Jouve and Padillia (2007) in the Mediterranean basin, there are different approaches and types to the theme of urban agriculture.

- Professional productive agriculture;
- Agriculture of necessity;
- Multifunctional agriculture;
- Specialized family agriculture.

Depending on the modus operandi, agricultural production is decisive for human well-being. Furthermore, it must be considered that the spread of this phenomenon is strictly linked to the emerging demand by citizens for greater food safety on the products consumed and awareness of the production methods and the impacts they may have on the ecosystem.

In fact, in terms of food security, urban agriculture is used to produce local and fresh products that are daily consumed by the local population, contributing to the maintenance of healthy populations. [4]

Urban spaces considered as empty, thanks to urban agriculture, may find an important position in the planning and sustainable management of the city territory, contributing to increase its biodiversity.

The creation of agricultural areas within urban centres represents a possibility for the implementation of green areas and for the creation of new spaces that can be used by citizens. [Figure.4]

4 Opitz I., Berges R. and Priorr A., "Contributing to food security in urban areas: differences between urban agriculture and peri-urban agriculture in the Global North", s.l., Agriculture and Human Values, 2016.



Figure.3

Title:Wheat cultivation in Piazza Duomo during the Second World War
Source: Corriere della Sera's archive



Figure.4

Title: Parco Agricolo Sud, Milano
Source: Unknown

H.2 Urban agriculture and demographic dynamics

In the period following the end of the Second World War, a process of abandonment of the agricultural landscape and an increase, instead, of urban areas due to socio-economic changes underway, began in Europe, and with greater attention in the countries bordering the Mediterranean. Many small businesses have not managed to remain competitive with the market offered as they were not able to quickly adapt to industrialization processes and adopt the new tools that technology allowed to increase production rates.

Two consequences correspond to this phenomenon, namely the gradual reduction of fertile plots of land used for agricultural production and the increase instead of forest areas around cities. Therefore, it is needed to re-establish the balance and the relationship that exists between urban agglomerations and the countryside.

Agriculture, incorporated within the city, becomes of public interest as it can be used as an integral part of large natural public green infrastructures.[5]

The widespread use of urban agriculture, used today more and more intensively in urban centres, is linked to a change, an increase in its demand and a change in supply production.[6] Mediterranean cities, such as Athens or Barcelona, for example, are destinations of ever-growing migratory phenomena and therefore, the theme of urban agriculture must be explored in order to restore the balance between the built space and the green space available in order to cope to a greater demand for food.

The population living in the areas bordering the Mediterranean, in the span of 50 years, has gone from a number of 300 million individuals in 1970 to a number of 500 million in 2020. These demographic phenomena of population growth and migratory dynamics have direct consequences on the increase in urban poverty, on city planning and on food security, bringing back the theme addressed so far.

In fact, it is necessary to consider that urban agriculture is useful in contrasting the phenomena of poverty in urban centres and facilitates the processes of social inclusion as well as producing food consumer goods, whose prices due to inflation had risen a lot, becoming often inaccessible to many families.

It can be affirmed that urban agriculture can be used in planning strategies for open spaces within urban centres both on a local and metropolitan scale, making cities more liveable and sustainable, counteracting the phenomena of continuous construction and territorialization of the built environment.

It is also necessary to consider the problems of transforming the areas within the city or the recovery of some abandoned spaces related to water and soil pollution or activities that are not compatible with agricultural ones. For this, in addition to financial support, proper planning and management of natural environments and biodiversity within the urban context is necessary.

H.3 Urban Agriculture in Greece

Only in recent times Greece went through the theme of urban agriculture, showing a limited culture on the subject, in fact, until the previous decade it was not even taken into consideration by the agencies that deal with the strategic planning of the city.

5 Donadieu P., *“Urban campaigns. A new proposal for the landscape of the city”*, Roma, Donzelli Editore, 2013.

6 Nazzaro C., *“Rural development, multifunctionality and diversification in agriculture”*, Milan, Franco Angeli, 2008.

In the country, this issue began to be addressed only in 2010, during the years of the economic crisis when urban agriculture became an instrument of self-sufficiency and self-consumption for local communities and this thanks to local organizations and channels of solidarity. In Greece, urban agriculture is manifested in the city mainly through shared gardens managed by the community.

The first forms of this type entered the interior of Greek cities only in 2012 and since that year their presence has multiplied rapidly throughout the territory. In fact, urban agriculture has been used by many municipalities as a tool to combat urban poverty, improving the nutritional quality of dietary products, and urban environmental degradation, so through various direct interventions on the territory it has been possible to know this new form of city-countryside balance to local communities.

In Greece, the markets linked to the production of urban agriculture and solidarity networks have become increasingly widespread with the advent of the economic crisis that has put the poorest social classes of Greek society in difficulty. This situation of economic uncertainty has allowed the widespread proliferation of these spaces and practices which have become tools adopted by the cities to support families. [Figure.5]

Urban agriculture has thus been widely used by municipalities as a means of support for the most economically vulnerable social groups, such as the unemployed, retirees low-income people, etc. and thus, giving in usufruct some plots of land within the city you can help these people both from an economic point of view and from a psychological point of view.



Figure.5

Title: Allotments garden during the Economic crises

Source: <https://www.athenssocialatlas.gr/en/article/the-field-in-the-city/>

The benefits are not only related to these aspects but also include the consolidation and improvement of the urban landscape and environmental management, including the management of organic waste which becomes an important resource to be used in urban agriculture as composting.

As previously stated, the most widespread type in Greece is that of the shared garden. The municipalities outline and assign municipal areas to the community where the organic production of self-consumption products is allowed, of which, in part, is then assigned to local associations of the municipality that redistribute fresh products on the territory to those who need it most.

The economic crisis of 2008 has diminished the interest of many real estate investors and builders, so many areas within the Greek cities are free and cleared and converted into gardens that are given back to the community.

This phenomenon has spread particularly within the metropolitan region of Athens and in the Attica basin. The absence of open spaces reinforces the need to rebalance the relationship between the inhabitants and nature.

The main reason that pushes the creation and maintenance of these initiatives is linked to the production and demand for fresh food, as well as the need to limit household budgets for food spending.

The tangible aspects don't just stop at food production and financially helping families.

Urban agriculture is experienced by some individuals as an instrument of reconnection with the natural element, with the re-appropriation of traditional techniques and to reconnect with their village of origin and childhood experiences.

The act of cultivating the land and taking care of a space has extreme mental benefits for the health of an individual. The first harvests, the joy of enjoying something for which they have worked so hard, arouses new emotions, memories related to childhood are activated, depression due to the economic crisis is fought, new social relations in the neighbourhood are established and social solidarity is strengthened.

These aspects apply to all age groups, from retirees to young people who find themselves struggling with unemployment and the psychological impact it causes.

The Greek cities, especially Athens and Thessaloniki, are lacking in green spaces and the absence of these areas has generated a need for rapprochement between the inhabitants of urban centres with the natural element.

Due to the decline in construction activity and to the low interest of investors in the post-crisis real estate sector of 2008, especially in Athens, there are several lots and vacant lands, both private and municipal, which today they are used as parking lots or are in a complete state of decay and abandonment, depriving the community of possible spaces for social interaction (*Cf.* Paragraph G.4).

With the spread of the different types of forms linked to urban agriculture such as the shared garden and the vegetable garden in the city, a process of recovery of these spaces has begun in order to return them to the local community and transform them into green oases and meeting places for the district. An interesting case is the municipal garden of the Municipality of Marousi [7] [Figure.6], a garden that was born in 2012 and can be taken as an example of a space that was in a severe state of decay and which has been converted into a productive green area. The Marousi area, like the Messoghia area, was the subject of new processes of dispersal of human settlements, especially in 2004.

In this type of context, where there are some abandoned and degraded areas and there is an absence of possible real estate investors, these are converted into agricultural spaces so that they can be reintegrated within the urban and social fabric of the city.

7 Anthopoulos T. and Nikolaidou S., *"City growers: the municipal urban vegetable garden of Maroussi"*, Athens, Athens Social Atlas, 2015.



Figure.6
Title: Municipal Vegetation Garden of Marousi, areal view
Source:googlemaps.com



Figure.7
Title: Municipal Vegetation Garden of Marousi entrance, 2021
Source: Author

The goal of the municipality was mainly to be able to reuse the open and abandoned spaces and reintegrate them into the urban fabric through their conversion into common gardens to beautify the neighbourhoods and create new meeting places for the community at the time of the crisis. [Figure.7-8]



Figure.8

Title: Allotments garden in Marousi, interior view, 2012

Source: <https://www.athenssocialatlas.gr/en/article/the-field-in-the-city/>

The urban garden of Marousi extends for about 1500 m² and before its conversion it was a degraded area and used informally as a landfill.

Its conversion and use have transformed it from a degraded space to a living space used by citizens and which plays an active role for the local community, rebuilding part of the dead urban fabric. It is divided into about 40 plots of 25 m² each and the criteria for the distribution of the lots was based on social criteria. So, at first the Municipality proceeded to the requalification and reclamation of the area, reclaiming the land and creating the basic infrastructures, such as for the distribution of water and fences, for operation for agricultural purposes and subsequently it proceeded to allocation of plots.

Citizens who took part in this initiative argue that the garden has become a place for social interaction, meeting and recreation through gardening. [Figure.9]

By Eleni (Ελένη), local housewife:

“Working the garden has now become a daily requirement.”

By Panayiotis (Παναγιώτης), retired:

“Gardening reminds me of my childhood, when in the 60s where I lived, near Kifisias Avenue there were fields with irrigation canals. When I was a child, I used to play with my friends, and we made paper boats to put in the rivers.”

However, it is necessary to emphasize that despite the beneficial and positive effects found, as in the case of the Marousi garden, there are no real institutional safeguards for permanent agricultural use, which thus makes the land vulnerable to real estate market policies.



Figure.9
Title: Citizens working together and socializing in Marousi, 2012
Source: Author

Thus, this type of shared urban gardens become short-term actions in the absence of protection policies, as with the economic recovery and the return of real estate investors, these lands can be foreclosed and converted to other uses.

Urban agriculture contributes to the production of collective goods in urban agglomerations and its added value is significantly higher than the monetary value of the production itself [8] and it is therefore necessary to protect all those spaces where these activities are practiced through a correct legislative production in order not to take away from communities, which have already suffered the crisis, all those spaces that are now part of their daily life.

H.3.1 Urban and peri-urban agriculture in Athens

Greece was not an exception to the social and economic changes that were taking place in Europe in the Second World War. Even the Hellenic rural territory underwent important landscape transformations, in fact, many areas that had historical interest were converted to make space for the spatial expansion of the city, thus losing part of their historical heritage and identity.

The city of Athens is a clear example of this loss of heritage, where many areas were converted to accommodate new settlements and to make available land for the construction of infrastructure and industrial development, a clear example is the neighbourhood of Eleonas which from a character strictly agricultural was converted into an industrial centre.

This phenomenon intensified between the 80s and 90s when many agricultural functions were removed from the urban agglomeration and rejected on the outskirts of the city, in the peri-urban area and many of them closed definitively because they were unable to compete with international markets.

8 Dubbeling M., *"Cities, poverty and food: multi-stakeholder policy and planning in urban agriculture"*, s.l., RAUF Foundation, 2010.

In fact, the technological modernization of agriculture and globalization have cut consumers off from family farming and from production areas.

The cultivated areas in the Athens area have decreased from 4% to 2% from the time period between 1960 and 2000 and therefore a reduction of 50%, however, agricultural activities in the peri-urban area have suffered a slight decline passing in the same time period 1960-2000 a reduction from 33% to 30%. [9]

The uncontrolled growth of Athens has mainly generated an expansion of the compact city and widespread areas, characterized by the phenomenon of sprawling.

The population density in the centre has literally doubled in just over 50 years and the peripheral areas have also experienced a significant increase in urban density.

Athens was, with the city of Thessaloniki, a reference centre and pole of migratory attraction and it was thus the city was the subject of important infrastructure implementations which resulted in a further expansion of the city beyond the basin, spilling over the Parnitha, Egaleo mountains, Imetto and Pentelico in the Messoghia plain, a symbolic area of urban agriculture in Athens with a centuries-old agricultural vocation and famous in Attica to produce wine.

In this area 30km from Athens there were several towns which, following the construction of the Eleftherios Venizelos international airport, underwent important demographic changes and where the population more than doubled in the decade 2001-2011.[10]

In fact, after the 2004 Olympic Games, a last wave of the phenomenon of urban dispersion particularly affected this area with the consequent abandonment of many agricultural lands and an increase in human settlements which have resulted in environmental degradation and incompatibility of uses of the soil (OECD, 2004).

Following the economic financial crisis of 2008, there has been a return of agricultural activities to urban realities in these areas.

The towns of Mandra and Eleusis have seen the recovery and reuse of previously abandoned agricultural land.

Many people have opted to cope with the crisis to return to agricultural activities with the consequent recovery, therefore, of all the areas that in the past were used for agriculture, of all the traditional techniques and of all that intangible and tangible heritage that seemed to have almost been lost in the urban culture of the city.

Traditional techniques such as, for example, to cope with the aridity of the region and which today, due to climate change and rising temperatures, play a vital role in allowing the maintenance of certain cultures in the Mediterranean area.

H.4 Urban growth and the food-city relationship

Today, the success of urban and peri-urban agricultural policies is mainly due to the interest of the general public on the issue of urban sustainability, the food issue and the return of the territorial economy. [11]

It is possible to affirm that the growth of cities has altered, profoundly modifying it, the Mediterranean agricultural landscape, the result of centuries of social interactions between man and nature. However, space was given to experimenting with new interactions between the city and the countryside. The protection and preservation of the rural landscape within urban areas has assumed vital importance and has become a recognized tool as an element

9 See fn.1

10 Hellenistic Statistical Authority, 2011

11 Bonnefoy S., “*Ville et agriculture périurbaine: la trajectoire française*”, s.l., Scienze del territorio, 2014.

that can be used for careful integrated planning of the various territories of the metropolis. The socio-economic changes of the last 50 years have given impetus to the growth of urban agglomerations and to the abandonment of the countryside and the work relegated to it. In the Mediterranean cities, of countries such as Spain, Greece or Italy, it was the peri-urban areas that were subject to the greatest changes involved in a very important process of demographic increase [12] which resulted in a greater fragmentation of urban areas, forest territories and the degradation of agricultural areas.

However, in the contemporary city it can be affirmed that there is a return of agriculture in new forms that contribute to the improvement of services and the consolidation and definition of the Mediterranean urban landscape.

The activities related to this area are not limited only to the production of goods but also of services that revolve around urban demand.

Furthermore, the recovery and use of abandoned urban spaces used in urban agriculture (urban gardens, common gardens-gardens, etc.) reflects a new sensitivity towards green spaces and their social significance in the daily life of the inhabitants. as they represent new places of social interaction.

The phenomenon of urban agriculture is present in all large European cities, showing the willingness of large urban settlements and the population to carefully manage land use and green area.

It can therefore be said that in Europe there is a great deal of attention to the issue which is reflected in an ecological and social management of the spaces available in urban fabrics.

Thus, a rapprochement between the urban and rural worlds is taking place, creating suitable spaces in the city for the cultivation of different crops managed by local communities and thus showing the importance that these spaces assume today for the conservation of the agricultural landscape, of the organic theme and proximity production and consumption.

H.5 How family farming in Greece challenges the economic crisis

For the economic growth of the Hellenic country, the primary sector, with particular attention to agricultural activity, was fundamental from the dawn of the birth of the Greek state until the 1970s.

The agricultural sector and its economy, until the period before the two Great World Wars, have always been oriented towards the export of the goods produced. Only with the advent of war conflicts, a closed policy was adopted due to the and financial crisis and transatlantic migration between Europe and America.

There was a modernization and expansion of the agricultural sector only in the post-war phases, but the crisis of agricultural incomes upset the social balance causing a flight of agricultural workers from the countryside.

Family farming is one of the organizational forms that predominates in the economic sector linked to the production of food. These autonomous family “units” can manage and organize themselves flexibly according to the supply and demand present in a broader economic context so that they can manage their resources. This management system is a peculiarity of families and local economic communities in the Hellenic country which show an adaptive capacity of these families to changes in the labour market.

12 See fn.1

Furthermore, it has been found that this organizational structure of agriculture is a defensive practice for various social groups residing in rural areas to counter a constantly evolving global context.[13]

To understand how organizational structures have changed over time, it is necessary to consider the process of de-agriculturalization of rural areas in Greece. With this it is important to underline how agricultural activity has become in recent decades from a main occupation to a secondary occupation with the takeover of new work activities without losing the value it assumes in rural communities.[14] This change has also taken place due to the migratory phenomena that push local populations to move to the urban or peri-urban areas of the large Greek cities. The rural communities present and the agricultural activities they still conduct can be considered aimed at protecting the rural landscape heritage, traditions of agricultural techniques and goods such as food. The growing public demand for slow-food and awareness of the origin of the products and therefore of a short supply chain makes rural farming communities assume an even more important role. Another issue the agriculture sector and the consumers had to face with the economic crisis of 2008 and with higher taxes of inflation. Another problem, that of product costs, which directly involved the agricultural sector, from producers to consumers, emerged with the economic crisis of 2008 and with an increase in inflation and the price of goods. Also, to this new challenge, the population found an alternative solution which consisted in shortening the food supply chain, cutting out the large supermarket chains, selling the products directly to consumers in the cities. Thus, was born the movement of the potato that will be better explained in the following paragraph.

H.5.1 “The movement of the potatoes” (“Η κίνηση της πατάτας”)

The potato movement (in Greek κίνημα της πατάτας) or also commonly referred to as the “*Potato Revolution*”, was born in 2012 as a response to the largest recession in the country’s modern history and can be interpreted as an economic and social revolution.

This movement consists in the direct rapprochement between the producer and the consumer. In fact, the user can thus purchase certain products, especially food products such as potatoes, from the producer as a farmer, shortening the food supply chain and without involving third parties, in order to reduce sales costs. [Figure.10]

By Stelio Ioannis (Στέλιο Ιωαννίδη), farmer

“The intermediary exploits us by buying our products at low prices. We, on the other hand, want to help the consumer in difficult times. The message is: few cannot make money at our expense”.

In this way it is no longer necessary to rely on intermediaries, such as supermarket chains, and farmers can resell their goods at slightly higher prices than those that were established in the negotiations between intermediary-farmers, but in any case, with this cheaper procedure for consumers who face lower costs than the prices to buy the same good in a supermarket. Many municipalities and organizations have given their support to the initiative by giving spaces where this initiative took place. The potato movement was made up of groups of associations, municipalities, consumers and producers and its popularity grew incredibly fast, involving the sale of other food consumables such as honey, rice, olive oil, fruit and

13 Kasimis C. and Papadopoulos A. G., “*Family farm and capitalistic development in Greek Agriculture: A critical review of the literature*”, s.l., Ruralis, 1997. 1



Figure.10
Title: The farmers selling their products in Athens
Source: Petros Katsakos' archive (Πέτρος Κατσάκος)



Figure.11
Title: "One Stop" organization selling potatoes in Katerini town, 2012
Source: <https://www.iefimerida.gr>

vegetables and sometimes even meat.

This initiative was first born in a provincial city, the town of Katerini, where 24 tons of potatoes were sold in a few days, finding great success among the local population, a success that will reach the capital of Athens. [Figure.11]

14 Kasimis C. and Papadopoulos A. G., *"The De-Agriculturisation of Greek Countryside: the changing characteristics of an Ongoing Socio-economic transformation"*, Aldeshot, Ashgate, 2001.

H.6 The fundamental characteristics of family farming in Greece

The agricultural sector has been of vital importance for the economic history of Greece up to the present day. Currently the sector has about 13.8% of employees, about 1.2 million people involved [15], a decrease compared to previous decades due to the recession and the economic crisis of 2008 where the number of employed stood at 1.6 million in 1991. [Figure.12] Furthermore, the goods produced represent 18% of the total exports.

Despite this, Greece has low production levels, and the territory is dotted with the presence of small family businesses that make up most of the agricultural sector of contemporary Greece. In 2010, the number of lands used for agricultural production was about 723 000 hectares, a decrease compared to the year 2000 (-11.5%). 76% of the companies in the sector work on land of less than 5 hectares, with an average of 4.8 hectares, the remaining 24% of the activity, on the other hand, works areas with dimensions greater than 5 hectares up to land of over 100 hectares. It is then necessary to subdivide the companies that work land owned by those that instead rent the land from other private individuals.

In 2010 the lands used for the primary sector were divided into arable land equal to 51%, meadows and pastures made up 22% and permanent crops instead amounted to 27%. [Figure.13] The theme of organic farming has instead been developed only recently and has seen an important growth where in 1993 only 250 companies were involved in the production of organic products up to 23 000 operators in 2013, however representing only 3.3% of the total. It must be said that many of the producers of organic products are concentrated in the vicinity

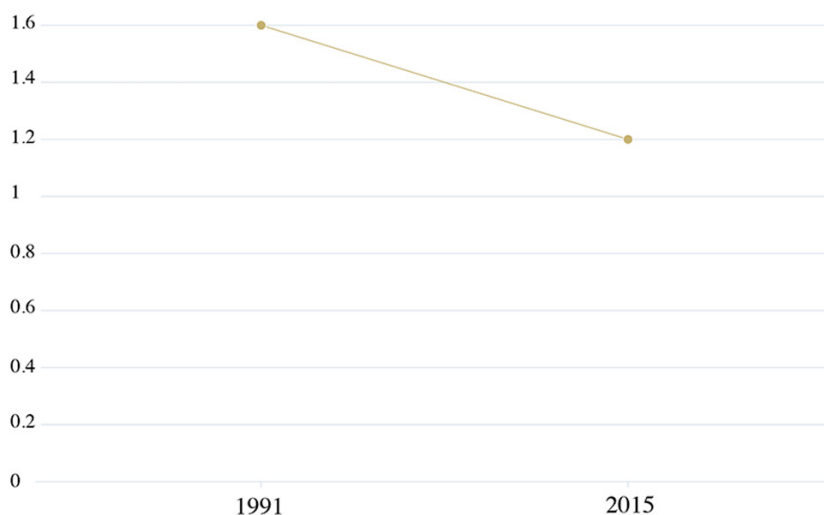


Figure.12
Title: Employed in Agricultural Sector
Source: Elstat, 1991-2015 & Eurostat Database

of large urban centres in order to be able to respond directly to a growing demand for organic products and because there is necessarily a need for technical support and specialized knowledge, which are concentrated in the cities in the large research production centers.

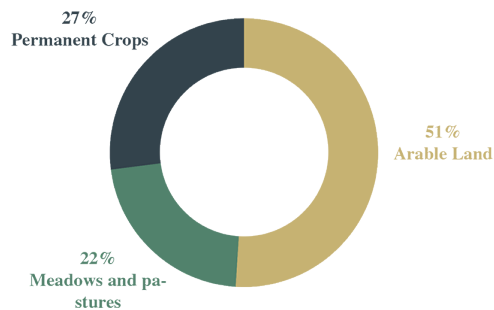


Figure.13
 Title: Agricultural land use
 Source: Elstat, 1991-2015 & Eurostat Database

H.7 Trends and challenges of family farming in Greece

Family businesses in the sector are very heterogeneous even if in recent decades there has been a polarization and division between companies that operate on a small and large scale. The activities that operate on large areas are mainly concentrated in the rural areas of the country and are characterized by intensive and specialized production with the use of innovative techniques, on the opposite of the small farms in the peri-urban areas Greek of cities. It is interesting to note that there is a generational gap and a polarization of medium and large-scale activities in the hands of young farmers, and, on the other hand, small-scale activities are relegated to operators over the age of 65.

In fact, younger farmers try to expand their farms through the acquisition or leasing of new land in order to better compete in the market.

The size of the activities and the land on which they operate helps to understand the distribution of employment in this sector.

Family farms, therefore, generally smaller, tend to use family labour and, on the other hand, larger farms require extra labour that does not belong to the family unit, often migrant labour which constitutes a good percentage of those employed in the agricultural sector and which enriches demographically these areas that are now depopulated.

This is because a trend of internal migration has been accentuated since the 1990s where people living in rural centres move to the most important urban agglomerations, affecting the number of people working on family farms which have therefore lost a significant portion of their family work.

However, it should be emphasized that following the 2008 crisis, the agricultural sector was the least affected in terms of active employees within the sector.

In fact, while in the cities there was a deep crisis and the number of unemployed secondary and tertiary sector workers was increasing, in rural areas it was possible to generate new jobs. Therefore, it can be said that family farming has been a sort of defence shield against the economic recession in Greece by offering jobs to many people.

Today, despite the decline in family activities, their role is vital for the support and life of rural areas by offering job opportunities in otherwise depopulated areas but not only, providing food security to community members during times of severe recession and austerity.

H.8 Assumptions

The studies carried out on the theme of Urban Agriculture and how it is applied in the urban contexts of Greek cities show that even if it has only been taken into consideration in the last decade as a tool for territorial planning, it is a fundamental tool for management of disused areas within the compact urban fabric and for their conversion into green areas usable by citizens.

The widespread use of Urban Agriculture in Greece took place only in the years after the 2008 economic crisis, where the country had to interface with the greatest economic recession of the contemporary era.

In fact, there were many Municipalities that favoured the birth of such practices within urban centres with the aim of being able to fight urban poverty as the creation of spaces dedicated to such agricultural practices are useful for the generation of employment, income and to produce cultural and social services and, therefore, contribute to the strengthening of the territorial economy.

In addition, urban agriculture promotes biodiversity and encourages social inclusion processes.

The most widespread tool in Greece, within urban centres, is that of the Shared Garden and managed by the local community whose products are directly consumed by the population and contribute to the nutritional enrichment of people's diets.

The spread of Urban Agriculture was therefore mainly encouraged by the prices of basic goods, such as food, which were subjected to high rates of inflation and people found themselves having to buy more expensive goods but with increasingly tight family budgets.

It can also be stated that these practices contribute to the re-appropriation of traditional cultivation techniques, to the resurfacing of memories related to the individual's childhood and therefore to his psychological well-being.

These spaces play active roles within the community and at the same time fight environmental degradation by recovering dead parts of the urban fabric.

Therefore, in an area such as Eleonas, characterized primarily by a weak and precarious social fabric, by a past agricultural heritage and by large abandoned spaces that fall into disuse, the application of Urban Agriculture would represent an optimal solution for fight urban poverty, create job opportunities, salaries, to provide fresh food to the population and through the recovery of these areas, the return of spaces usable by the community as places of socialization as well as production, all at almost zero maintenance costs for the municipality as it would fall directly on the bodies that manage the various spaces.

It is therefore possible to pursue an urban strategy based on the implementation of green spaces within Eleonas, since all the necessary prerequisites are present, with the aim of improving the ecological, environmental and social conditions of the city if the Urban Agriculture is applied constantly as a basic tool for the recovery of these areas.

I. Approaching Eleonas

I.0 Introduction

The analysis conducted previously showed how Athens is characterized by a dense urban fabric consisting of small blocks, a deep-rooted and hierarchical road system and the almost total absence of green spaces within the urban agglomeration.

The spatial expansion of the city took place in a frenetic way and without any control and was mainly concentrated along the great roads and infrastructures that connected the heart of Athens to the rest of the region.

The absence of expansion plans was matched by a dense urban fabric lacking in social spaces and green areas. These represent the premises that led the author to deepen the relationship between greenery and Athens and demonstrate the need to recover PD 1995 and its implementation in Eleonas but considering the needs of the city today, through an approach based on the resolution of the problems of the local realities directly interested by the intervention.

I.1 Purposes

The concept on which the strategy pursued is based on the desire to reintegrate the social and urban fabric of Eleonas within the city of Athens, through the recovery of spaces that are now abandoned and inaccessible and their conversion in order to provide the various communities with spaces for socializing and meeting. Eleonas in the last century has literally become an enclave towards the city whose infrastructures represent barriers that highlight the urban discontinuity, a factor that further distances Eleonas's people from the dynamics of the city, increasing social distances, despite the spatial proximity of the city centre. (Cf. Paragraph D.5) [Figure.1]

The creation of a green infrastructure that crosses these barriers and accompanies the city into Eleonas and vice versa is necessary in order to mend these two realities and to transform the image and perception that the Athenians have of this isolated “*world*”, where greenery becomes an element of continuity and centrality within the neighbourhood favouring the internal mobility and the creation of social processes between the isolated residential pockets within Eleonas. [Figure.2]

I.2 Dealing with Eleonas

The design strategy focuses on the recovery of different abandoned areas, called *Hubs*, through the implementation of Agricultural and Social Activities, considering the rules and plans relating to urban planning already in force, as the PD 1995 and “*Athens-Attica 2014-2021*”, and proposes a new system of connections in order to integrate the recovered area with the existing Greenery such as Parks and Gardens through the implementation of green corridors that can be defined as *Links* to achieve the creation of a well-integrated new green network within Eleonas' urban fabric. The intent stems from the desire to mend a landscape that has been the subject of violent transformations and that have resulted in the disappearance of the agricultural landscape that has characterized the history of Eleonas for over two millennia, replaced by a transactional-industrial landscape. (Cf. Paragraph D.3.3) The proposed interventions aim to restore the various areas which have been selected through

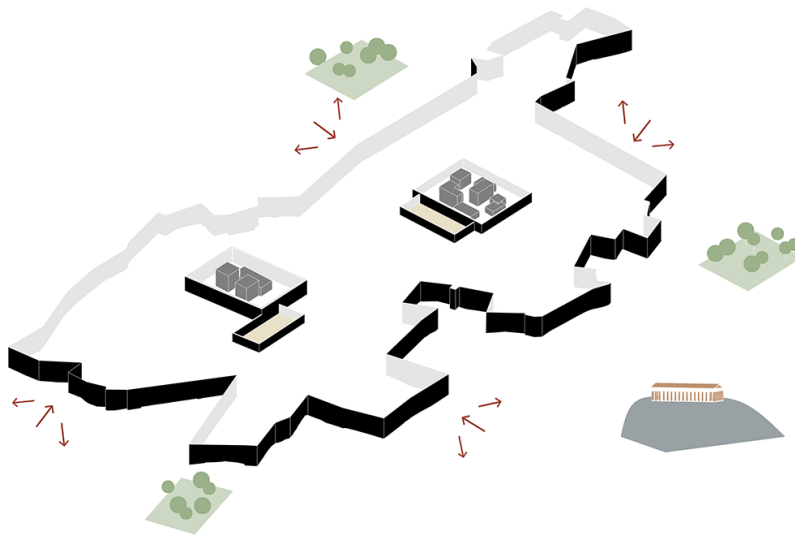


Figure.1
 Title: Eleonas as a reality of Enclaves
 Source: Author

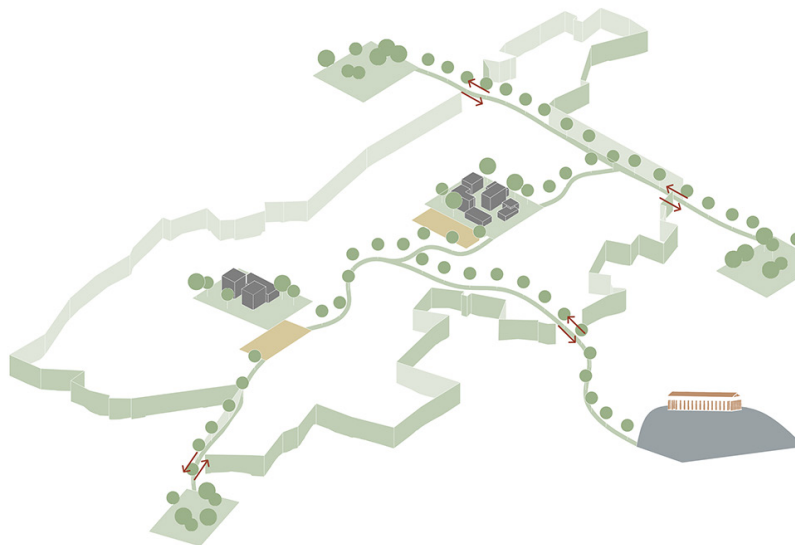


Figure.2
 Title: Greenery as urban approach to integrate the different realities
 Source: Author

the criteria of proximity to the residential pockets in order to set new activities and provide spaces for socialisation processes.

The works focus first on a big scale, proposing a general urban strategy, and then to a medium scale as it will be presented in the section Project.

I.3 Links, Hubs and Existing Nodes

As previously defined, in paragraph G.5, the implementation of a green infrastructure is based on two main elements, namely the Hubs and Links. In the Urban project Strategy adopted these elements will correspond to some environmental and built areas among Eleonas who have been carefully selected:

-The *Hubs* will consist of the new areas obtained through the recovery of currently inaccessible and degraded spaces (Cf. Paragraph I.3.2) and which will host educational, productive (agricultural), social and entertainment activities, selected by chance in case, depending on the need of the area of interest. Their recovery is based on the desire to give back to the community some social spaces of which the population has always been deprived and to transform these areas into new attractive points at the local and metropolitan level. The implementation of the *Hubs* is necessary and urgent in order to promote the creation of more solid social networks, a sense of belonging to a community and to combat degradation. [Figure.3]

-The *links* will instead consist of the connecting elements which in this case will coincide with the water channels and the road network that now represent elements of discontinuity (Cf. Paragraph D.3.2) and whose recover and transformation will allow to guarantee continuity

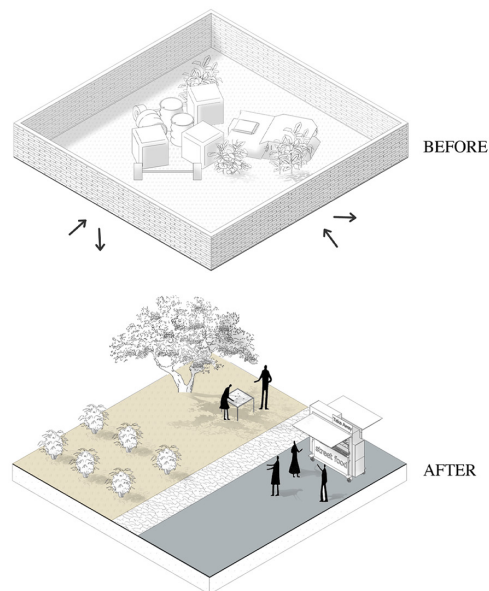


Figure.3
Title: From abandoned areas to Hubs
Source: Author

between the various Hubs and among all the other elements taken into consideration for the design of the work strategy (Existing Greenery and Symbolic Places). [Figure.4]
At a hierarchical level of priority, the implementation of these green corridors is secondary to the development of the *Hubs*.

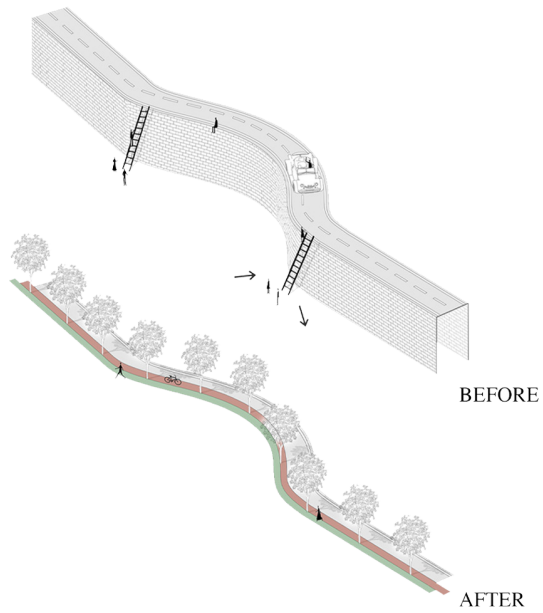


Figure.4
 Title: From boundaries to Links
 Source: Author

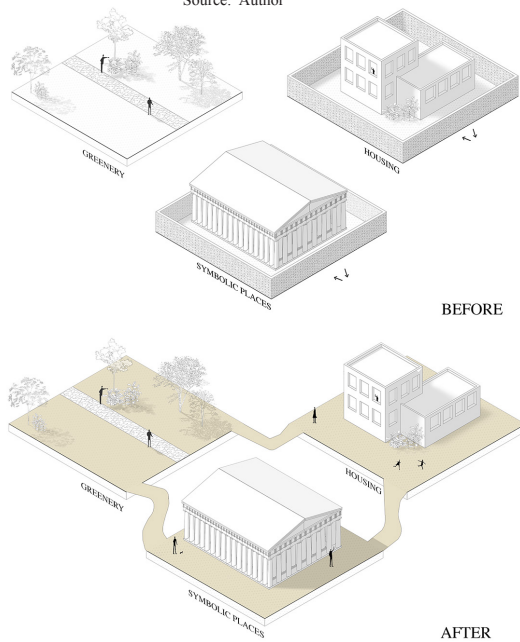


Figure.5
 Title: Re-connecting the Symbolic places - Housing complexes - Greenery
 Source: Author

-The *Existing Nodes* will correspond to the built environment already present within the Urban fabric, exploiting all their potential of a social, cultural, historical and urban nature in order to be able to involve them, enhance them and reaffirm their roles at the territorial level and social value. (Cf. Paragraph I.3.4-5-6)

In this specific case, the *Existing Nodes* will coincide with the already existing Green Areas within and outside the administrative boundaries of Eleonas, the formal and informal residential areas and all the symbolic places of the neighbourhood. [Figure.5]

I.3.1 Key Elements

The Urban Regeneration Strategy adopted is based on some key elements that are currently in a condition of decay, isolation and the cause of disconnection of Eleonas from the rest of the Athenian urban fabric, such as symbolic-cultural places, residential pockets, abandoned not-built areas and the road system.

Each of these elements will correspond to Hubs-Links-Existing Nodes and their role and functions will be explained in the following paragraphs.

I.3.2 Hubs: Abandoned Areas

The proposed Urban Regeneration Strategy is built on the desire to recover areas that are currently inaccessible and that are in a state of complete decay and abandonment.

From the studies conducted in the Analysis section (*Cf.* Paragraph D.2.4) it emerges that the areas not built, excluding the surface occupied by the road network, constitute almost half of the total surface, a factor which is reflected in the low urban density that characterizes the neighbourhood and large space availability. (*Cf.* Paragraph D.3)

Furthermore, from Paragraph D.8 it emerges that most of these areas, in addition to their state of neglect and inaccessibility, present important problems relating to the state of degradation, due to the high levels of soil pollution, water contamination and through direct surveys, it is noted that these spaces are often used illegally as landfills. [Figure.6]

The goal is to be able to recover these areas, reclaim them, make them accessible again and return places to the community in order to meet, socialize and carry out activities of a different nature since, as things stand, Eleonas does not have places dedicated to sociability. The selection criterion is based on the proximity of these areas with respect to the residential pockets scattered within the territory of Eleonas. [Figure.7-8]

Therefore, the residential areas have been mapped in order to identify potential non-built and water-permeable areas that could be converted into what it will be defined as Hubs, or the new places of Eleonas, incubators of productive and social activities.

The selection of the areas was also made through the constant comparison with PD 1995 (*Cf.* Paragraph E.3.3, Figure.13) so that it could remain partially faithful to the implementation work envisaged in this decree, as many of the areas planned for the creation of green spaces, over the years, have been built and are no longer available except through the foreclosure and expropriation of the built environment and its subsequent demolition.

The recovery of these areas and their conversion into Hubs is the founding point of the strategy and, together with the integration and enhancement of the symbolic places, spaces can be returned to the community where activities that respond to the local needs of the resident population can be set up in proximity of these areas and where it will be possible to regenerate almost the entire surface through Urban Agriculture, in order to increase the percentage of green area within the city, without particular

■ Permeable and unbuilt areas



Figure.6
Title: Permeable areas to water within Eleonas' urban fabric
Source: Author



■ Housing
■ Abandoned Areas

⊙ 5 mins by walking



Figure.8
Title: Abandoned Areas neraby Housing complexes in Eleonas by 5 min walking
Source: Author



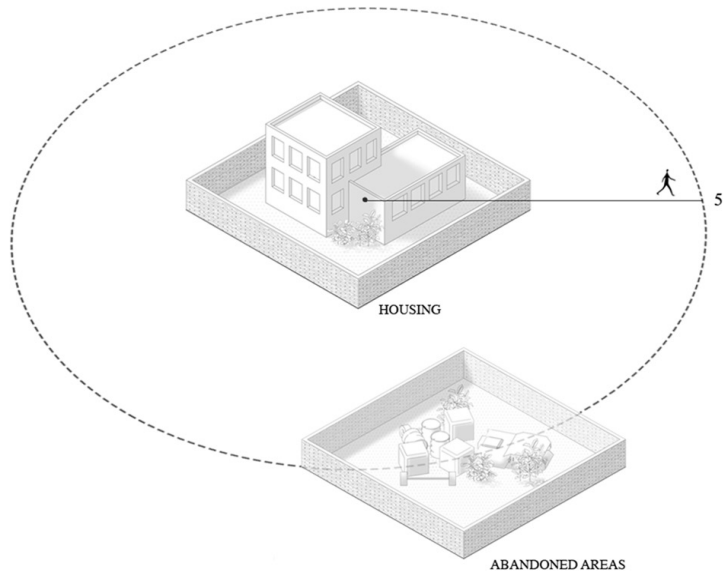


Figure.7
 Title: Criteria of proximity of Abandoned Areas to Housing complexes
 Source: Author

expenditure of financial resources for the implementation of these infrastructures and for their maintenance but that, on the contrary, they can create income and fight urban poverty, a phenomenon that characterized Eleonas.

I.3.3 Existing Node: Eleonas' Symbolic Places

Eleonas is negatively perceived in the collective imagination of the population (*Cf.* Paragraph C.6) and in the last period a social stigma afflicts this area, further marginalizing it from the social dynamics of Athens.

The thousands of people residing in the neighbourhood are in turn subjected by a sense of despondency linked to this stigmatizing vision of Eleonas and by the absence of a sense of community caused by the lack of places dedicated to socialization and the spatial isolation of the different residential areas.

In order to achieve a complete work of regeneration, which does not only deal with the physical regeneration of the places, but it is also necessary to consider the different social aspects that characterize this reality, from the opinion of the inhabitants of Eleonas to the motivations that led to the negative perception of the neighbourhood. For this reason, it was essential to consider all the places in Eleonas that have a cultural, symbolic, historical and social value within the proposed Urban Strategy, acting as supporting pillars.

Paying particular attention to these places, placing them as nerve centres, is essential in order to create a clear and cohesive program that can strengthen the sense of belonging to the neighbourhood.

Therefore, the intent is to pay more attention to these elements, through their enhancement, transforming them into tools that can bring back the lost identity of Eleonas and their role

within Athens with the aim of being able to build *another* image of Eleonas, overcoming the social stigma with which it is perceived on a metropolitan level.

The symbolic places identified and selected following previous analysis are the Gardens of the Platonic Academy, the Main Cemetery of the city, the Prophet Daniel canal, the Kifissos river, the Iera Odos road axis, a Mosque, the Athens General Market, the Agricultural University of Athens, the Botanical Garden and Acropoli since its view can be enjoyed from almost everywhere in Eleonas. (Cf. Paragraph D.5. Figure.21) [Figure.9]

I.3.4 Existing Nodes: Existing Greenery

The approach taken for the recovery of Eleonas considers the different types of existing green spaces such as public parks, gardens, sports facilities, agricultural areas and urban green both inside and outside the administrative boundaries of Eleonas. [Figure.10] The intent is to put these places in relation to each other and integrate them with the new green areas that will be implemented within the *Hubs*, to create a system of constant green spaces within the compact urban fabric of Athens.

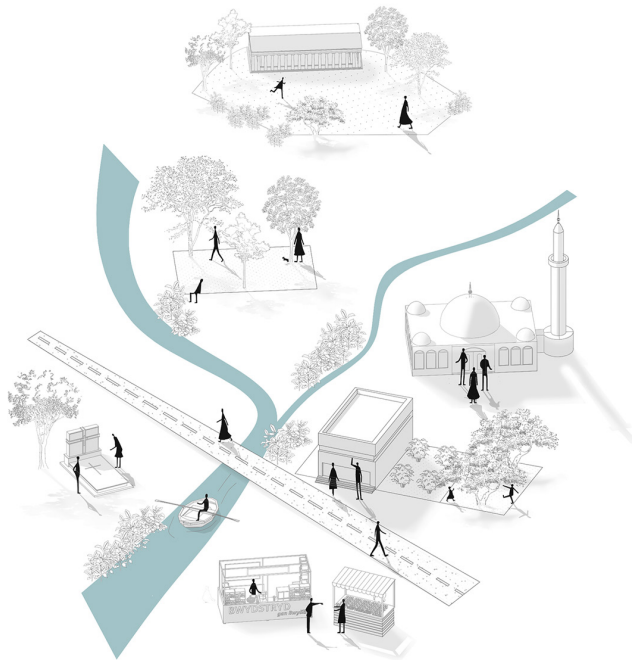


Figure.9
Title: Symbolic Places in Eleonas
Source: Author

- Urban Park
- Urban greenery
- Sport infrastructure
- Unbuilt and permeable Areas
- Agricultural Fields

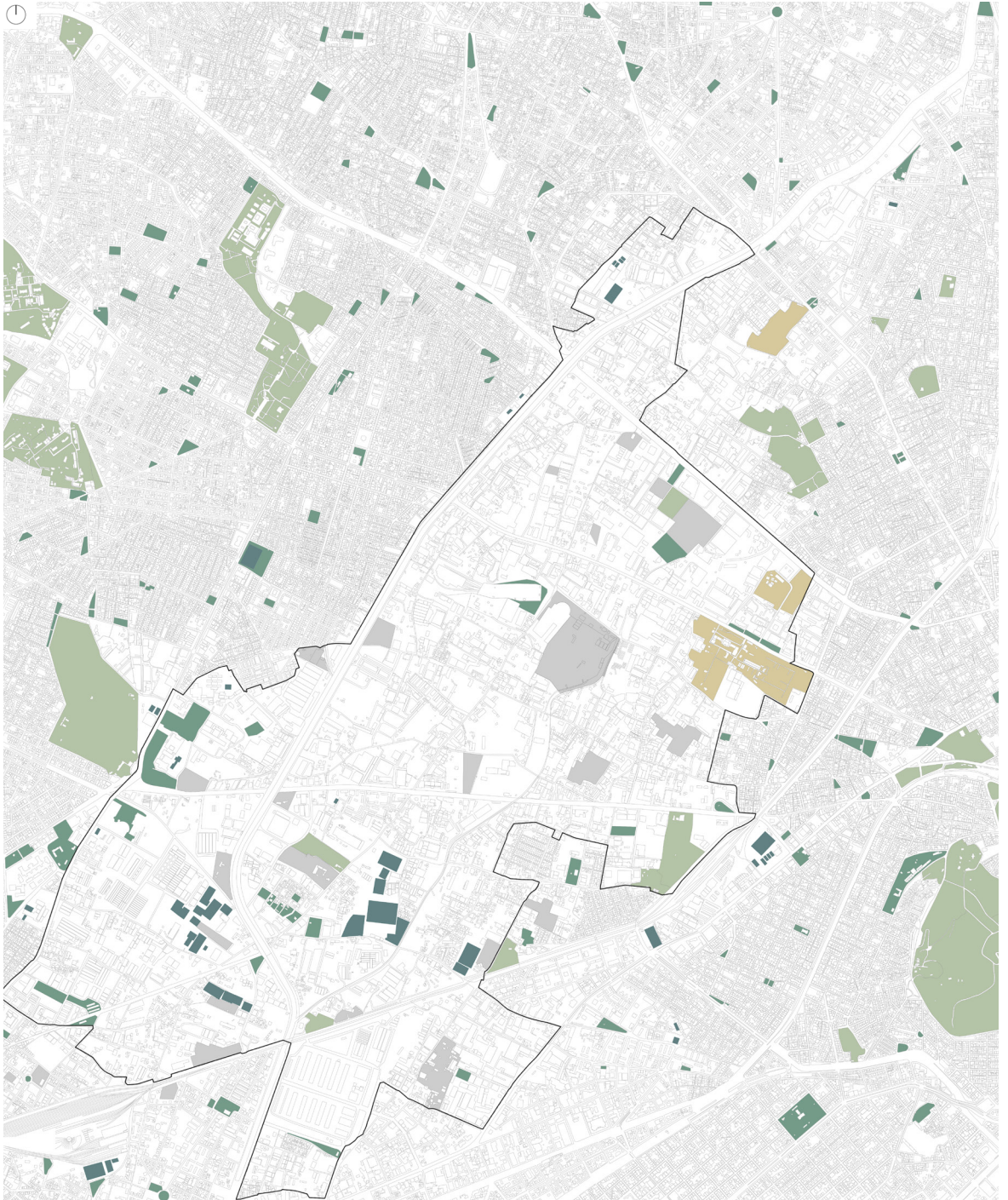


Figure.10
 Title: Green Areas within Eleonas' urban fabric and close to its sourrandings
 Source: Author



I.3.5 Existing Node: Residential Pockets

From the analysis conducted previously, it emerged that about 4250 people legally live in Eleonas (*Cf.* Paragraph C.2), without therefore counting the thousands of unregistered people who live daily in the Eleonas Refugee Camp (*Cf.* Paragraph C.3) and in the informal settlements of the Roma community (*Cf.* Paragraph C.5) which are not considered in the official census.

Furthermore, the physical analysis carried out show how these residential pockets and settlements, both legitimate and unauthorized, arise isolated and they are spatially distant from each other (*Cf.* Paragraph D.2.2). [Figure.11]

They are not served by any service and to socialising places, thus preventing the creation of a cohesive community within Eleonas' social fabric. These residential pockets are completely discontinuous with each other, connected by a precarious internal road system that does not guarantee safe pedestrian mobility in the neighbourhood (*Cf.* Paragraph D.4.1) and that is characterised by dead ends, the almost total absence of public lighting systems, the absence of sidewalks and places of sociality thus, disadvantaging internal mobility in the district and accentuating a sense of total disconnection.

All these factors force people to look for places of sociality and services outside of Eleonas' boundaries, using their own private cars as only way to move and therefore losing any opportunity to relate to other residents. Therefore, the residential pockets have on a fundamental role within the Strategy, as the thousands of people who give life to the neighbourhood every day and who complain about

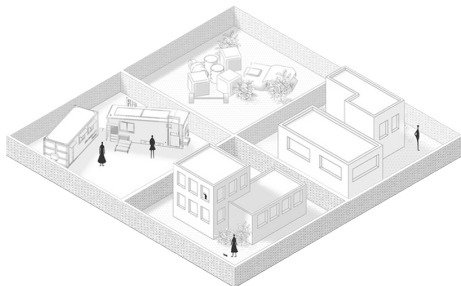


Figure.11
Title: Isolated Housing within Eleonas
Source: Author

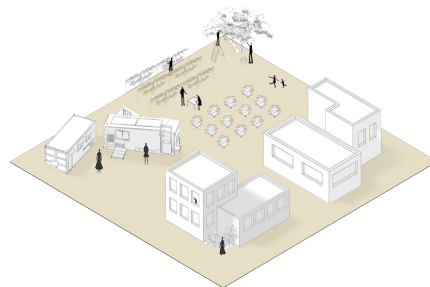


Figure.12
Title: Greenery as Unifying element
Source: Author

the absence of spaces to meet, relate and strengthen the sense of community. Their spatial position was, in fact, decisive in establishing a criterion for the selection of abandoned not-built areas that had to be in the immediate vicinity of residential pockets, to be able to provide to the population new spaces for aggregation through their recovery. [Figure.12]

I.3.6 Links: Road Axes and Water Channels

All the elements considered so far - the *Hubs* and the *Existing Nodes* - will be related to each other through the implementation of green corridors, which will be defined as *links* that will guarantee the perceptual and visual continuity of the proposed green infrastructure along with the water channels. They will therefore assume a function of connectivity, facilitating the processes of internal mobility and integration with the urban fabric of Athens. The basis for the implementation of these corridors corresponds to the existing road axes. In fact, it has started from the latter to design paths identified so that their physical conditions can be improved (Cf. Paragraph D.4.1) through their redevelopment which consists in increasing the permeable surface, in the planting of new tree-alleys, the implementation of cycle paths, to reduce the phenomena of floods, heat islands and to create a coherent system to facilitate the integration processes of sustainable mobility. [Figure.4]

In addition, the different water channels that cross Eleonas are also considered, such as the Kifissos River and the Prophet Daniel Channel, in order to transform them into connecting elements that guarantee continuity between the different *Hubs*, residential areas and symbolic places through the recovery of their banks and embankments, where possible, in order to transform them into future cycle-pedestrian paths, thus making them assume the characteristics of *links*.

I.4 Visions for a Future Athens

It is necessary to take note of the large spatial dimensions that characterize Eleonas and the difficulties that may be encountered in the process of implementing this Regeneration Strategy.

For this reason, it was important to create a hierarchy of intentions and actions and of what absolutely must be implemented compared to what can be achieved later in a second phase.

The author has foreseen two possible scenarios: one characterized by well-being and economic availability, that is that of “*Athens European Capital*” while the other, on the contrary, is linked to a pessimistic vision of the trend of economic flows, where the capital will represent the “*Athens in Recession post Covid-19*” and therefore will not have the necessary resources for the implementation of the entire project.[Figure.13]

Based on these visions, what is urgently needed to be implemented to try to improve the living conditions of the neighbourhood and its citizens has been identified and what can be considered superfluous and can be implemented later.

This *modus operandi* will then be the spatial-temporal planning basis of the *Hubs*, which in turn will have a hierarchy of actions to be implemented as soon as possible in order to recover the abandoned areas, through collaboration with local and supra-local authorities.

I.4.1 Athens in Recession post Covid-19

In the vision of “*Athens in Recession post Covid-19*”, as opposed to the vision of “*Athens European Capital*”, a new economic recession is expected, in the footsteps of the 2008 financial crisis, and which would have important impacts on the construction of the work in whole.

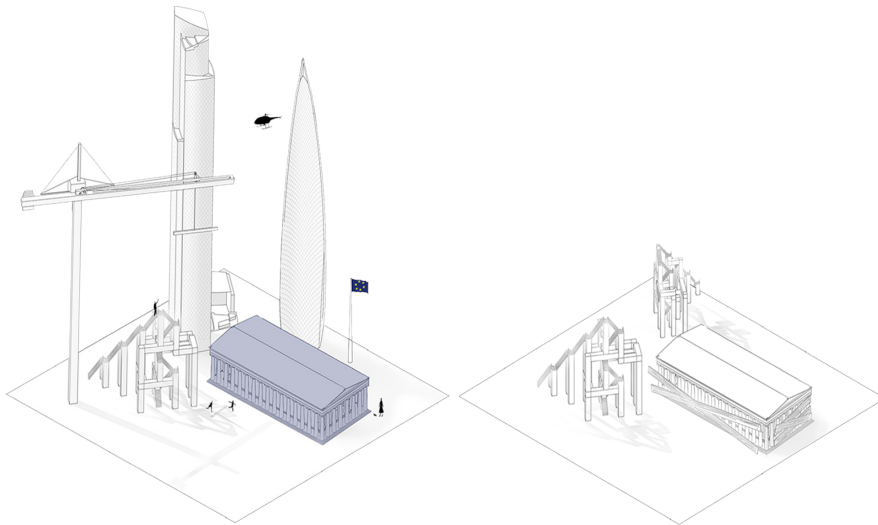


Figure.13
 Title: “Athens European Capital” [1] vs “Athens in Recession Post Covid-19” [2]
 Source: Author

In fact, in this hypothesis economic constraints and the absence of capital to be invested for the realization of the Masterplan as a whole are expected. For this reason, it is necessary to hierarchize the actions to be implemented according to the real needs and urgencies that Eleonas presents.

In this vision, the implementation of the Hubs is given absolute priority, so that the residential areas can be provided with meeting, social, entertainment and production places with the aim of establishing a sense of identity, community and belonging to places and therefore to improve the social conditions of the minorities residing in Eleonas, creating attractive points in the heart of the neighbourhood. [Figure.14]

Subsequently, if there are the appropriate economic conditions, it will be possible to think about the implementation of the Links that will allow a further level of integration with the city of Athens and realise the program for the “Athens European Capital”.

I.4.2 Athens European Capital

The vision of “Athens European Capital” promotes the idea of a dynamic city, in step with other European capitals, in an imaginary of economic well-being and large financial resources that can be used to implement and improve the environmental conditions of the city.

This Hypothesis provides for an abundance of economic resources that can be invested for the completion of the general Master Plan as a whole, without posing the problem of what can be implemented or not.

In fact, in this Vision, the Masterplan would be 100% completed and thus the *Hubs* and *links* can be completely created, and the *Existing Nodes* can be enhanced. [Figure.15]

- Hubs
- Existing Urban Greenery
- Water Channels
- Housing
- Symbolic Places

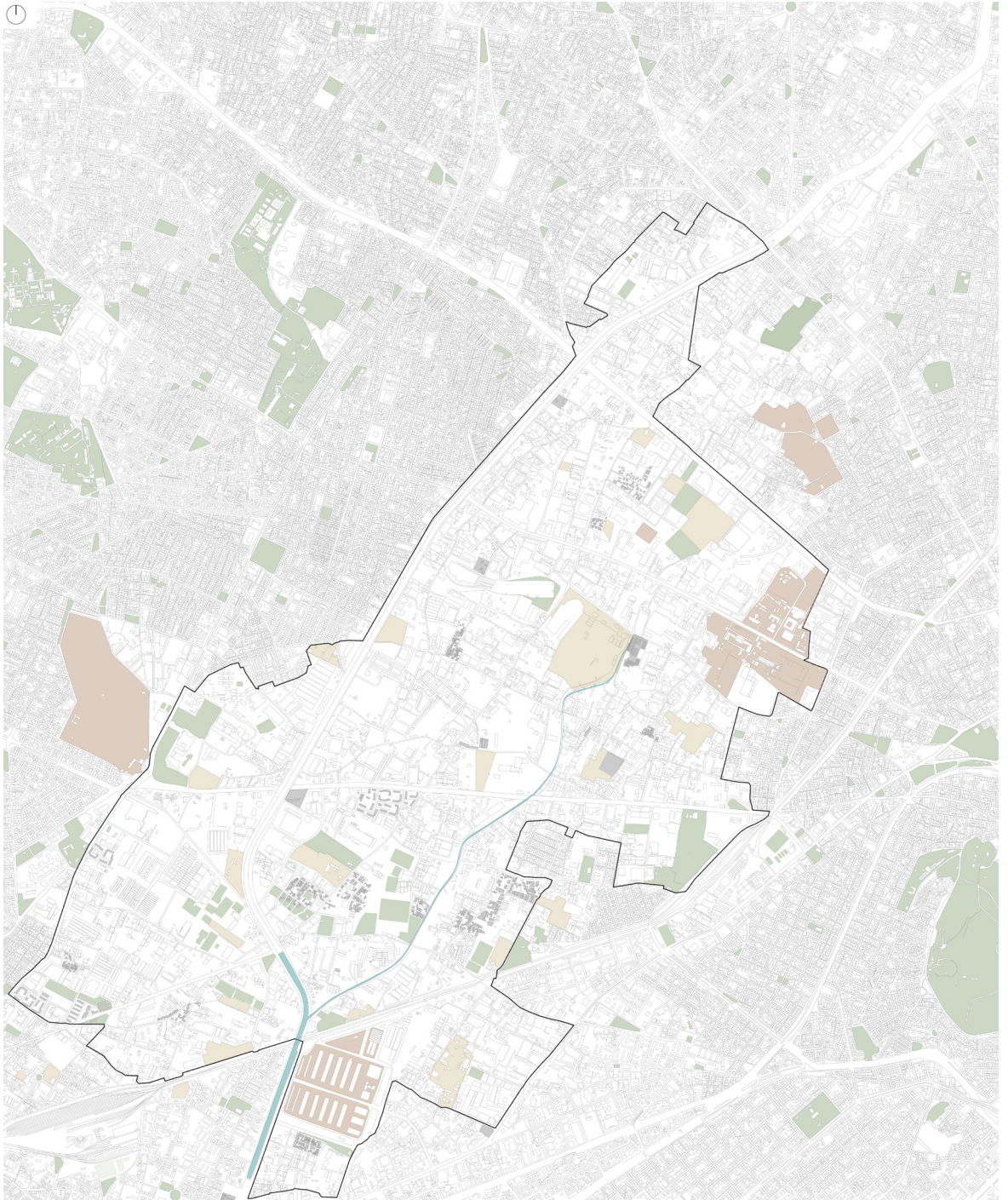


Figure.14
 Title: Vision for “Athens in Recession post Covid-19”, implementation of Hubs
 Source: Author



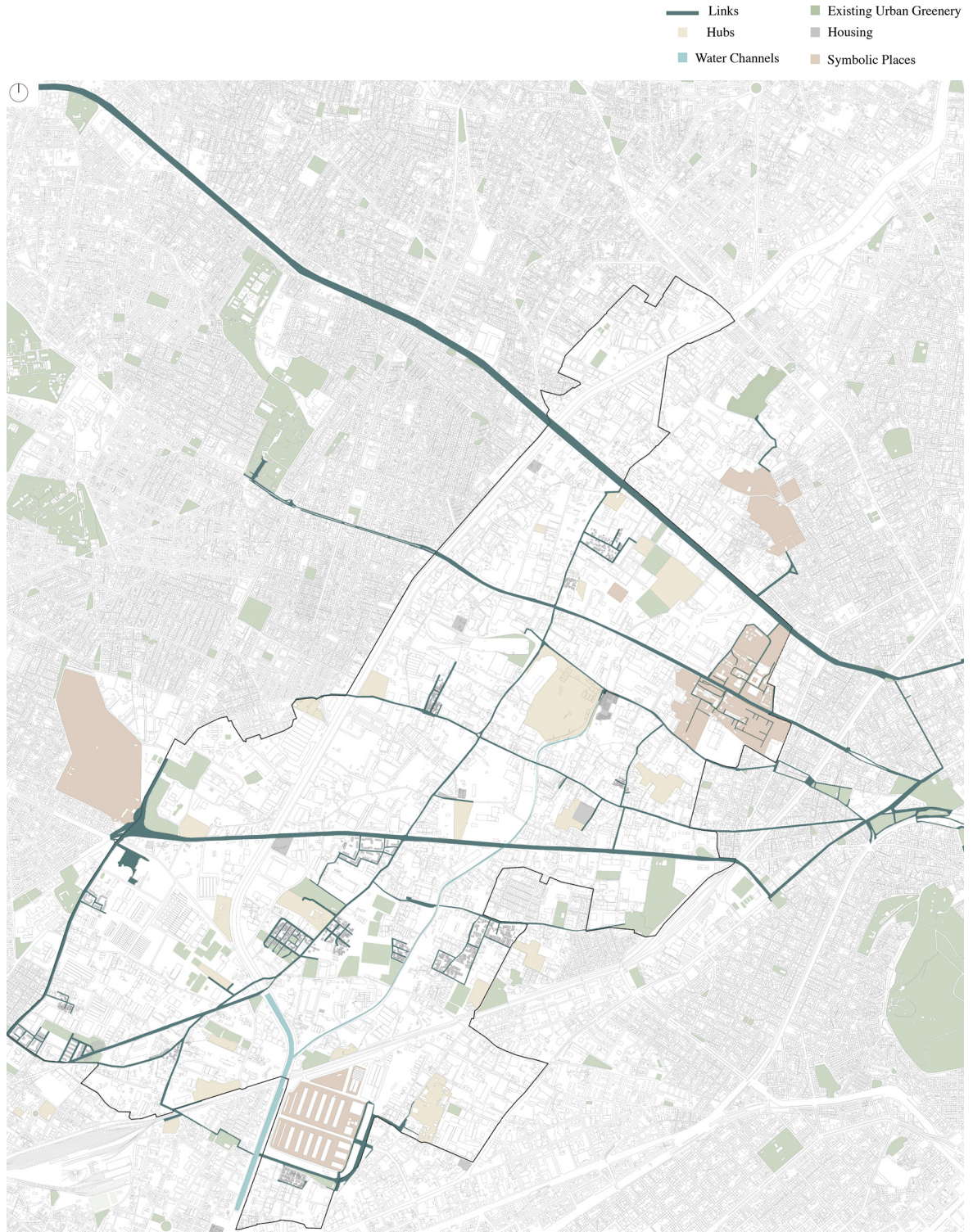


Figure.15
 Title: Vision fo “Athens European Capital”, Implementation of Hubs and Links
 Source: Author



I.5 Objectives

The Intervention Strategy proposed is willing to achieve some objectives and its implementation will have positive consequences and benefits from an environmental, ecological and social point of view.

Here below are reported the most impactful effects that the realisation on the proposed approach will have:

1) Encourage social interactions between residents as there is a real lack of public spaces and meeting places in Eleonas. The absence of public spaces has a strong impact on the public life of residents as there are no suitable places for social interaction and the development of a sense of belonging to a place and identification with it.

Therefore, the development of green areas can be a suitable opportunity to implement services and meeting places for the inhabitants of Eleonas and to be able to encourage the emergence of interactions and social relationships between the inhabitants. [Figure.16]

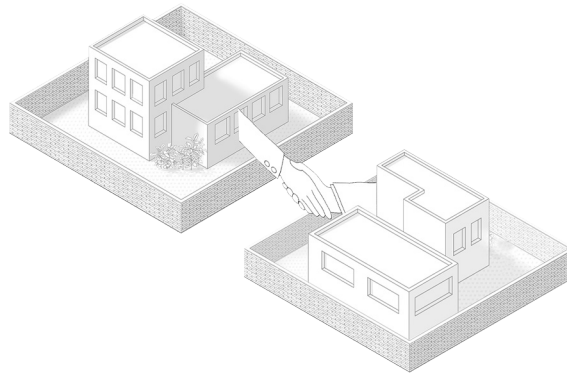


Figure.16

Title: Encouraging Social Interaction between residents in Eleonas

Source: Author

2) Improve the physical and psychological health of the inhabitants, creating places of social interaction that promote accessibility to the open space, becoming an attractive pole on a metropolitan scale for practicing sports and recreational activities. [Figure.17]

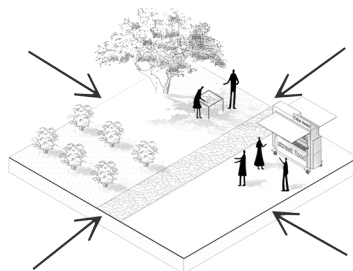


Figure.17

Title: Eleonas as an attractive point on metropolitan Scale

Source: Author

3) Improve the image of the neighbourhood, trying to change the negative perceptions with which Eleonas is perceived today.

In this way, it is possible to proceed to the elimination of stereotypes and the stigma linked to the area and this can happen by transforming Eleonas into a point of attraction and reference within the metropolitan city of Athens which could also achieve an increase of the value of private property. [Figure.18]

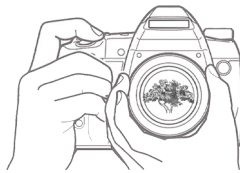


Figure.18
Improving the Image of Eleonas
Source: Author

4) Increase the per capita availability of green areas within the urban fabric, in order to get closer, at least, to the national standard levels of 8m² per citizen.

Increase the environmental quality of the area as the use of autochthonous species of Attica could help the recovery of a by now non-existent historical landscape heritage, which had a great importance for Athens, through the removal of invasive species and thus creating resources of food and ideal habitat for local fauna and human activities.

Therefore, one of the fundamental points is the creation of new habitats in order to increase biological diversity within the urban centre. [Figure.19]

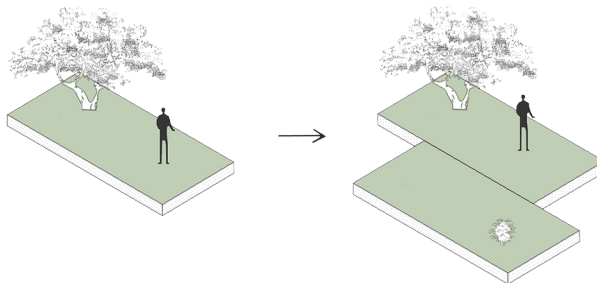


Figure.19
Title: Increasing pro capita availability of greenery in Athens
Source: Author

5) Stimulate an alternative mobility to that proposed by the automobile culture.

Through the creation of an interconnected system of cycle paths, the use of alternative mobility tools, such as bicycles or electric scooters, can be encouraged in order to reduce the high levels of CO₂ emissions associated with the high use of private cars in the area. [Figure.20]

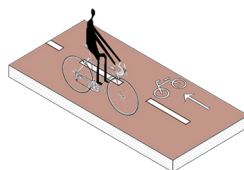


Figure.20
Title: Slow mobility integrated in Eleonas
Source: Author

6) Better water management within Eleonas. Creating permeable areas throughout the territory would help the process of rainwater management and water runoff, to prevent possible flooding of the Kifissos and Prophet Daniel River. [Figure.21]



Figure.21
Title: Better water Management in Eleonas
Source: Author

7) Improve the quality of the Eleonas' local microclimate through the creation of green areas and the planting of different wooded areas. In addition, they can represent buffer zones and filters to reduce noise as well as atmospheric pollution. It must be considered that the implementation of these green systems can be essential to combat the phenomenon of heat islands due to the impermeable or "grey" soil, which absorbs heat and releases it in the urban centre by increasing the air temperature. [Figure.22]

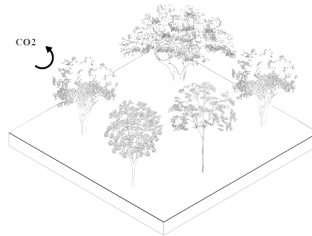


Figure.22
Title: Increasing Environmental quality in Eleonas
Source: Author

8) Stimulating economic growth, as the diversity of recreational opportunities and the emphasis on eco-design has the potential to attract local businesses and potential homeowners to the neighbourhood by creating a more attractive environment. [Figure.23]

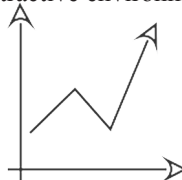


Figure.23
Title: Stimulating Economic Growth
Source: Author

9) Give a new life to all those spaces that are now only residual and marginal areas, through the establishment of attractive activities that can attract people and tourists to Eleonas. This could have positive implications for the local economy as a greater presence of people in the area corresponds to an increase in revenues from businesses. [Figure.24]

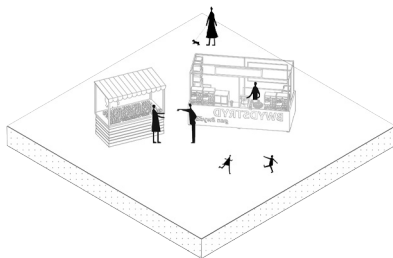


Figure.24
 Title: Attracting new Activities within Eleonas
 Source: Author

10) Stimulate culture and the sharing of agricultural techniques and all those knowledges relegated to the cultivation of the olive tree and the production of its products such as oil or olive harvesting. [Figure.25]

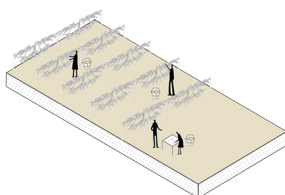


Figure.25
 Title: Sharing agricultural techniques in Eleonas within the Hubs
 Source: Author

I.6 Urban Agriculture as a tool to recover the Hubs

This approach therefore proposes to use the urban green and its infrastructures, with particular attention and importance to Urban agriculture as it generates income and has a low impact in terms of maintenance costs, as a tool for the redevelopment of the territory, focusing on its ecological, historical and heritage function understood as landscape, improving the processes of social interaction in order to mend and integrate the industrial landscape with the agricultural one through the selection of native species.

The basic connective element used is that of culture by identifying places with historical significance, such as archaeological sites, in order to create awareness of the territory, it was possible to proceed with the definition of the work strategy.

In fact, it was decided to start from these places as they can become places of reference and identification of the local population with the aim of enhancing the identity of Eleonas and together with the introduction of recreational and educational activities on the territory, it is possible to implement the Eleonas' didactic offer and its attractiveness on the territory.

It therefore emerged that urban agriculture, although used in Greece for only 10 years as a tool to support and regenerate abandoned areas, is of great importance from a social, economic and cultural point of view for local communities.

The conversion of disused areas into places of production, socializing and meeting, allows the inhabitants to rediscover practices, techniques and traditions that have now gone into disuse and therefore has an important pedagogical and educational role.

Furthermore, it can be affirmed that the application of agriculture in urban contexts represents a possibility of social redemption and the fight against poverty and therefore a careful planning of transformation of land uses with agricultural destination within metropolitan areas, can become a program to support the economic welfare of entire neighbourhoods and the psycho-physical well-being at residual costs transforming the citizens in “*urban farmers*”. [1]

In fact, the costs to be considered are mainly relegated to the implementation of the infrastructures necessary for carrying out agricultural activities as subsequently, the maintenance costs will be directly managed by the organizations in charge and by any sponsors and absorbed by the production and sale of the cultivated products.

These are some of the reasons that prompted the author to propose to Eleonas, an urban regeneration strategy through the conversion of abandoned, permeable and undeveloped areas within the dense urban fabric of Athens to agricultural green.

Following the 2004 Olympic Games, the land taken into consideration in Eleonas represents the last available areas within the capital and therefore represents the last chance to consistently implement the green spaces in the city.

However, a hypothesis of a total conversion to green areas, without the establishment of any alternative and attractive activities and functions, would represent an extremely bucolic and nostalgic vision of a neighbourhood, Eleonas, which in fact has substantially changed with the passing of the last century and which today has a completely different relationship with the city of Athens and has very specific needs and requirements.

Eleonas presents itself as a neighbourhood defined by clear social problems, lived by ghettoized and stigmatized groups, poorly integrated within the city community and residing in isolated and disconnected residential pockets.

In fact, the criterion for selecting the areas of interest involved in the project is that of spatial proximity to the housing units, to be able to provide, in a neighbourhood devoid of public spaces, meeting places, sociality and production for each micro-community at the interior of Eleonas and providing new green spaces to residents of the entire metropolitan area.

The intent is to be able to partially recover, in a limited way, the agricultural character that has always distinguished Eleonas, while adapting it to the local and extra-local needs of the capital nowadays.

Furthermore, it is necessary to remember the presence within the district of the Agricultural University of Athens and this factor is of vital importance in order to consolidate a relationship on different levels, between institutions and local communities, which can rely on meetings, workshops and teachings provided by the university with the aim of learning how to manage, maintain and produce from small plots of land and the latter. The university will instead have the possibility of usufruct of some areas to allow a spatial expansion of the land where teaching activities take place today.

The presence of the University in Eleonas is a great resource for the management and control of the territory and future hubs that will be proposed through the gradual recovery of the various areas of Eleonas which today are in a state of abandonment and degradation with the aim of allowing citizenship to take back some areas of the city that had been deprived of them up to now.

In order to allow this, it will therefore be necessary to be able to define how these areas will be managed, how the conversion and development of these areas

1 Lohrberg F., Licka L., Scazzosi L. and Timpe A., “*Urban Agriculture Europe*”, Berlin, Jovis, 2020.

will take place, which activities will be established, with what criteria the portions of land will be assigned to the inhabitants up to understanding which crops will be suitable to the climate and the place and that they can respond to the needs of the market, as family agricultural activities in Greece have always done.

These are just some of the key points that must be taken into consideration in order to propose a feasible project that seeks to satisfy within its limits all the criteria and needs that emerged as a result of historical, socio-demographic, physical and regulatory studies, proposing a valid alternative for the sustainable development of the neighbourhood and which meets the needs of local communities.

I.7 Methodology: Votanikos

Among the selected areas, in the next section of the Project, an area will be identified to be analysed as an example and further physical analysis will be carried out, going down the dimensional scale, in order to methodologically demonstrate the planning processes to be implemented and how to act to be able to intervene on each individual *Hub*.

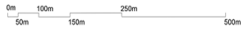
The *Hub* that will be taken as an Example for a more detailed Focus will be that of Votanikos (Cf. Paragraph L.1) [Figure.26], as it is subject to the “*Double Regeneration Program*” and will therefore be interested in important changes in its environmental state, ecological and physical as the new PAO Stadium will be implemented in it, the construction of which will be decisive in influencing the social and economic dynamics of Eleonas.

Furthermore, the area presents various environmental and social criticalities, that will be exploited later in the following Chapters, and its recovery through the use of Urban Agriculture and the creation of spaces dedicated to commerce and sociality would represent a possible and sustainable alternative that is in the interests of the community, reaffirming the right of all to the city as a common good.



■ Votnikos

Figure.26
Title: Whole green infrastructure implemented and Votnikos within Eleonas
Source: Author



Project Proposal

#Focus #VotankosArea #Metodology #BottomUpGovernance #Collaboration

In the macro-chapter of Analysis, the strengths, weaknesses, characteristics and opportunities of Eleonas emerged. That led the author to determinate an Urban Development Program, explicit in the Strategy section, based on the intent to implement a green infrastructure rooted in the territory and based on two keys factors: the Hubs, which are selected disused areas near residential pockets that will be recovered and returned to the local community through the establishment of agricultural, commercial and social activities and Links, or green corridors, which have the function of clearly relating the identifying places of the neighbourhood, the different residential areas and the existing green spaces both inside and outside the administrative boundaries of Eleonas, with the aim of mending the discontinuity of the urban fabric and favouring the processes of urban integration.

Following the studies conducted and the data that emerged so far, in this macro-chapter, it was decided for feasibility reasons in this research work, to methodologically select one of the possible Hubs previously identified, namely the Votankos area, for implementation of a project proposal that places the local needs of the population living in the area at the centre, proposing in this specific case for the Votankos area an alternative of sustainable development to the real proposal of the construction of the PAO's Stadium.

Thus, pursuing a Work Strategy based on a further level of in-depth analysis, so that the social and physical characteristics and dynamics of the area of interest can be included, and whose development is gradual and based on collaboration between local and supra-local authorities directly affected by the transformation of Votankos, with the aim of reducing the public economic impacts for the realization of the work, recovering spaces that would otherwise be in a state of abandonment and inaccessibility and filling the demand for spaces for socializing through the restitution of the area which, thanks to these interventions, will once again be usable by the local community and an attraction point within Eleonas.

L.The project area: Votanikos (Βοτανικός)

L.0 Introduction

For reasons of feasibility and motivations inherent to the substantial spatial dimensions of Eleonas, considered as a whole, it was decided here, following the results obtained from the studies and analyses carried out previously, to identify and study the area of Votanikos, at the intersection between Agias Giannis and Agiou Polykarpou, as a lot of interest to be able to put forward a design proposal. [Figure.1-2] Votanikos is one of the many areas that are currently in a strong state of decay and neglect and represents one of the possible spaces that could potentially be returned to the community. The recovery of the disused areas in Eleonas and their conversion into new green “Hubs”, incubators of recreational, entertainment and social activities is part of an urban strategy applied on a large scale (Cf. Paragraph G.7) whose methodology is based on the restitution of these areas, on the implementation of the green system and on the desire to promote internal mobility between neighbourhoods in Eleonas with the aim of creating new possibilities for socialization and strengthening the sense of community.

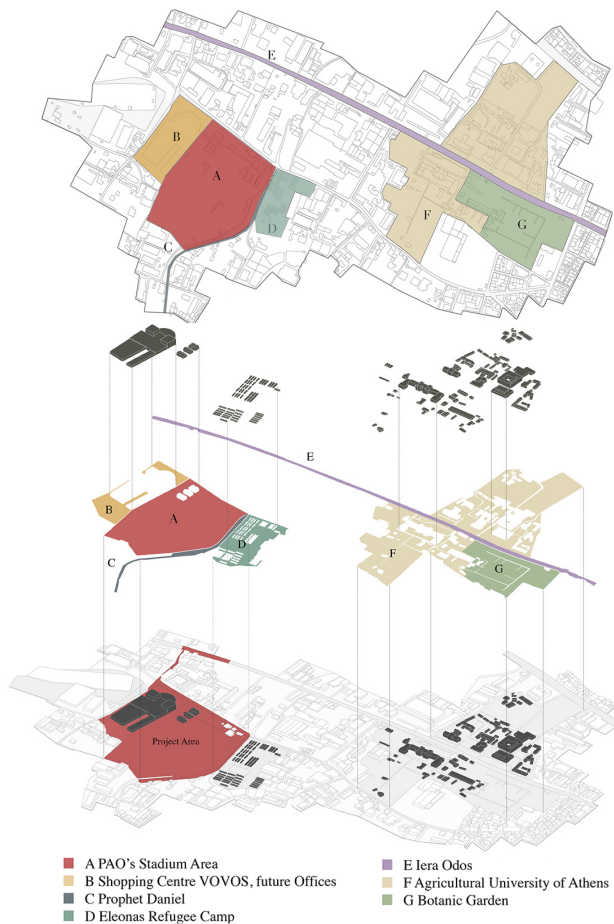


Figure.2
Title: Project Area within Votanikos
Source: Author

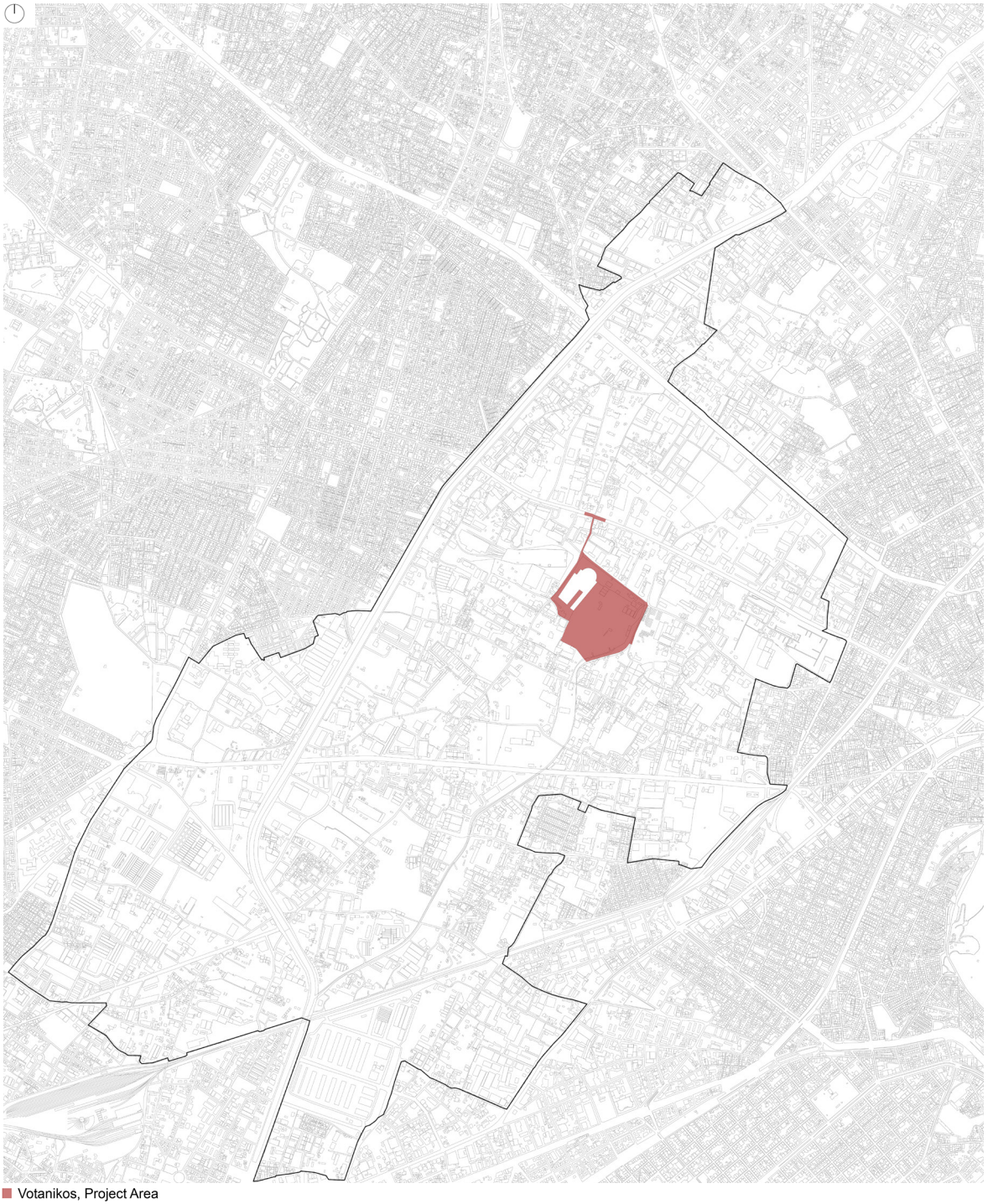
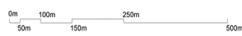


Figure.1
Title:Project Area within Votanikos and Eleonas
Source: Author



L.1 Why Votanikos?

It was decided to proceed with the study of an area within the district of Votanikos as it presents itself as one of the most critical nodes within Eleonas. [Figure.2] Votanikos is one of the areas interested by the “*Double Regeneration Program*” since 2005, the year in which the Municipality of Athens proposed it to Panthinaikos F.C. Club as a possible location for the construction of the new stadium as there was the need for a new and modern sports and accommodation infrastructure in the city. (Cf. Paragraph F.1) From the moment in which the law 3481/2006 was approved, the lots of interest, the responsibilities and duties to which the PAO, the Municipality of Athens and the Greek state had to comply were defined, the planning and implementation phase of the Masterplan began based on a project by A&A ARCHITECTS studio which received the assignment through a direct commission from Panathinaikos FC. (Cf. Paragraph F.1.1)

In order to proceed with the start of the preliminary works, as reported by Amnesty International, two of the Roma settlements in Votanikos were destroyed and the resident families were evicted.

Following the 2008 economic crisis, the lack of investments and a legal appeal presented by the citizen committee for the recovery of Eleonas, an intervention supported in order to protect the biodiversity of Eleonas and based on the DPR 1995, the project stopped with a date to be decided in the future, thus leaving the area of Votanikos once again abandoned. (Cf. Paragraph F.2.1.)

In 2015, with the advent of the Refugee Crisis, the municipality of Athens lacking residential infrastructure to house refugees and in the absence of progress for the construction of the stadium, selected Votanikos for the implementation of a new reception centre. Therefore, since 2015 the eastern area of Votanikos has hosted the Eleonas refugee camp in which approximately 2 000 individuals live. (Cf. Paragraph C.3)

Furthermore, in the Votanikos area, every weekend, the so-called “*Scavengers Market*” (Cf. Paragraph C.5.1) comes to life, a market managed by the local Roma population that has become a point of reference and of social importance for the vitality of the neighbourhood. (Cf. Paragraph C.5.2)

The construction of the stadium would lead to the eviction and relocation of this market, and this would cause a disintegration of the already fragile human relationships present.

However, the Votanikos area is not only interested by the construction of the Panthinaikos F.C club stadium but in parallel, due to its accessibility and low land costs, is subject to other recovery projects. In fact, another area in the West side of Votanikos, at the intersection between Agias Giannis and Agiou Polykarpou and adjacent to the construction lot of the Stadium, was destined for the construction of a new shopping centre on behalf of the VOVOS company which, however, fell bankrupt in 2013. (Cf. Paragraph F.1)

The construction of the mall stopped, leaving as result an impressive reinforced concrete skeleton in the heart of Eleonas. Nowadays, the work has been foreclosed by the Greek National Bank and there are currently no certainties on the intended use and recovery of this infrastructure, but so far it has only been hypothesized the option of converting the building into a building for offices. It must also be considered that in the immediate vicinity of the study area there is the Agricultural University of Athens, which plays a fundamental role in the management and control of the territory and could become a key element in a

redevelopment urban strategy. These listed are some of the key elements and events to make the reader understand the recent history of Votanikos and its role within Eleonas and at the same time they are tools for the author to have a complete view on the current state of the area. The study has the will to open a reflection on the feasibility of such projects of great urbanistic weight such as those briefly described in this paragraph and better explored in the previous chapters of study and introduction to the project and to launches an alternative, sustainable project proposal that meets to the real needs of the local community with respect to the projects presented. Furthermore, after having acquired general information on the historical, socio-demographic, physical and normative aspects of Eleonas, it was decided in this chapter to continue, going down the dimensional scale and concentrating on Votanikos, to make a further physical analysis of the area for preparatory purposes to better understand the issues that directly involve the project area.

L.2 Physical Analysis of Votanikos

L.2.1 Introduction to the Area

The area of interest (A) is located in the heart of Eleonas, precisely in the district of Votanikos, at the intersection of the road axes of Agias Giannis and Agiou Polykarpou (B), which, together with Iera Odos, are also methodologically taken into consideration as a study topic and integrated into the project proposal with the aim of presenting a possibility of development and redevelopment for the transformation of these roads into green corridors that will have a connective function between the various residential pockets and the new hubs, favouring the internal mobility of the neighbourhood and connection between the new green areas and the existing ones. In addition, some spaces belonging to the National Bank of Greece (C), adjacent to the intervention area and integrated into the project proposal, are taken into consideration, and the area where the Eleonas Refugee Camp stands today is excluded. (D) [Figure.3]

L.2.2 Geometric Survey

The study area taken into consideration has a gross area of 140 000 m². The surfaces are divided as follows: [Figure.4]

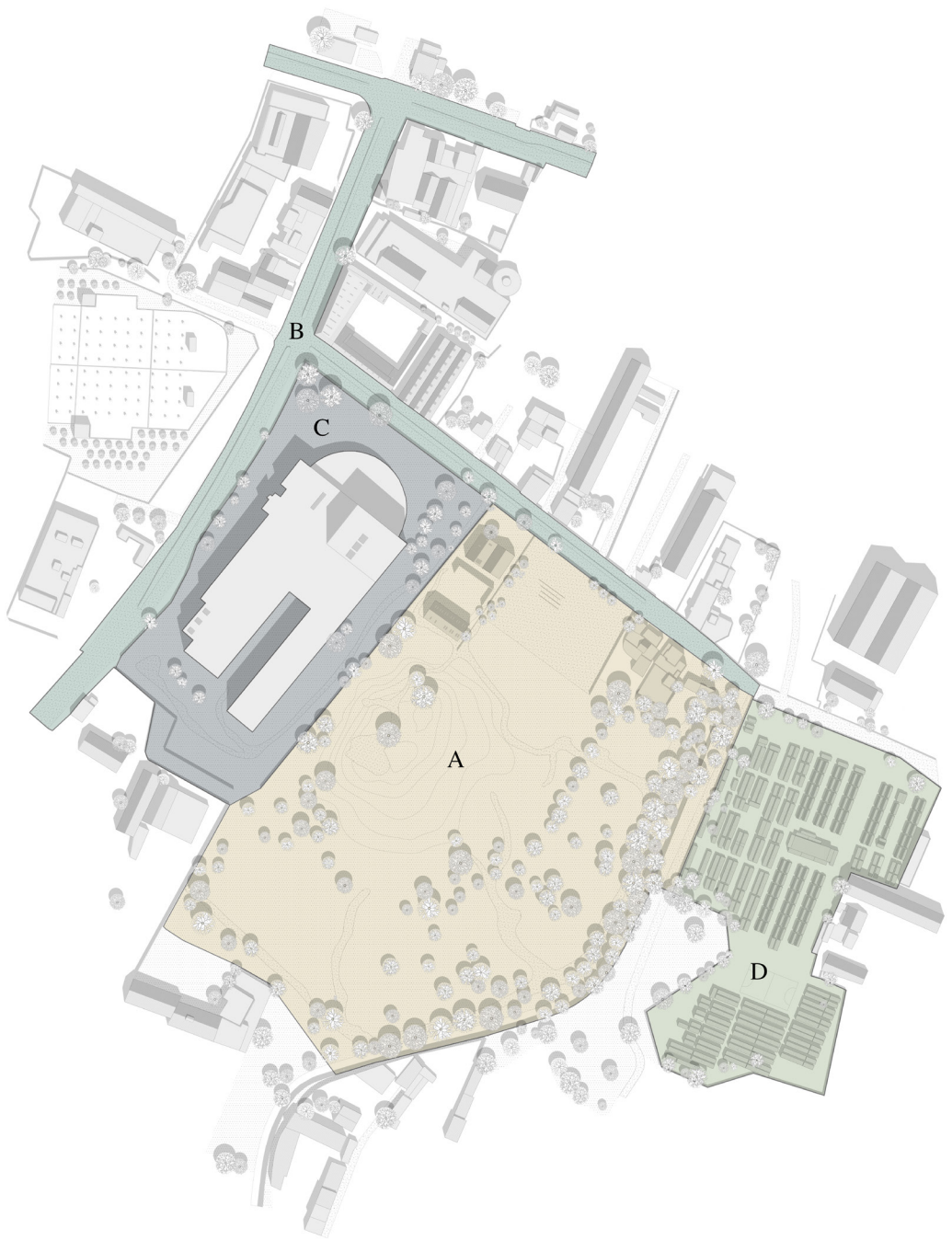
- A) The Votanikos Intervention area, excluding the area of the Reception Centre (D), is equal to 100 000m²,
- B) The road axes considered have a surface area equal to 27 000m²;
- C) The area adjacent to the Shopping Centre is 13 000m².

The intervention area [Figure.5] is mainly flat with no morphological changes except for sector A which is characterized by a difference in height of about +6 meters of artificial origin. In fact, this “*hill*” is mainly composed of debris from the works for the construction of the foundations of the Shopping Centre, which have been deposited and left in the study area. [Figure.6-46] Another orographic difference of about -3.5m is due to the construction of the banks of the Prophet Daniel canal which runs along area A in its eastern part dividing it from area D. [Figure.43]



Figure.3
Title: Project Area
Source: Author





- A) Votanikos Area
- B) Agias Giannis, Agiou Polykarpou and Iera Odos
- C) Property of National Bank of Greece
- D) Eleonas Refugee Camp

Figure.4
 Title: The different areas taken into account
 Source: Author





Figure.6
Title: Morphological alteration made of debris
Source: Author

L.2.3 Built Environment and functions

Votanikos is a low-density urban area compared to the dense urban fabric of Athens, and it hosts different functions and activities. [Figure.7]

The space consists of large open plots of land that alternate with large abandoned industrial buildings and warehouses used for logistics, which have settled in the district without following a clear but more confusing settlement logic, inherited peculiarity of Eleonas' agricultural past and consequence of the lack of territorial planning plans. (Cf. Paragraph D.3)

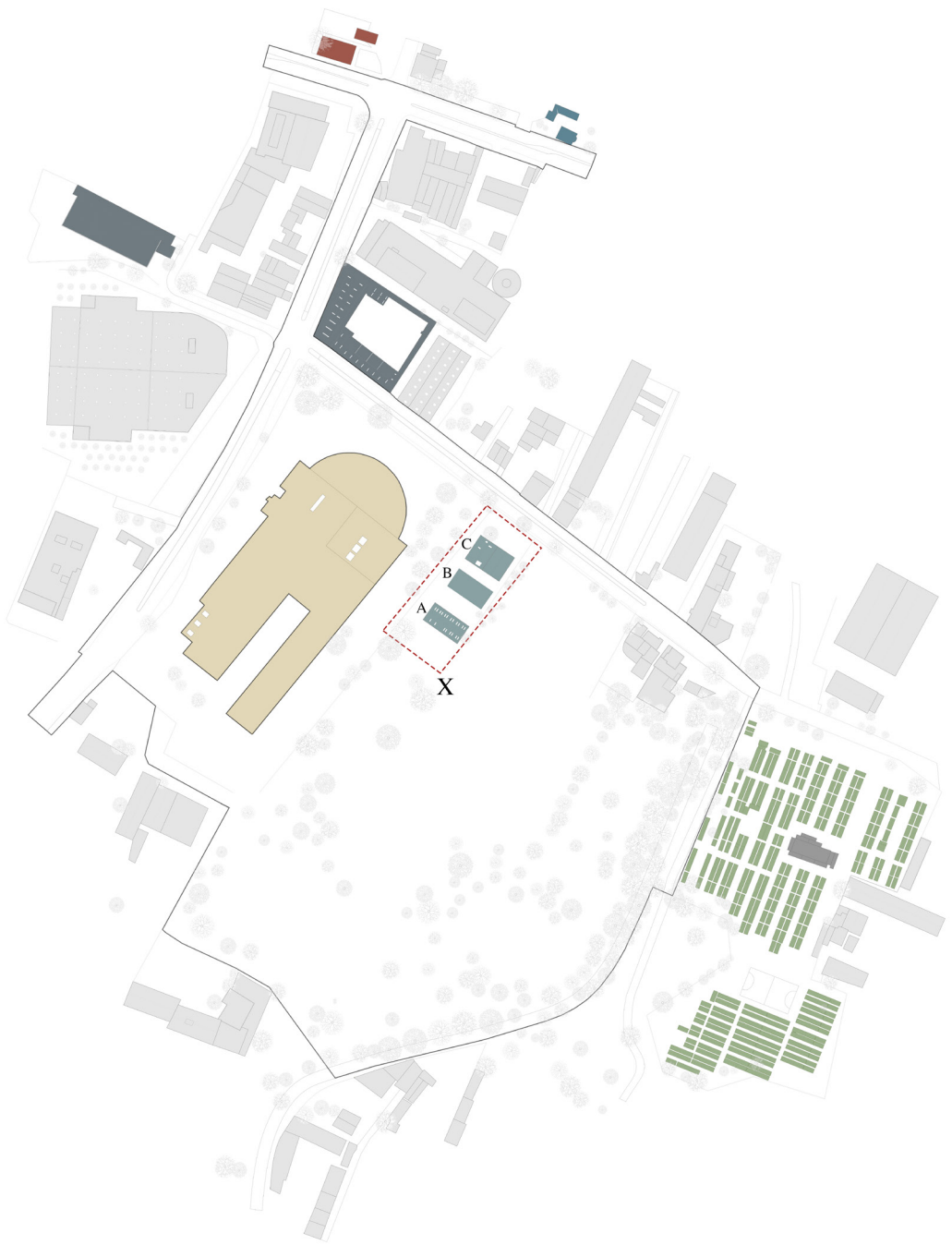
In fact, Votanikos area is characterized by a succession of small buildings that hardly reach a maximum of five stores in height and which are mainly occupied by activities dedicated to the provision of services, especially affiliated to the logistics sector.

In the immediate vicinity of the study area there is no residential settlement except for the Refugee Camp which has been in existence for six years in Votanikos and which houses nearly 2 000 individuals in temporary structures. [Figure.8]

The area has a low supply of places for socializing or, at least, to meet the needs of entertainment and stable meetings for the people who live Eleonas in their daily lives such as workers, city users and residents, thus accentuating a sense of marginalization with respect to the city. The only spaces that come close to the idea of a meeting place and socialization are the Community Service inside the Refugee Camp [Figure.9] and the “*Scavengers Market*” [Figure.10], which is currently kept informally outdoors for the streets of the neighbourhood and in some disused buildings in Votanikos.

The market is destined to disappear with the construction of the PAO stadium.

There is also the church of Agios Savvas. [Figure.11] These listed can be considered the only places of attraction and sociality and therefore the need emerges to implement, in a possible recovery of Votanikos, entertainment activities and places of sociality.



- Religious Building
- Eleonas Metro Station
- Activities related to Logistic
- Abandoned Warehouses
- Zoom A
- Eleonas' Refugee Camo Community Centre
- Eleonas' Refugee Camp temporary Housing
- Squat Buildings used for the "Scavengers Market"
- Abandoned Shopping Centre that will be converted in Offices

Figure.7
 Title: Functions
 Source: Author





Figure.8
Title: Temporary houses in Eleonas Refugee Camp
Source: Carole Reckinger's personal archive



Figure.9
Title: Community Centre in Eleonas Refugee Camp
Source: https://www.huffpost.com/entry/eleonas-refugee-camp-athens_n_8146140



Figure.10
Title: The Scavengers market in Votanikos
Source: author



Figure.11
Title: Church of Agios Savvas
Source: author



Figure.12

Title: Areal view of Votanikos

Source:<https://www.fosonline.gr/plus/epikairoτητα/article/114316/vgike-apo-to-syrtari-i-dipli-anaplasti-l-alexandras-votanikoy-me-gipeda-podos-fairoy-mpasket>

In the study area there are currently some abandoned buildings whose recovery and future settlement of recreational activities could represent a possibility to improve the quality of life of the people who live in the surroundings of Votanikos.

In fact, in the heart of area A there are three abandoned industrial warehouses (A, B, C) which are in a severe state of decay. [Figure.7 (Point.X) -12-13]

Buildings (A) and (B) have dimensions of approximately 18m x 32.5m x 11m, while building (C) (divided into two compartments) is 34m x 22.5m x 11m. The total gross area is equal to 1935 m² but of these, only 1350 m² are usable as the double pitched roof of the central building (B) collapsed together with the West and South walls, leaving standing the North and East walls.

Instead, buildings (A) and (C) are still intact even if they are in a severe state of decay, in particular some parts of the roof are uncovered as the metallic sheets used for the roof have detached. For their potential use, a recovery and restoration intervention are necessary for their possible use.

Following a survey, it was also found that the interiors of the sheds show signs of burns probably due to illegal activities of extraction of metals from waste, a common phenomenon of Eleonas, as explained in Paragraph C.5. [Figure.14]

In addition to this, two further problems related to the consistent presence of solid waste and problems with the accessibility of the area must be reported as it is almost completely fenced. [Figure.15]

It is therefore suggested a clearing and cleaning of the area and the removal of barriers and obstacles to allow a possible future use of these spaces.

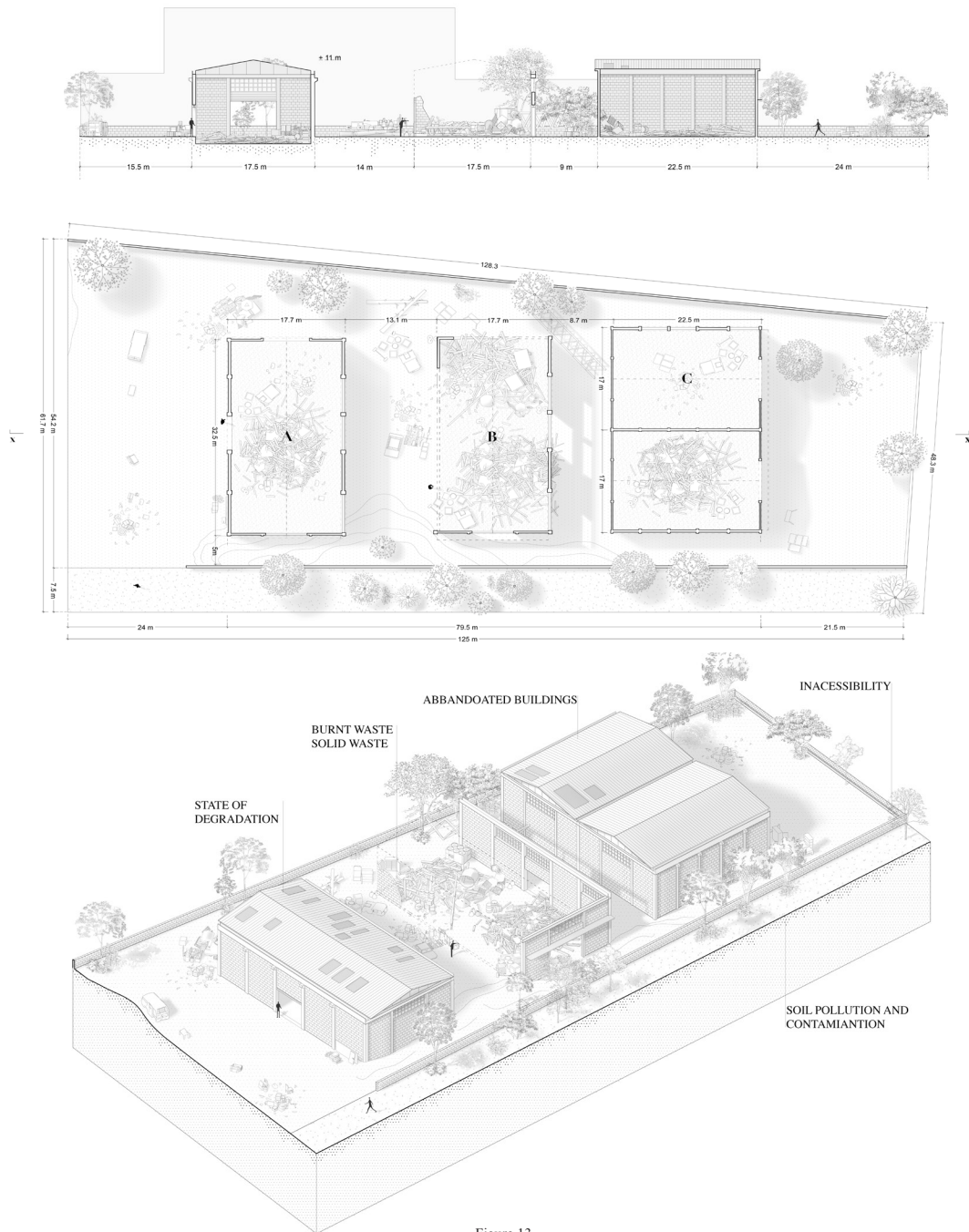


Figure.13
 Title: Geometric Survey of the abandoned warehouses in Votanikos (Point X, Figure 7)
 Source: Author



Figure.14
Title: Burnt waste inside of the warehouses (A)
Source: Author



Figure.15
Title: Perimetral fences
Source: Author

L.2.4 Permeability

Votanikos, as highlighted in the previous paragraph, is an area characterized by a low settlement density and clear areas which, however, in most cases, are complementary to the

tertiary and secondary activities present as they have an ancillary function. (*Cf.* Paragraph D.3)

Despite the large space availability, it must be emphasized that the percentage of areas that are permeable to water, and therefore not asphalted, are a minimal percentage and this has direct consequences on the quality of life of the workers and residents of Votanikos. In fact, the high percentage of completely asphalted areas contributes primarily to the heat island effect, consequently increasing the average temperature and the perceived heat, thus influencing the state of physical well-being of an individual.

Furthermore, especially during the autumn and winter period, when atmospheric precipitations occur in a constantly and consistently, the problem of water runoff and drainage arises and this results in flooding phenomena, as the water does not find channels of drain where it can be drained, causing a reduced pedestrian and vehicular accessibility. This is because Eleonas, despite the high rates of urbanization and settlement of manufacturing activities, was never included in the management and expansion plans of the city that caused a lack in the constructions of adequate infrastructures to counteract problems related to water drainage. The roads and large ancillary areas used for the unloading, loading and storage of goods and vehicles are almost completely asphalted and therefore impermeable to water. Despite this, in study area [Figure.16], excluding the roads, the permeable surface is 89.4% of the total, while the remaining 10.6% is waterproof considering the volumes of the warehouses present and the surface located in the central part to the north which is instead completely asphalted. [Figure.17]



Figure.17

Title: Children playing on the asphalt in Votanikos

Source: Author

The presence of the Prophet Daniel canal, which constitutes 0.45% of the surface, supports the flow of water. It is therefore suggested the implementation of permeable areas with the aim of facilitating the processes of drainage and water absorption to counteract the phenomena of flooding and heat islands so that the quality of life of the inhabitants can be improved.



Figure.16
 Title: Water permeability
 Source: Author



L.2.5 Barriers and obstacles

Walking through Votanikos, the first perception of the urban space is that of a fragmented area, characterized by large gates and dividing walls that separate the various properties and with different problems of accessibility. [Figure.18]

In fact, Eleonas, as already explained in paragraph D.3.2, is an area divided into medium-large private properties which results in a consistent fragmentation of the lots belonging to the various private entities. These large walls that enclose the perimeters of the areas can be considered as the first barriers that have a direct impact on the visual perception of the neighbourhood. This is also a peculiarity of the study area. In fact, large walls and gates divide the various spaces within the area, further fragmenting it. Even the refugee camp itself is completely enclosed by high fences, almost like a Roman castrum and increasing the ghettoization effect of the people who live there. [Figure.19] In addition to this, there is to be considered as real obstacles the mountains of waste that have been deposited over the years, transforming Votanikos into an illegal landfill and which today, in addition to being a symbol of degradation, represents an obstacle in terms of accessibility as well as also the height difference in area (A). In addition, the Prophet Daniel channel represents a further element of discontinuity between area (A) and (D) as it there is not any element of connection between the two lots.

Even the internal roads, in most cases, are characterized by an irregular presence of sidewalks, preventing them from being used safely by foot.



Figure.19
Title: Eleonas Refugee camp perimetral walls
Source: Author

In order to make the area more visually pleasing, accessible and safe, it is therefore suggested a work of clearing waste, a removal of architectural barriers and unnecessary divisions within the study area, the creation of a continuous pedestrian system and, potentially, think of a possible new connection that link the Refugee Camp directly to the area of interest.



Figure.18
 Title: Problems of accessibility to Votanikos Area
 Source: Author



L.2.6 Accessibility: private cars and public transport network

The study area in Votanikos is spatially located in the heart of Eleonas, exactly at the intersection between Agias Giannis and Agiou Polykarpou.

The area is poorly served by the local public transport system OASA (ΟΑΣΑ) but is still served by the Eleonas metro station of the blue line (Nikaia-Aereoprto) and by bus line 856 (Egaleo - Ymittos - Dafne), both stops located respectively in Iera Odos 127 and 93. [Figure.20]

Instead, on the contrary, the area is easily accessible by car. In fact, Votanikos is crossed longitudinally by the Iera Odos axis, one of the most important road axes of the city. Iera Odos, as explained in Paragraph D.5.2, is one of the oldest streets in Athens and was built to connect the city centre to the urban centre of Elefesina for a total length of 22km. In ancient times it was used by the vestals of the temple of Demeter of Elefesina as a procession route to transport sacred objects from the city temple to Athens to celebrate the rites of Elusui, religious rites derived from an ancient agrarian cult. In addition, Iera Odos was the backbone for the transport of goods produced from the agricultural fields and the olive grove of Eleonas that were brought to the commercial port of Piraeus to be used as products of commercial trade with the rest of the Mediterranean.

In more recent times, with the advent of vehicular transport, Iera Odos has been completely asphalted to make it usable by new technologies of transport except for some points, such as the part inside the Kerameikos cemetery, where its ancient traces can still be read. Today it is used as a road axis, thus maintaining its original function but losing its historical relevance in the memory of the Athenians who no longer perceive its importance. [Figure 21]

In order to provide the description of the current state of Iera Odos, as a reference point, it was decided to consider the section of the road at the civic number 134. (Point A in figure 20) [Figure.20-22]

Iera Odos has a road layout with an average width of 24-25m, characterized by two-way carriageways of 8.8m each and divided by a cemented traffic divider and presenting a completely waterproof surface [Figure.23], with a road surface in strong degradation.

On the sides of the carriageways there is no structured system dedicated to the function of a pedestrian crossing, but rather, it is discontinuous, with various architectural barriers, abandoned solid waste, spontaneous bushes of medium-large height and sometimes used as a parking lot, preventing its safe use. [Figure.24] The surface of the carriageway is functionally subdivided at 65% for vehicular traffic, 28% for auxiliary space for cars and 7% for pedestrians. [Figure.25]

There is a complete absence of paths dedicated to slow mobility and shading points. In addition, the road axis has a poor public lighting system, and, in some places, it is completely absent, illuminated only punctually by lighting systems installed by privates for reasons of safety and protection of their properties.

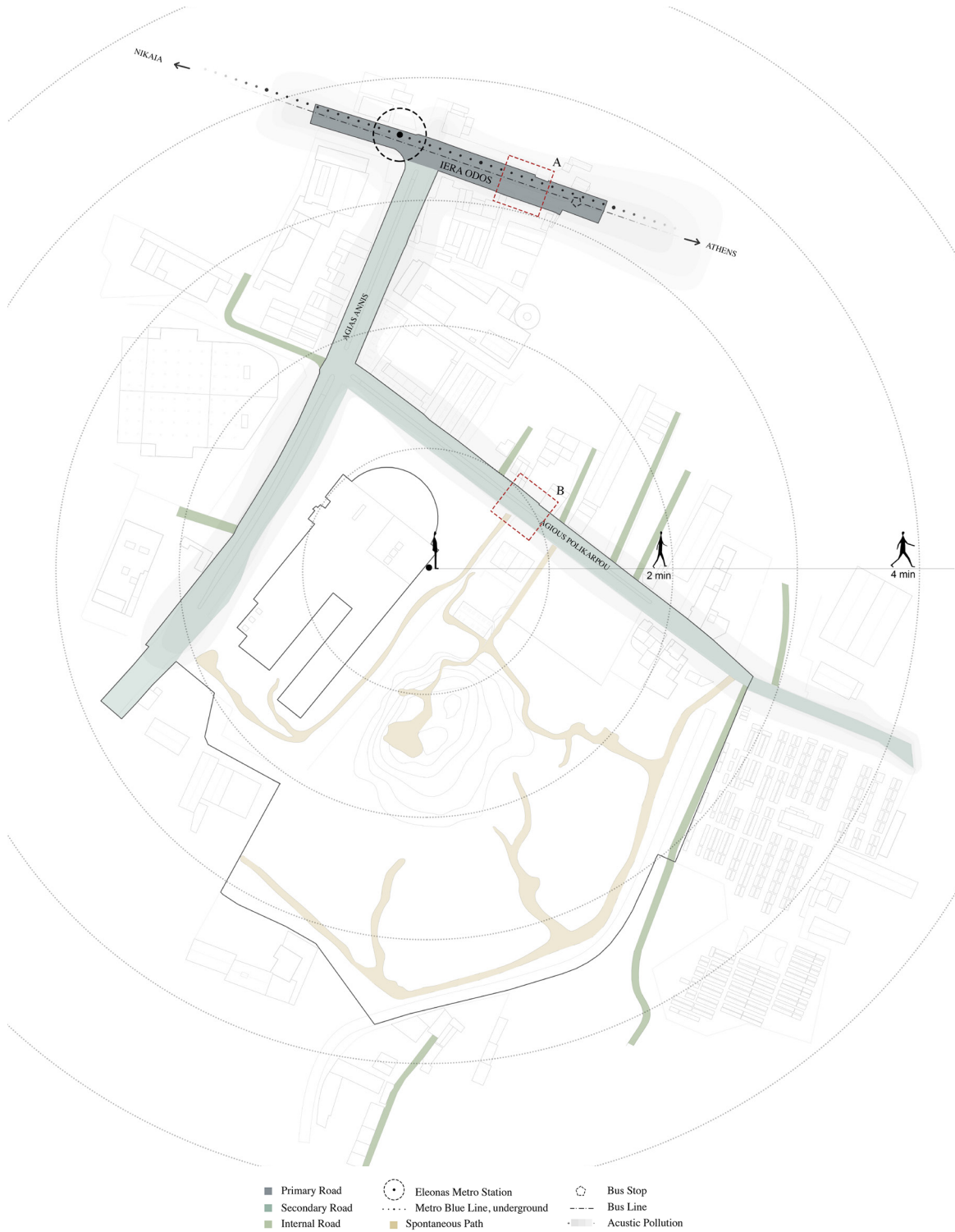


Figure.20
 Title: Mobility in Votanikos
 Source: Author



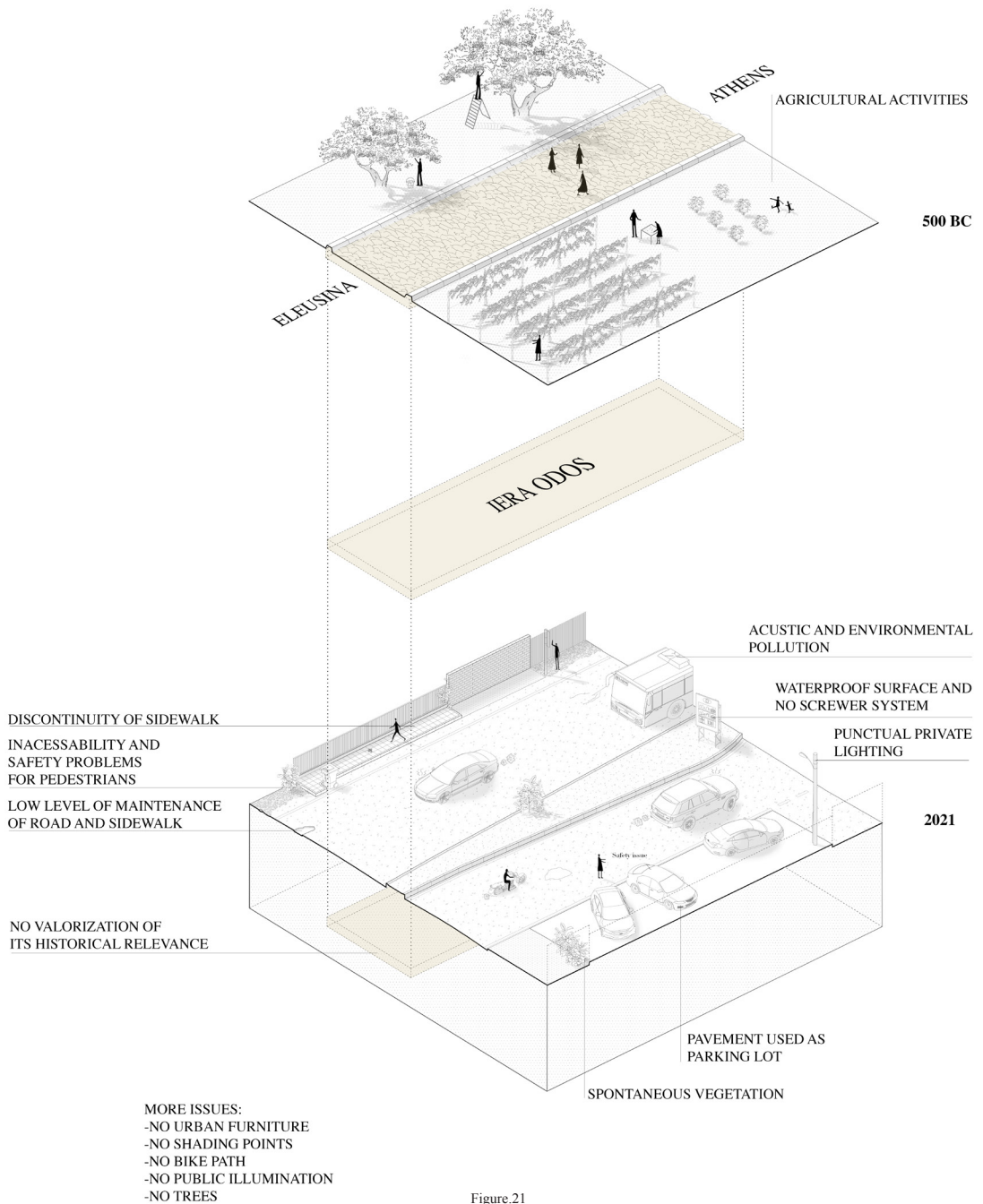


Figure.21
 Title: Iera Odos and Its evolution over time, axonometry (Point A, Figure 20)
 Source: Author

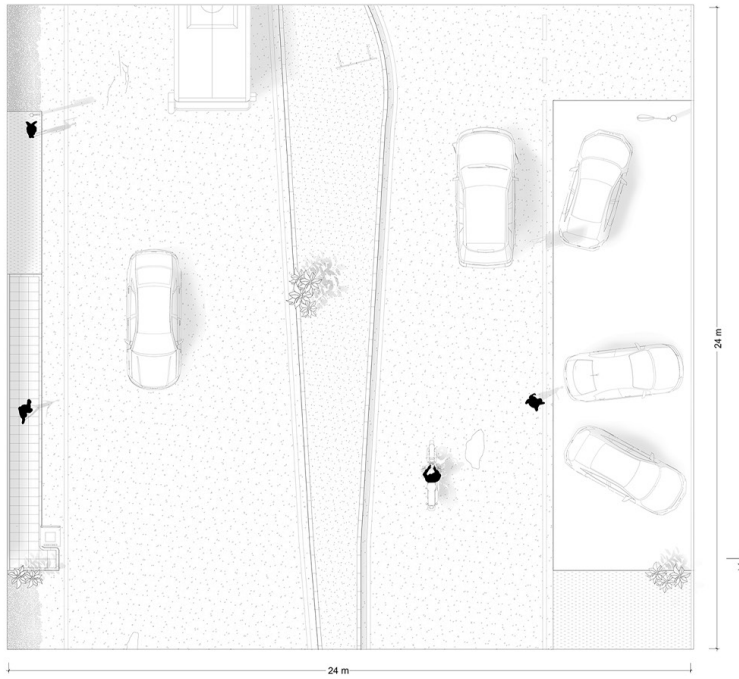
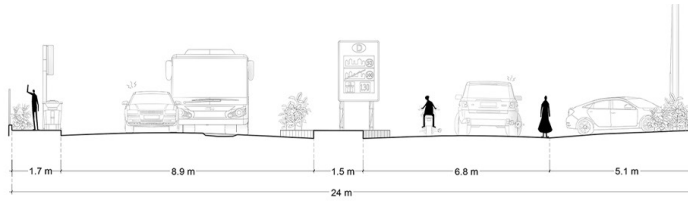


Figure.22
 Title:Iera Odos 134, Focus: plan and section (Point A, Figure 20)
 Source: Author

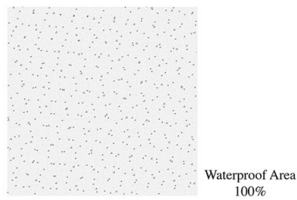


Figure.23
 Title: Waterproof surface
 Source: Author



Figure.25
 Title: Use of the road (Point A, Figure 20)
 Source: Author

The intermediate roads that serve the area, such as Agias Giannis and Agiou Polykarpou are also in a severe state of decay.

In order to describe the current state of these avenues, the section of the Agiou Polykarpou avenue at Civic 151 was taken into consideration as a sample. (Point B in figure 20) [Figure.20-26-29] The road has a road layout on average about 20m wide with two two-way carriageways with a width of 6.6m each and divided by a green median; therefore, unlike Iera Odos, the road has an 80% waterproof surface, with a road surface that requires maintenance. [Figure.27] The area is functionally dedicated to 66.5% for vehicular traffic, 28% for auxiliary space for cars and 5.5% for pedestrians. [Figure.28]

Here, too, there is a complete absence of paths dedicated to slow mobility, shading points and a continuous public lighting system. The space dedicated to pedestrians is residual and is discontinuous and inaccessible due to the state of degradation of the road surface, the growth of spontaneous bushes, cars parked on it and solid waste abandoned along the roadways. [Figure.30] In any case, the roads are often congested, and this results in a high rate of air and noise pollution in the area. The roads of lesser importance, on the other hand, have often been built by private individuals to meet the need to connect their production centres to the most important roads. Thus, the internal road system is often characterized by blind and narrow streets. [Figure.31] It should also be noted, within the project area, the presence of some paths born spontaneously from the pedestrian crossing. [Figure.20-32] These studies show the need for targeted interventions in order to guarantee greater accessibility, safety and use, such as the implementation of pedestrian and cycle paths, creating a continuous public



Figure.24
Title: Iera Odos 134
Source: Author

lighting system, increasing permeable spaces to drain water and counteract the phenomenon of heat islands, the inclusion of urban furniture usable by citizens and the possible planting of rows of trees to create shading points and to partially absorb the amount of CO₂ and interventions dedicated to the enhancement of Iera Odos.



Figure.30
 Title: Solid waste abandoned and bushes along the pavement in Agiou Polykarpou 151
 Source: Author

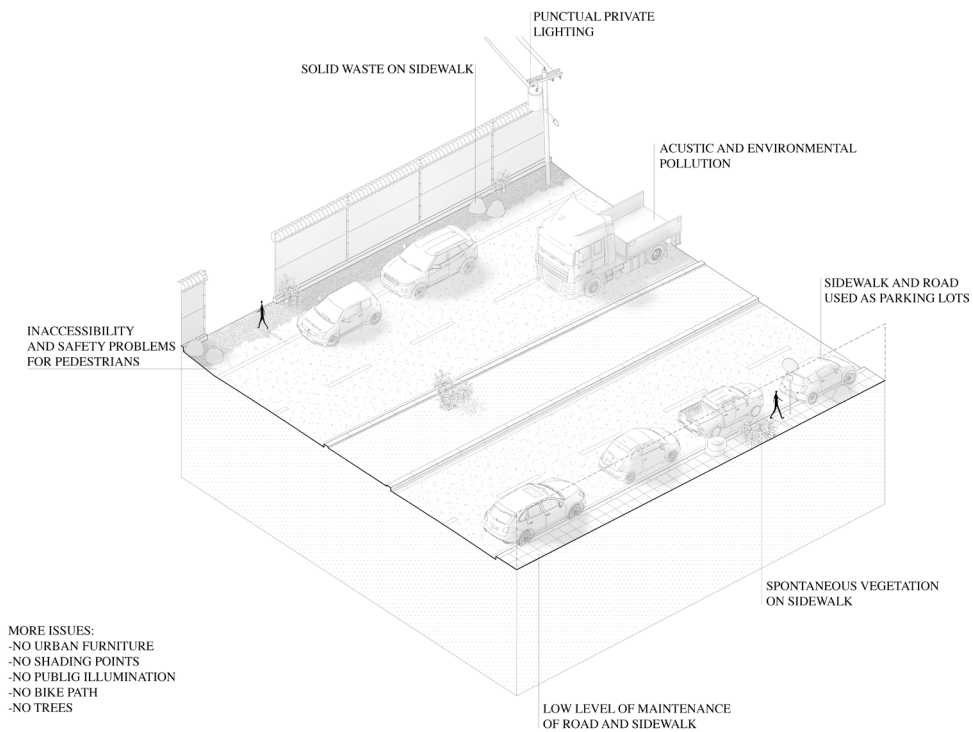


Figure.29
 Title: Agiou Polykarpou 151, Axonometry (Point B, Figure 20)
 Source: Author

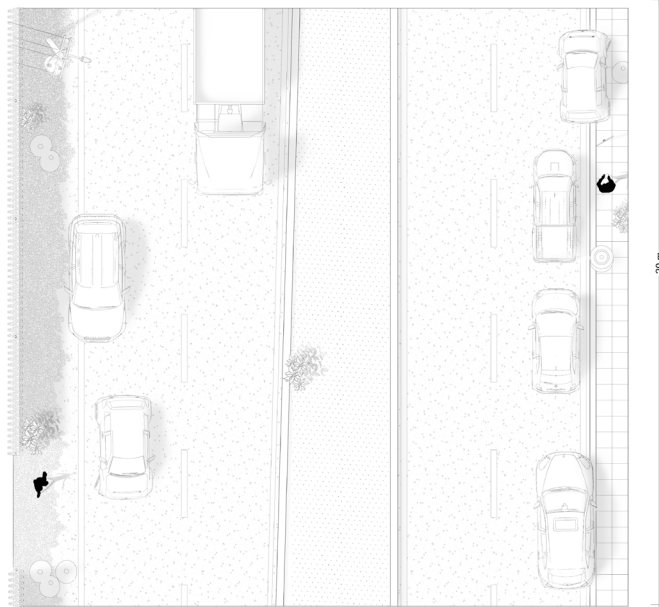


Figure.26
 Title: Agiou Polykarpou 151, Focus plan and section (Point B, Figure 20)
 Source: Author

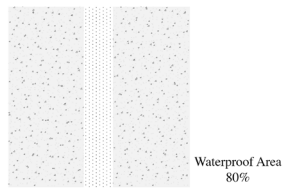


Figure.27
 Title: Waterproof surface
 Source: Author

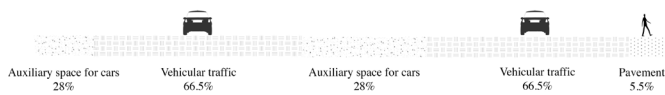


Figure.28
 Title: Use of the road (Point B, Figure 20)
 Source: Author



Figure.31
Title: Agiou Polykarpou cross road
Source: Author



Figure.32
Title: Spontaneous pedestrian path in Votanikos
Source: Author

L.2.7 Votanikos' Symbolic places

In the study area and in the immediate vicinity of Votanikos, some elements stand out that have contributed over time to the construction of the neighbourhood's identity and that have a great relevance within the district for the local people. [Figure.2-33]

Among these it can be found:

- Iera Odos (Cf. Paragraph D.5 and I.2.6); [Figure.34]
- The Prophet Daniel channel (Cf. Paragraph D.7 and I.2.9) [Figure.35]
- The Agricultural University of Athens (Cf. Paragraph D.7). [Figure.36]

The Prophet Daniel and Iera Odos determined the course of the history of Votanikos and Eleonas, being attractive elements for the establishment of agricultural, commercial and, only in the XIX century, manufacturing production centres.

Iera Odos represented a fast and direct connection for the transport of goods produced in Athens and later traded in the port of Piraeus. Instead, the Prophet Daniel canal constituted an important water source in the area for the supply of water and for its use in agricultural activities and use in industrial production processes.

Unfortunately, the value and contribution that these two elements have given to the development of the Eleonas territory no longer emerges as the Prophet Daniel has lost its original function and is in a state of decay and instead Iera Odos, while maintaining the plant and original function, it has been completely asphalted and all traces of the ancient road have been lost.

Currently the only institution that has an important role in the management of the territory is represented by the Agricultural University of Athens which holds several possessions in Eleonas used for preparatory purposes.

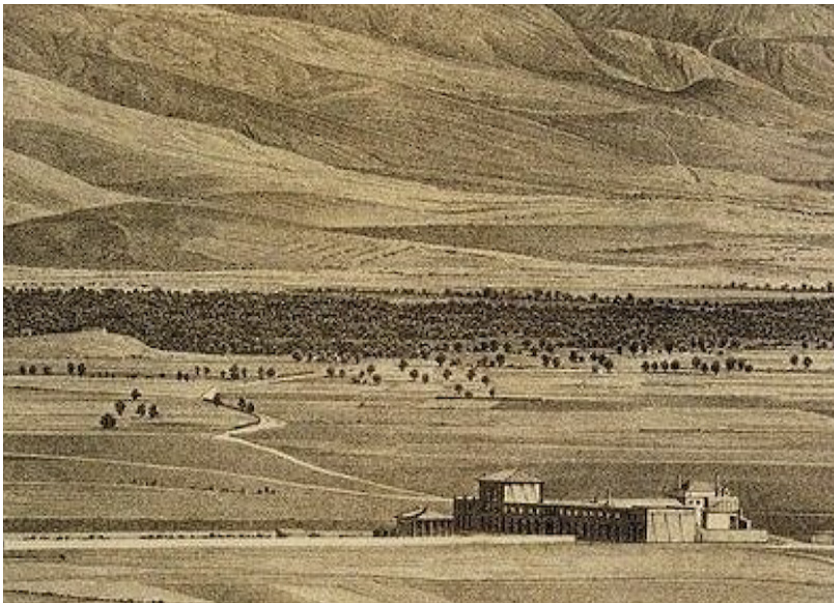


Figure.34

Title: Iera Odos, 1835

Source: <https://www.athensguide.com/iera-odos/index.htm>

In order to regenerate Votanikos it is therefore important to start from the reconstruction of its identity through these places that have determined its character in the past and to exploit the presence of the University as a precious cultural centre.



Figure.33
 Title: Symbolic places in Votanikos
 Source: Author





Figure.35
Title: Prophet Daniel in Votanikos, 2021
Source: Author



Figure.36
Title: Agricultural University of Athens
Source: <https://ianos.upatras.gr/agricultural-university-of-athens/>

L.2.8 Greenery

The study area, as previously highlighted in Paragraph I.2.4, has a total permeable surface of 89.4%. This surface taken into consideration is mainly covered by a spontaneous lawn characterized [Figure.37] by the presence of different species and sometimes takes on the characteristics of a polyphite lawn. [Figure.38] However, it is in an uncultivated state, of decay as it is a lawn that arises by itself and therefore not maintained. In fact, it is easy to find different plants of medium and large dimensions, mainly spontaneous bushes. [Figure.39]

The latter are mainly concentrated in the eastern area of Votanikos, on the banks of the Prophet Daniel canal and where the presence of various young and wild trees is concentrated, extending longitudinally for almost one hectare on the banks of the canal. [Figure.37-40]

At the base of the trees there is a rich vegetation of wild bushes and plants with low and medium stems not identified here which make access to the canal and the pedestrian passage inaccessible.

These trees, despite their young age, can become elements to be considered in the design phase, but an intervention is required to check the health of the trees and maintenance work to secure the area.

In addition, there is a lack of public green spaces in the vicinity of the study area of interest.



Figure.38

Title: Spontaneous flower spices growing in Votanikos

Source: Author



Figure.37
 Title: Greenery: trees and lawns
 Source: Author





Figure.39
Title: Spontaneous lawn growing in Votanikos
Source: Author



Figure.40
Title: Young and wild bushes and trees growing on Prophet Daniel's banks
Source: Author

L.2.9 Water Basins

Votanikos area is today only crossed by the Prophet Daniel canal [Figure.41], which was first a tributary of the Illisos river and later, after the settlement of the various manufacturing activities, its channel-bed was altered making it flow into the Kifissos river, with the flow of the waters directed towards North-East. In any case, the Prophet Daniel in ancient times was used as a water resource for the sustenance of the agricultural activities that characterized Eleonas. In fact, together with the floods that once frequently also characterized the Kifissos River, the Prophet Daniel represented a very important element for the irrigation processes and to ensure the well-being of the olive grove and crops present. [Figure.42] Subsequently, when Eleonas became a reference point for the establishment of industrial activities, many industries built their factories along the banks of the Prophet Daniel as it represented a water resource from which to be able to draw to meet the water demands of the industrial production processes. An area of 19.66 km² draws the water needed for industries from Prophet Daniel, of which 7.33 km² only in Votanikos. Subsequently, when Eleonas became a reference point for the establishment of industrial activities, many industries built their factories along the banks of the Prophet Daniel as it represented a water resource from which to be able to draw to meet the water demands of the industrial production processes. An area of 19.66 km² draws the water needed for industries from Prophet Daniel, of which 7.33 km² only in Votanikos. At the same time, however, due to the absence of expansion plans and land management, which corresponded to the lack of implementation of basic infrastructures such as sewage systems, the Prophet Daniel canal became a place of discharge of industrial process waste which achieved a significant increase in the levels of contamination and pollution of water. [Figure.42] In the 1960 the “*New Great Pipeline*” project was presented in order to implement the Eleonas sewer network. In more recent times, the Prophet Daniel was partially undergrounded. The canal is in fact completely buried from the point where it intersects with the Agiou Polykarpou road for the rest of its north-east length. The remaining South-West section is still visible, and it is still possible to read the connection with the Kifissos River. Not only were the canal burying works carried out, but the embankments were also completely redone. The sinuous and natural embankments that characterized the canal were replaced by reinforced concrete embankments with a rectangular section of a height of 3m with an average width of the channel-bed equal to about 5-6m. In order to understand its geometric and environmental properties, it was decided to dissect a point within the Votanikos area in order to be able to describe its actual state. (Point A in figure 41) [Figure.41-43] As previously described, the canal has reinforced concrete edges with a rectangular section which have the function of containing water in the event of intense atmospheric precipitation and containment walls for the tons of soil that press on its sides. [Figure.43] Nowadays, the levels of water contamination are lower than in the past, but it must be emphasized that the canal is still used as an illegal landfill by uncivilized who abandon any type of waste usually along its path or directly in its channel-bed. [Figure.44] The canal is today completely inaccessible as it is fenced and because there is a dense vegetation of bushes and trees that have grown over time on its banks. (Cf. Paragraph I.2.8) Furthermore, it can be said that the Prophet Daniel has lost its original function and its historical relevance within the neighbourhood. Prophet Daniel has always been one of the main players in this area and its recovery could be an interesting object of study to be considered within a design proposal. The restoration of its historical value, making it accessible, less polluted and giving it a new function in the contemporary city are fundamental necessities for the regeneration of Votanikos.



- Prophet Daniel
- Prophet Daniel Underground
- Direction of Water Flow
- ⊞ Zoom A

Figure.41
 Title: Prophet Daniel in Votanikos
 Source: Author



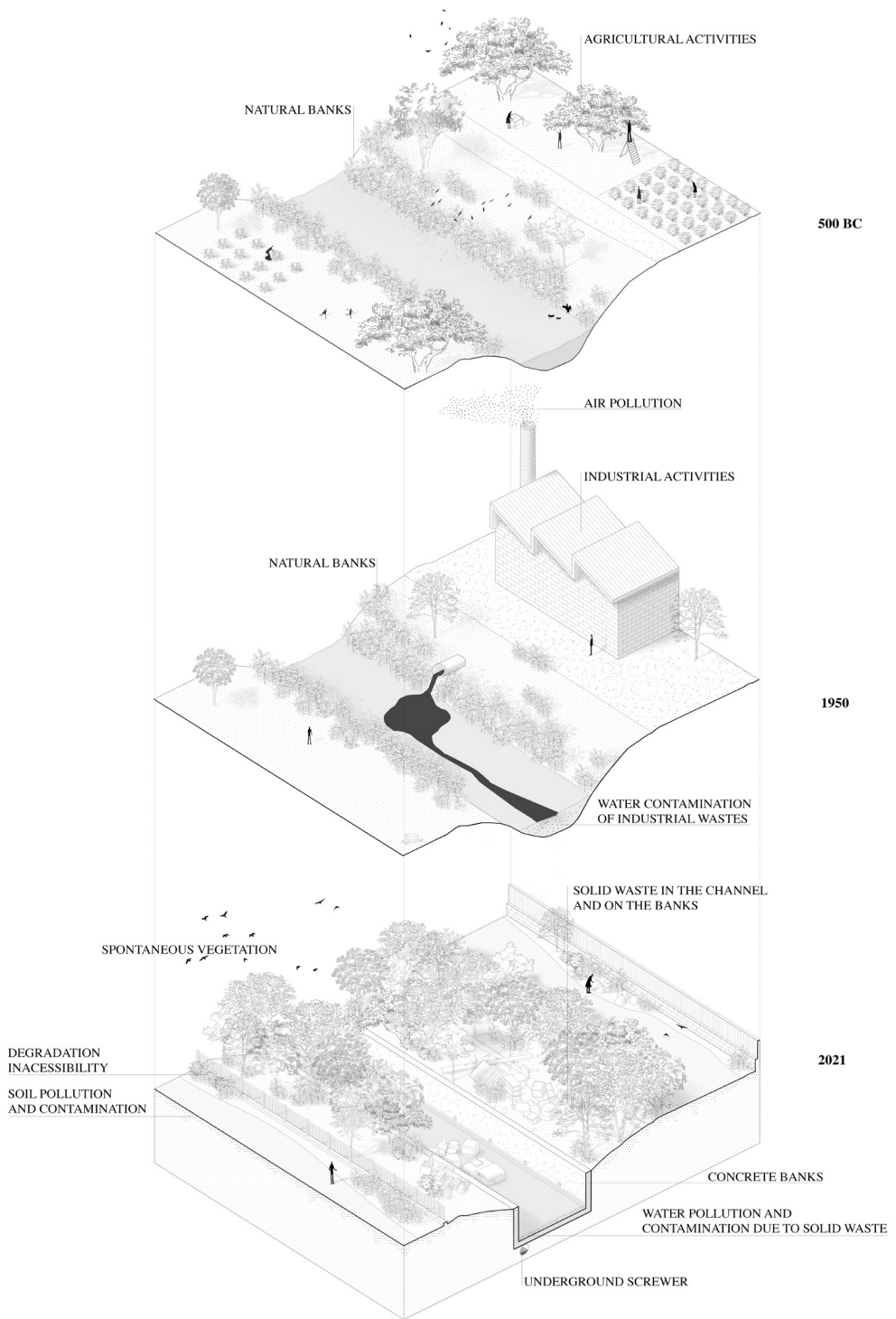


Figure.42
 Title: Prophet Daniel's evolution over time, axonometry (Point A, Figure 41)
 Source: Author



Figure.44
 Title: Abandoned solid waste on Prophet Daniel's banks, 2021
 Source: Author

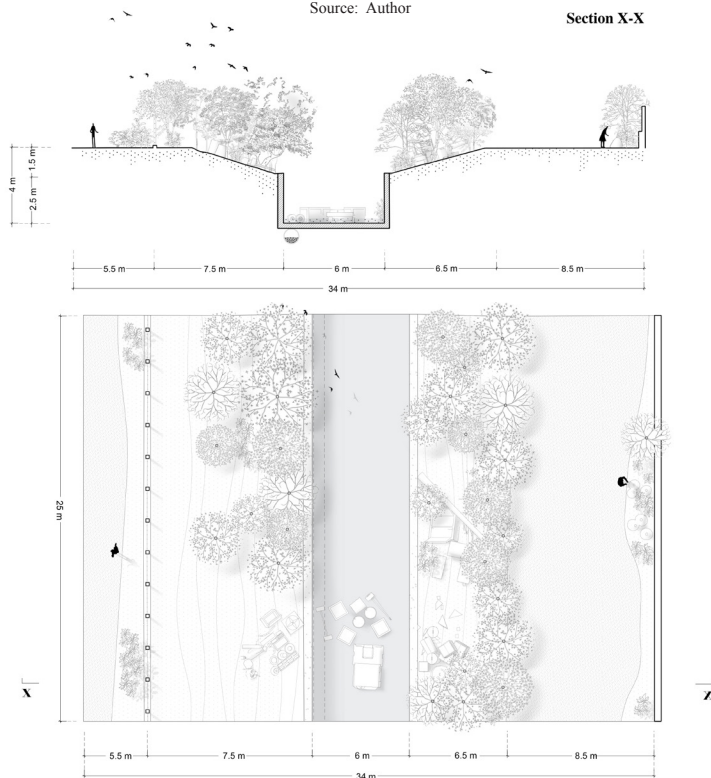


Figure.43
 Title: Prophet Daniel Focus, Plan and Section (Point A, Figure 41)
 Source: Author

L.2.10 Environmental Pollution

The area of interest is subject to various problems related to environmental pollution. [Figure.45] Votanikos is in fact a highly polluted area and the reasons are solely caused by human activities. The system of local and supra-local road connections, although it has always been heavily burdened by the trucks of manufacturing and logistics activities, has never been implemented and this results in a strong congestion of the road axes.

From the early morning the streets are characterized by long traffic queues resulting in direct environmental impacts that affect the quality of life of Eleonas, such as the further degradation of the air due to the production of carbon monoxide, already burdened by industrial processes, and the high levels of noise pollution. This was one of the main reasons that prompted the Municipality of Athens to decree the DPR 1991 and then the DPR 1995 with the aim of encouraging a slow exit of manufacturing activities from Eleonas with the aim of being able to improve the quality of the air within the entire metropolitan area.

To these factors it must be added, as explained in Paragraph I.2.3, that Votanikos is occasionally subjected to combustion processes caused by the illegal extraction of metals from waste, an activity conducted by the Roma communities, as emerged in the research “*Eleonas Area Development Agency Design*” of 1997 funded by the NTUA. [Figure.14]

These processes, in addition to representing a danger in terms of safety, as these metal extraction operations can represent possible outbreaks for the spread of fires, are the cause of the emission of consistent quantities of CO₂.

In addition, the area of interest in the last decade has been used as an illegal landfill, characterized by mounds of solid waste of all kinds, especially in the vicinity of the hill within the area [Figure.45-46-47] and in the Prophet Daniel. [Figure.41]

Through a report by Enveco SA, two further problems related to soil and water contamination levels emerged. In fact, many industries have discharged for decades, until 2008 after the construction of the first sewer system in Votanikos, the waste obtained from the production processes directly into the Prophet Daniel canal, further degrading the quality of the water and causing the persistence of strong unpleasant smells that make breathing processes difficult. These stenches are the consequence of the stagnant water collected in the various tanks in the area, used as a water source by manufacturing activities.

To improve the conditions of the study area, it is suggested the removal of solid waste present, the insertion of elements, such as trees, which support the processes of absorption of carbon dioxide and which act as barriers to counteract noise pollution, the implementation of drainage systems, sewers, greater control by the authorities to stem the phenomena of combustion and illicit discharge of polluting components in the area and in the Prophet Daniel with the aim of protecting the well-being and biodiversity of Eleonas .

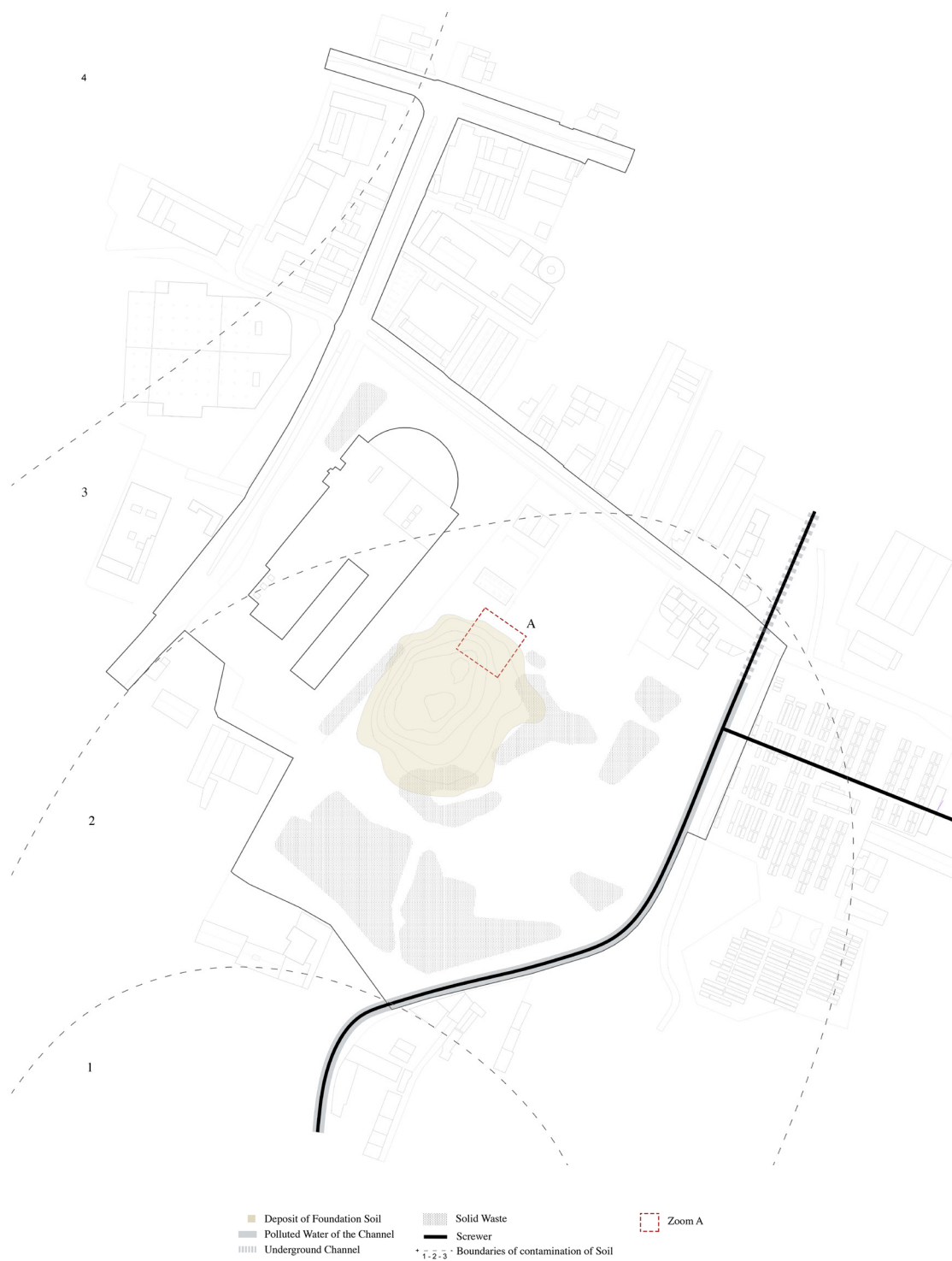


Figure.45
 Title: Environmental Pollution in Votanikos
 Source: Author based on Enveco SA, Atlas of Eleonas, Attica



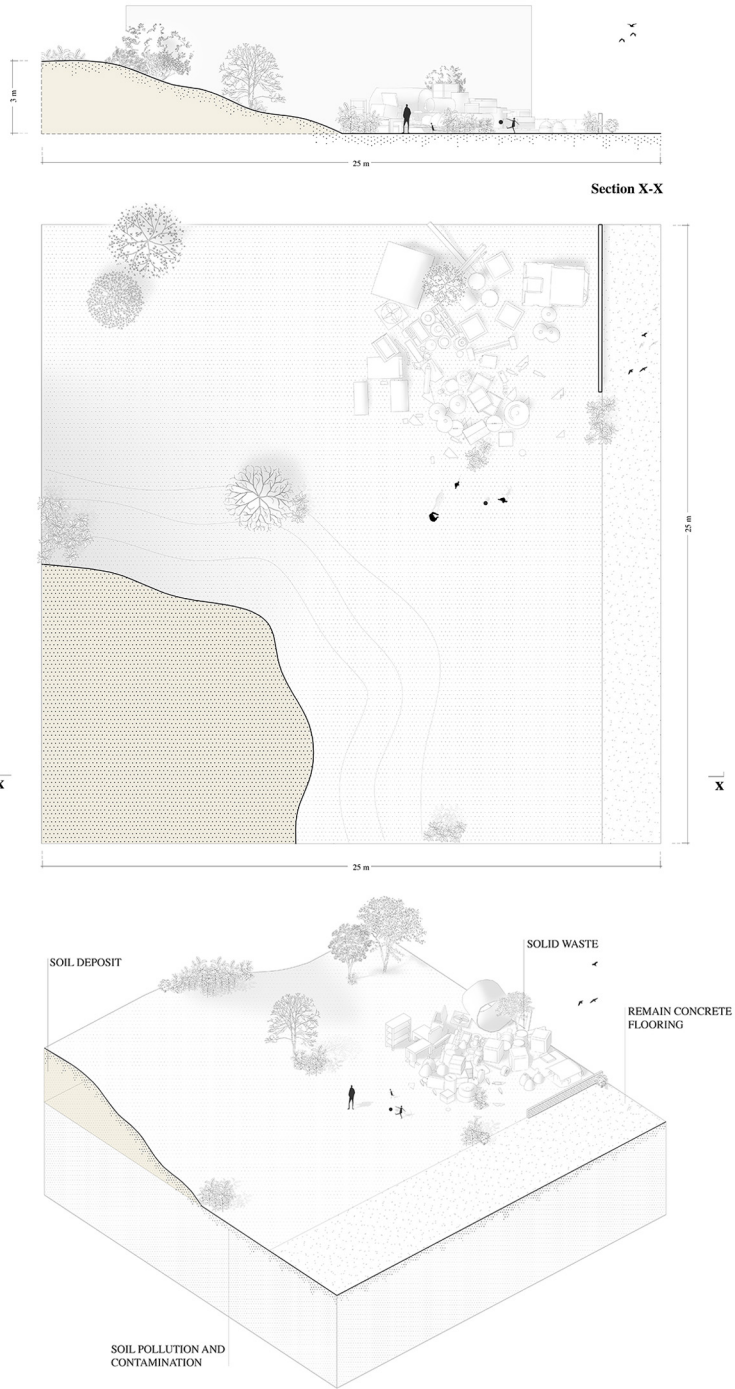


Figure.46
 Title: Abandoned Solid waste in Votanikos Focus Sample, Plan, Section and axonometry (Point A, Figure 45)
 Source: Author



Figure.47
Title: Trash in Votanikos, 2021
Source: Author

L.3 SWOT Analysis

The analysis performed made it possible to have a complete general view, highlighting the historical, social and physical characteristics that distinguish the area of Votanikos, in Eleonas.

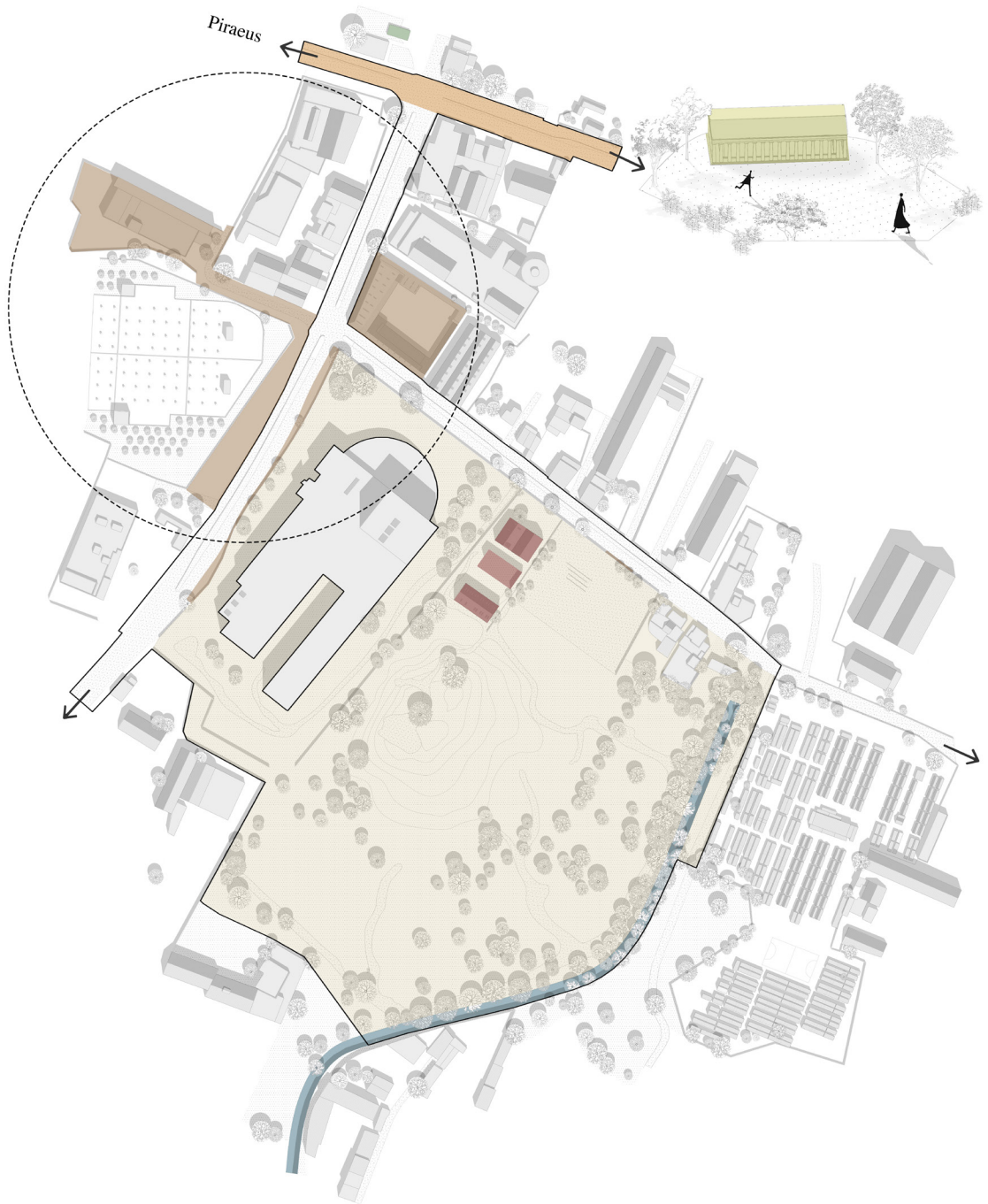
Following the acquisition of such descriptive information, it is necessary to proceed with their systematic structuring in order to understand its the strengths, weaknesses, opportunities and threats and to proceed with the definition of project actions that can be implemented to carry out the recovery of Votanikos.

L.3.1 Strengthes [Figure.48]

1) The area is crossed by the Prophet Daniel canal which is currently inaccessible and has totally lost its natural connotations and its historical value. (Cf. Paragraphs D.7 and L.2.9) Its presence is a strength that must be exploited through recovery and reintegration work within the work so that it can play an active role within the area.

2) In the immediate vicinity of the project area there is Iera Odos, a road axis of great historical importance and vital for the city's vehicular mobility. (Cf. Paragraphs D.4.1, D.5.2 and L.2.6) The realization of a targeted intervention for the recovery of its historical value and to make it more accessible and usable by the citizens is a strategic point to be taken into consideration.

- 3) Within the project area, there are old Industrial Sheds (*Cf.* Paragraph L.2.3) which do not present interesting peculiarities from an architectural point of view but represent a built heritage that could be exploited for the establishment of new activities after the execution of due recovery and safety works.
- 4) A strength of the area, according to the needs that emerged, is the wide availability of space (*Cf.* Paragraph L.2.4) that can be used to host new urban green areas, agricultural fields and can contribute to better management of the waters and combat the phenomena of heat islands.
- 5) Within Votanikos area, “*The Scavengers*” Market takes place informally every week, which plays an active and attractive role within Eleonas. (*Cf.* Paragraph C.5.1) Following the interviews and the comparison with the Roma population that manages the market, the demand for “*formal*” spaces where the market can be carried out has emerged. The involvement of the Roma population and market activity is a strong point for maintaining the attractive area not only on a local scale but also on a metropolitan scale and to be able to meet the local needs of the population.
- 6) Votanikos is a semi-central area and is only 2km from the centre of Athens. The spatial proximity of Votanikos with respect to the centre guarantees a strong point in terms of accessibility.
- 7) Another strong point is the presence of the “*Eleonas*” Metro Station which guarantees fast accessibility to public transport within Athens. (*Cf.* Paragraphs D.4.2 and L.2.6)
- 8) The area is not only accessible because of public transport and its proximity to the centre. In fact, Votanikos can be reached by car because of the large roads network that cross Eleonas transversely and is therefore accessible from the most peripheral areas of the city (*Cf.* Paragraph D.4.1)
- 9) The area has an extraordinary agricultural historical heritage and because of the availability of space it is possible to plan the settlement of agricultural activities that will allow the recovery of the historical character that has always distinguished Eleonas and create a unique landscape that can merge the industrial character of Eleonas to the agricultural one. (*Cf.* Paragraphs B.1, B.2, D.3.3 and I.6)



- 1 ■ Historical Value: Prophet Daniel
- 2 ■ Historical Value: Iera Odos
- 3 ■ Built Environment: Abandoned Shades
- 4 ■ Unbuilt Space: Great Availability of Space
- 5 ○ Attractive Point: The Scavenger Market
- 6 ■ Spatial Location: Proximity to Acropolis
- 7 ■ Public Transport accessibility: Eleonas metro Station
- 8 → Car Mobility: Great and fast connections within Athens and its periphery

Figure.48
 Title: Strengthes
 Source: Author



L.3.2 Weaknesses [Figure.49]

1) Votanikos area, although reachable through public transport, driveways and pedestrians, is currently in a state of inaccessibility due to various architectural barriers, waste and gates, for this reason an intervention is necessary to make the area usable. (*Cf.* Paragraph L.2.5) In addition, the Prophet Daniel crosses the area completely and there are no support structures to ensure the movement between the project area and the adjacent area where the Eleonas Refugee Camp is currently located.

2) The Eleonas refugee camp adjacent to the project area is a housing reality, detached from the urban context like all the Eleonas housing complexes that are isolated and distant from each other. (*Cf.* Paragraphs C.3, D.2.2 and I.3.5) For this reason it is necessary to involve the housing complex within the Urban Regeneration Strategy and on a local scale to provide spaces for the residents of the camp, who will be able to use the project area, which will be part of their daily life.

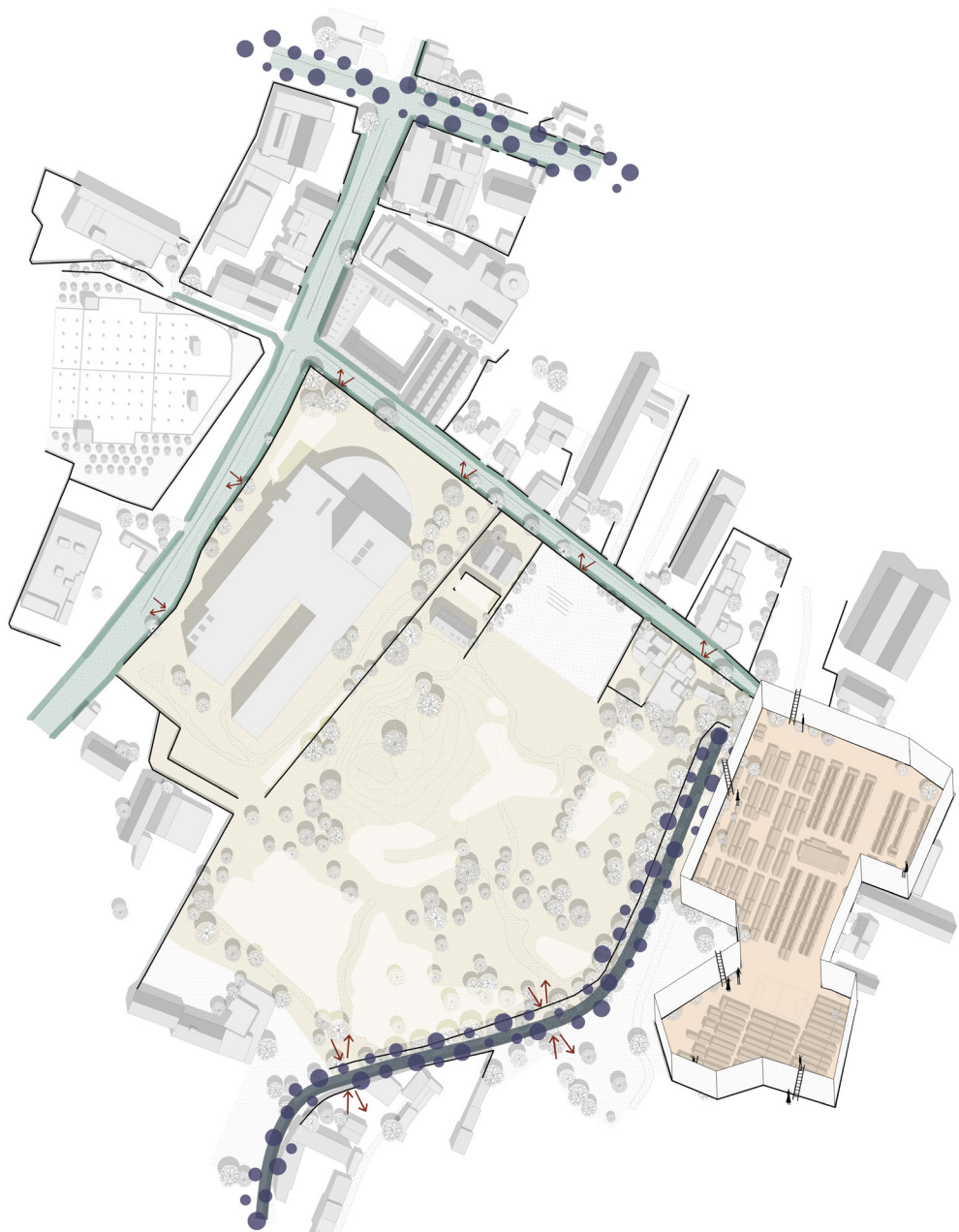
3) A major problem is the current environmental conditions of Votanikos. In fact, the area is in a severe state of decay and pollution. (*Cf.* Paragraphs D.8 and L.2.10) An intervention to restore the state of health of the area is necessary so that it can be used again by the citizens and to be able to host agricultural activities.

4) Votanikos area, despite being populated by about 2000 individuals, does not have spaces for aggregation and socializing. It is necessary to consider the implementation of places dedicated to sociality in order to promote the processes of sociality and integration of residents. (*Cf.* Paragraph L.2.3)

5) The relevant roads, and the primary road axes, do not present any safe path dedicated to sustainable mobility without therefore guaranteeing slow and safe mobility. (*Cf.* Paragraph L.2.6) and it is therefore necessary to integrate dedicated paths in order to support an alternative mobility system to the car.

6) Both Iera Odos and Prophet Daniel are in a state of decay and inaccessibility, losing their role and historical value.

7) A further important weakness to consider is the possibility of a shortage or lack of public funds that can be invested in the recovery of Votanikos and the other Hubs presented in the general urban strategy. (*Cf.* Paragraph I.3.3) and for this reason it is essential to consider a careful planning strategy that seeks to involve the population and local authorities in order to reduce construction and maintenance costs. (*Cf.* Paragraph I.4)



- | | | | |
|-------|---|-------|--|
| 1 — | Accessibility Aspect: Barriers | 3 ■ | Environmental Aspect: contamination of Water |
| 1 ↗ ↘ | Accessibility Aspect: Inaccessibility | 4 □ | Social Aspect: no place of socialisation |
| 1 ↗ ↘ | Accessibility Aspect: No Connections (Bridges) | 5 ■ | Mobility Aspect: Whole Road Surface dedicated to car |
| 2 ■ | Housing Aspect: Isolation within the Area | 5 ■ | Mobility Aspect: Discontinuity of pavement |
| 3 ■ | Environmental Aspect: Concentration of Solid Wastes | 6 ●●● | Physical Aspect: State of Decay |
| 3 ■ | Environmental Aspect: Pollution of Soil | | |

Figure.49
 Title: Weaknesses
 Source: Author



L.3.3 Opportunities [Figure.50]

1) An interesting opportunity is the presence of the Agricultural University of Athens which is in the vicinity of Votanikos. (Cf. Paragraphs D.5.2, I.6 and D, L.2.7) The University plays an important symbolic and cultural role, as well as an institutional one, within the Eleonas area. The possibility of expanding the Campus and its settlement within Votanikos could result in an important collaboration for the management and maintenance of the area and the provision of services, strengthening the potential attracting character of the project area.

2) As described above, the area has a large space availability, and this factor can ensure the establishment of agricultural activities that can help combat urban poverty of Eleonas residents and can promote integration processes. (Cf. Paragraph H.3)

3) The establishment of various species of flora and the establishment of agricultural activities fundamentally contributes to the increase and protection of the biodiversity of Eleonas.

4) The recovery of the Area through urban agriculture would constitute a sustainable recovery alternative to the implementation of the PAO Stadium from a historical, social and urban point of view, guaranteeing all citizens the right to live in the city. (Cf. Paragraphs B.4 and F.2)

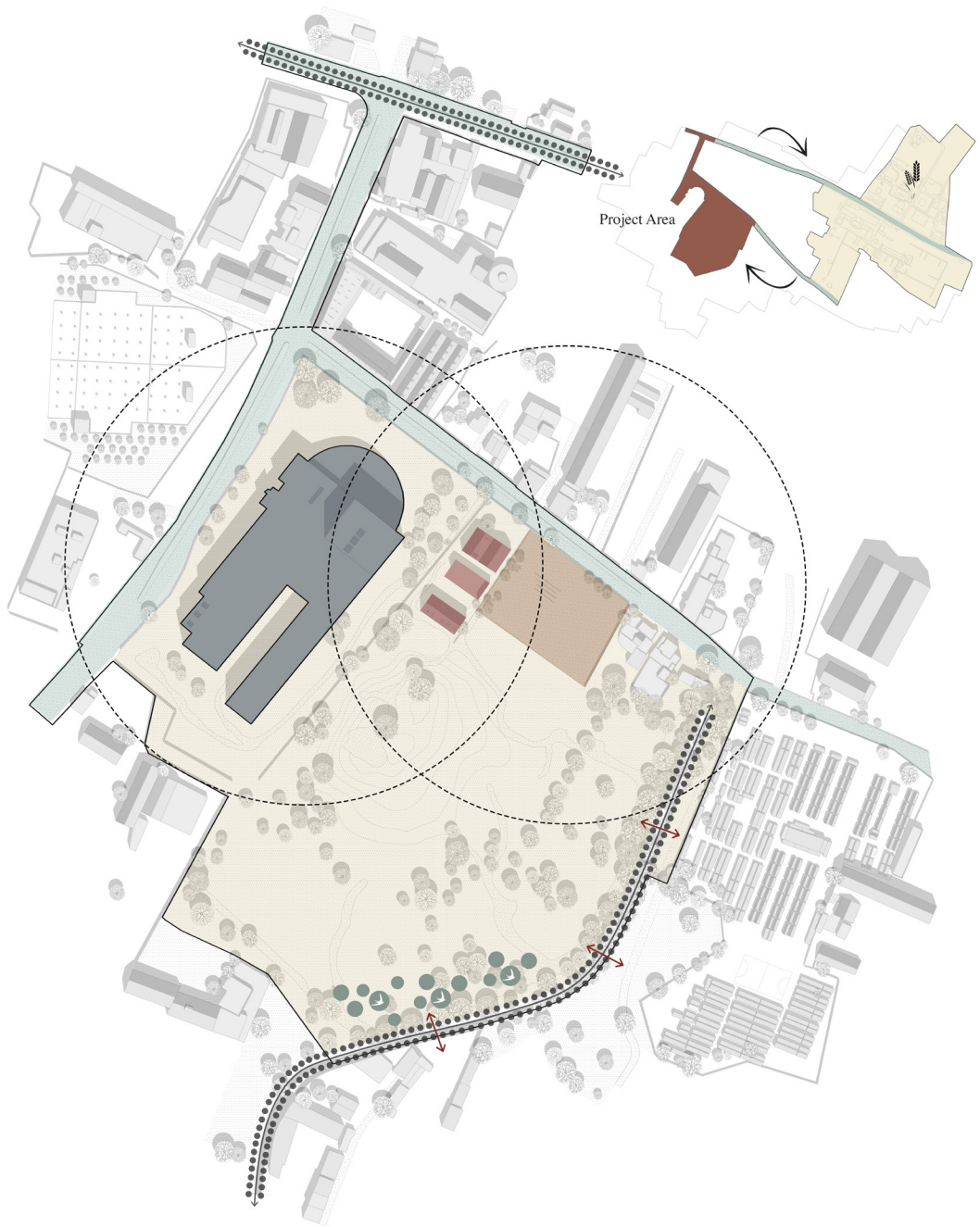
5) The implementation of a green infrastructure would ensure the completion of PD 1995 in order to improve environmental conditions and would benefit the entire metropolitan area of Athens (Cf. Paragraph E.3.3) and could be an element that can be planned and include in the new PGT that follows the “*Athens-Attica 2014-2021*”. (Cf. Paragraphs E.3 and G.2)

6) In the Votanikos area today there is an abandoned building due to the bankruptcy of the investor who financed its construction, and which was subsequently foreclosed by the Greek National Bank which, on the thrust of the decentralization programs of tertiary activities (Cf. Paragraph E.1), wants to transform it into an office site. (Cf. Paragraph F.1). Its conversion to offices would give added value to the area as it would become a new attractive centre which will result in a demand for local services and investments.

7) The recovery of Votanikos, together with the other *Hubs* present in the district (Cf. Paragraph I.3.2), would contribute to the creation of a new system of attraction points that respond to local needs but become reference places for the entire metropolitan area improving the image and public perception of Eleonas. (Cf. Paragraph C.7)

8) The redevelopment of the roads selected to become links within the proposed green infrastructure (Cf. Paragraph I.3.6) would constitute a fundamental element to encourage mobility between the residential areas of Eleonas, pedestrian and bicycle mobility and to improve conditions environmental aspects of the city.

9) As long as in Votanikos is set informally the “*The Scavengers Market*” and there is a demand of spaces to set it formally this might be an opportunity to consider it in the design proposal in order to include it and dedicate some spaces.



- 1 Spatial Aspect: Proximity to Agricultural University
- 2 Functional Aspect: Agricultural Activities
- 3 Environmental Aspect: Increasing Biodiversity
- 6 Functional Aspect: New Office Building
- 8 Mobility and Accessibility Aspect: Integrated cycle and pedestrian mobility in the road network
- 9 Social Aspect: Integration of "The Scravengers Market" and public spaces
- 10 Functional Aspect: Integration of Agricultural University's offices
- 11 Cultural Aspect: Recovery and enhancement of elements with historical value
- 11 Accessibility Aspect: new connections between the Hub and Eleonas Refugee Camp

Figure.50
 Title: Opportunities
 Source: Author



10) The abandoned warehouses might be used to host new functions and host offices of the Agricultural University of Athens to better manage the area and the agricultural fields.

11) The regeneration and recovery of Iera Odos and Prophet Daniel might be an opportunity to restore their historical value in order to make them as identifying elements of Eleonas and to improve the accessibility between the areas.

L.3.4 Threats

1) A possible threat is represented by the lack of economic funds to invest in the implementation of such infrastructures. This negative view is linked to the current precarious situation, in economic terms, of the Greek state and the capital in a scenario worsened by a possible post-Covid-19 recession. It is necessary to think about sustainable planning, planning the actions and hierarchizing them, selecting all the local authorities interested in a Bottom-Up governance vision and outlining all that is of primary urgency from what could be carried out in a second future step and that does not compromise the functionality of the area.

2) Another threat is the absence of legislation that protects the selected areas from future speculation so that green areas can maintain their character and their social role within the community over time. In fact, the low cost of land in Eleonas and its potential is an element that can easily interest investors and private individuals to carry out speculation works (*Cf.* Paragraph H.3) as happened for the PAO Stadium and for the shopping centre of Vovos. (*Cf.* Paragraph F.1)

3) The almost absence of policies aimed at improving environmental conditions and reducing pollution is a threat to be considered since this could lead to problems in the agricultural production phases, polluting the land dedicated to this function.

L.3.5 Summing Up [Figure.50]

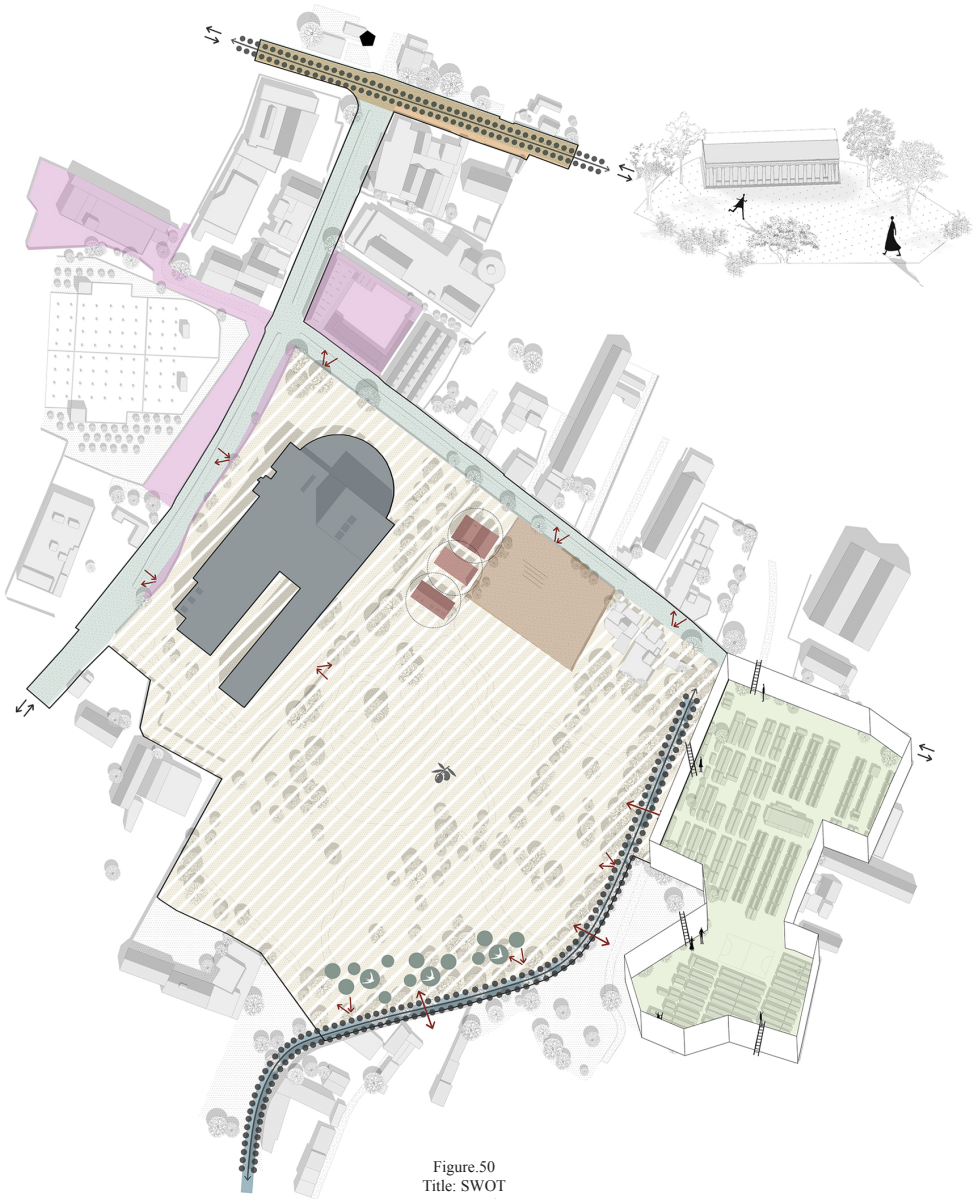


Figure.50
Title: SWOT
Source: Author

STRENGTHES

- 1 Presence of element of historical and cultural value such as Prophet Daniel Stream
- 2 Presence of element of historical and cultural value such as Iera Odos
- 3 Potential abandoned Sheds to be recovered
- 4 Great availability of unbuilt and permeable space
- 5 Presence of element of social value such as The Scravengers Market
- 6 Proximity to the centre of Athens
- 7 Great public transport accessibility: Eleonas Metro Station
- 8 Easily reachable by private transport
- 9 Agricultural Past Character of the Area

WEAKNESSES

- 1 Inaccessibility Problems
- 1 No Connection between the Project Area and Eleonas Refugee Camp
- 2 Isolation of Housing Pockets
- 3 High Level of environmental decay and pollution
- 4 There are no spaces for aggregation and socialization
- 5 No alternative mobility to cars
- 6 Iera Odos and Prophet Daniel are in a state of decay and inaccessibility and lack of wayfinding.
- 7 Few financial resources

OPPORTUNITIES

- 1 Proximity to the University of Agriculture
- 1 Future Collaboration with the University of Agriculture for the partial management of the Area
- 2 Establishment of agricultural activities due to great space availability
- 3 Increasing and protecting biodiversity
- 4 Sustainable Alternative to PAO Stadium
- 5 Recover of PD 1995
- 6 New Building Offices in the Area becoming a new attractive point
- 7 Recover of Votanikos to make it more usable and attractive on local and metropolitan scale, changing its negative image
- 8 Integrate Cycle and Pedestrian mobility in the road network
- 9 A new formal venue for the "Scravengers Market"
- 10 Recover of abandoned Warehouses to host new social and entertainment activities
- 11 Iera Odos' and Prophet Daniel's recovery and regeneration interventions

THREATS

- 9 Economic recession due covid19 and nofinancial resources to develop the project:restore the PAO project of the Stadium
- 10 Absence of legislation and general low cost of land: purchase from new entities and disruption of social equilibrium
- 2 Constant environmental pollution
- 4 May not change the negative image of Eleonas in the general Scenario



M. Design Proposal Hypothesis

M.0 Introduction

In this final section the reader is accompanied in understanding the methodological approach adopted by the author to produce the final Masterplan for the *Hub* of Votanikos. (Cf. Paragraph L.1)

The proposed Masterplan can be implemented gradually over time, in different phases, giving it a structural elasticity and flexibility, whose priority is the return of spaces to the community and the creation of reference and identification places for the population and whose purpose is the integration of previously selected *Hubs* (Cf. Paragraph I.3.2) in the social and urban fabric of Eleonas.

In order to achieve these objectives, it was essential to investigate the historical, socio-demographic, physical and regulatory aspects of Eleonas, studies that revealed the gaps and problems to be solved and to define the role of the *Hubs* within the urban strategy adopted. To reach the definition of a possible answer, the involvement of the population and all local and supra-local stakeholders was necessary, so that the designer, through participatory actions, can relate the different social realities of Votanikos, making them as a collaborative network that is able to implement all the project actions necessary to achieve the final Masterplan.

M.1 Concept

Votanikos, as was previously ascertained, is in a state of social, economic and urban decadence and its recover is necessary to return people to places to use, where they can socialize, trade and integrate into society.

It was decided to start from the people who live in their everyday life this marginal reality, to listen to them and to understand what was the path to be taken in order to proceed with the formulation of a project proposal. The will to strengthen the sense of belonging to a Community, where everyone can identify, must necessarily be a priority and the basis to be able to advance a project that connects different social realities, that pushes people to confront each other, exchanging ideas, opinions and goods.

It was therefore decided, in the process of regeneration of the *Hub* of Votanikos, to pursue a path that has as its goal the condensation of these different realities within the project area, recreating the social structure of the *Village* [Figure.1], where there is a part dedicated to *Housing*, that in this case will correspond to the Eleonas Refugee Camp, a part intended for the development of social relations, which can be defined as *Square*, in which people can socialize, trade and play, and finally, the part dedicated to *Agricultural Production*, where it will be possible to cultivate, share agricultural knowledge and techniques, learn, socialize and produce food for consumption and sale.

In order to proceed with the structuring of the project proposal it was necessary, as it will be explained in the following paragraphs, to outline the profiles of the bodies that will be directly involved and that will take charge of the economic, management and organizational aspects, to implement the planning actions and to define in a possible temporal arc of time the “*phases*” needed to complete the definitive Masterplan, which it is the final objective.

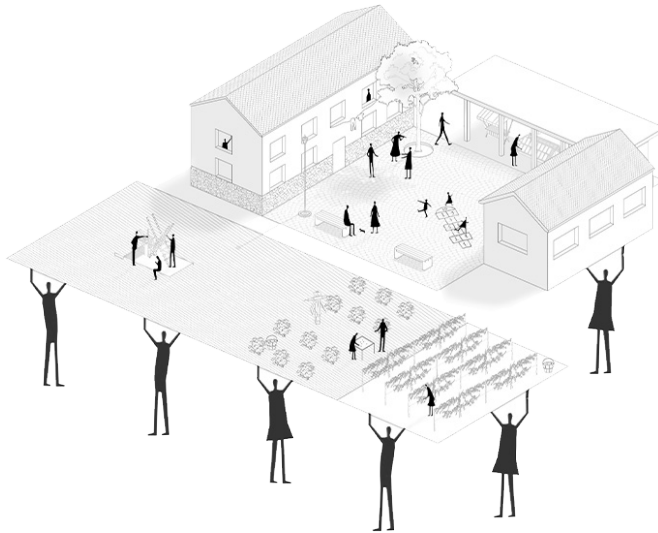


Figure.1
 Title: The Village: Housing, the Square and the Agricultural Production
 Source: Author

M.2 Stakeholders

After careful analysis, surveys and meetings, it was possible to outline the profiles of the Stakeholders directly involved and from their needs and considerations it was possible to define the Project Actions to be implemented in the intervention proposal for the *Hub* of Votanikos, some of which have priority over others [Figure.2], and which can be entrusted directly to all bodies involved in the recovery process. In fact, the primary objective is to restore the area and make it accessible to citizens, but to understand the approach to be adopted and what program to

propose it was essential to involve all entities, organizations, people, etc. directly affected and who will benefit from the work of regeneration.

The intent is therefore to be able to create a network of collaborations [Figure.3] between local and supra-local, private and public bodies, which will actively participate in the gradual implementation of the defined Project Actions.

Their direct involvement will allow the realisation of these interventions aimed at improving the lives of local communities and at low costs for the public administration, which will ultimately be able to evaluate the possibility of investing additional funds in the area.

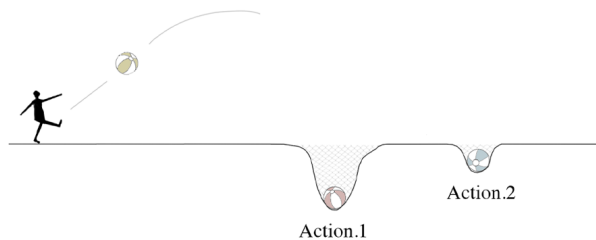


Figure.2
 Title: Different Actions, different weights
 Source: Author

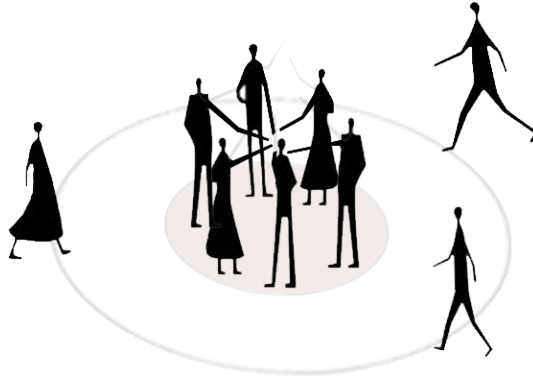


Figure.3
Title:Stakeholders networking
Source: Author

M.2.1 Local stakeholders

The local authorities that will be involved are:



Figure.4
Title:The Citizens' Committee for the rescue of Eleonas
Source: Author

1)The Citizens' Committee for the rescue of Eleonas (Για τη διάσωση του Ελαιώνα) [Figure.4] (Cf. Paragraph F.2.1), body that will play the role of intermediary with the residents of the neighbourhood. This authority will have the task of distributing, at the request of the population, the transfer and right of usufruct of the spaces dedicated to urban gardens so that every needy family can apply for and receive a part of land where they can grow their products with contracts with a predetermined duration and renewable upon expiry of the same.



Figure.5
Title: "The Scavengers Market"
Source: Author

2)The "Scavengers Market", as it emerged in earlier studies (Cf. Paragraph C.5.1-2)

[Figure.5] it takes place informally but from the interviews carried out it resulted that the market has a defined semi-structured organizational hierarchy.

Following the direct meetings with the sellers, there was a need for predefined spaces where they can exhibit their goods and conduct their commercial activities without the risk of possible eviction. The body that manages the Market will have the role of intermediary with the Municipality of Athens the direct assignment to the sellers of the future spaces dedicated to the market function within the Votanikos Area so that they can receive long-term safe areas where they can settle. After the allocation of spaces, the sellers directly interested will be allowed to create light structures for shading and for the display of their goods directly on site.



Figure.6
Title:Agricultural University of Athens
Source: Author

3)Agricultural University of Athens (Γεωπονικό Πανεπιστήμιο Αθηνών, Γ.Π.Α) (*Cf.* Paragraph I.6) [Figure.6] will be a key body for the implementation of the Project. In fact, the Agricultural University of Athens is a social and cultural institution well rooted in the territory and will have the opportunity to expand because of the granting of land with long-term usufruct rights where it can conduct preparatory, pedagogical and experimental activities in Votanikos, so that its presence in the area is guaranteed; in exchange, the University is asked to manage some areas and the periodic establishment of meetings with citizens and organizations to hold workshops on the management of plots of land and for the teaching of agricultural techniques, favouring social integration and strengthening the sense of community.



Figure.7
Title:NBG, National bank of Greece
Source: Author

4)NBG, National bank of Greece (Εθνική Τράπεζα της Ελλάδος) [Figure.7] will have an integrative role in terms of investments for the improvement of the Area. In fact, currently this entity is the owner of the shopping centre adjacent to Votanikos which is in a state of neglect and degradation due to the bankruptcy of the largest investor (VOVOVS) which fell into bankruptcy in 2013 (*Cf.* Paragraph F.1). NBG has expressed its will to recover and convert this structure into an office site and this intervention will lead to positive externalities on Votanikos as, every day, the area will be frequented by thousands of employees, who will demand for services, areas refreshment and entertainment. The recovery intervention of Votanikos will be able to satisfy part of this demand, also bringing a positive externality towards the NBG Office Site. In order to improve the area, NBG is asked to make small investments for the improvement of street furniture and for the maintenance of the areas adjacent to its building.



Figure.8
Title: ONG, The UN Migration Agency
Source: Author

5)ONG, The UN Migration Agency [Figure.8], will play the role of intermediary with the Eleonas Refugee Camp for the assignment of the areas intended for agricultural function so that they can be given in concession to associations such as Project Elea which will take care of the organizational and management part together to residents of the housing facility.

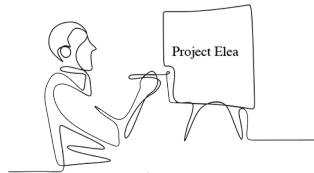


Figure.9
Title: Project Elea Association
Source: Author

6) Project Elea Association [Figure.9] is the main association of the Eleonas Refugee Camp housing structure (*Cf.* Paragraph C.3.1) and deals with the management and organization of all the activities carried out by the refugees. This body, in addition to having a managerial position, will have the role of direct intermediary with the families present in the structure in order to be able to entrust it with the spaces in usufruct.



Figure.10
Title: Private Bodies
Source: Author

7) Private Bodies [Figure.10], they will be involved in the implementation of various structures and services from which they will be able to obtain revenues, through public tenders for the allocation of spaces with long-term usufruct contracts in exchange for their maintenance and in the case of the Votanikos Sheds, their restoration. (*Cf.* Paragraph L.2.3)



Figure.11
Title: Municipality of Athens
Source: Author

8)Municipality of Athens (Δήμος Αθηναίων) [Figure. 11], it will play the role of intermediary with the various institutions listed above and with the supralocal stakeholders and will be a key body for the implementation of the preliminary project actions in order to make

Votanikos usable and accessible. Later, in the last stages of implementation of the area, the Municipality, together with the Prefecture of Attica and the Greek State, will be able to evaluate the possibility of investing additional funds for the completion of the Project Masterplan.

M.2.2 Supralocal stakeholders

The supra-local stakeholders involved are:



Figure.12
Title: Prefecture of Attica
Source: Author

1) Prefecture of Attica (Νομός Αττικής) [Figure.12], it will have a managerial role for the start-up of the works, together with the Municipality of Athens and the Greek State, and ultimately for the disbursement of funds that can be invested to complete the latest project actions.



Figure.13
Title: Greek State
Source: Author

2) Greek State (Ελληνική Δημοκρατία) [Figure.13], its role is ultimately related for the disbursement of funds that can be used to complete the Masterplan.

M.3 Insights

After outlining the concept, underlying the design strategy, defining the profiles of the bodies involved, it is necessary to start again from the SWOT analysis performed previously (*Cf.* Paragraph L.3.5) in order to select the Project Actions to be implemented for the achievement of the final MasterPlan and then it is necessary to program them along a hypothetical time span.

In order to proceed in this direction, it is essential to adopt a criterion based on what has absolute priority for implementation and which can immediately compensate for the shortcomings and problems of Votanikos and its residents, compared to what can be achieved in a next phase.

Therefore, it was necessary to hierarchize the project actions and plan their implementation in different phases and time sub-phases which have been metaphorically compared to the life cycle of a vegetal organism and that have been defined as follows: [Figure.14]

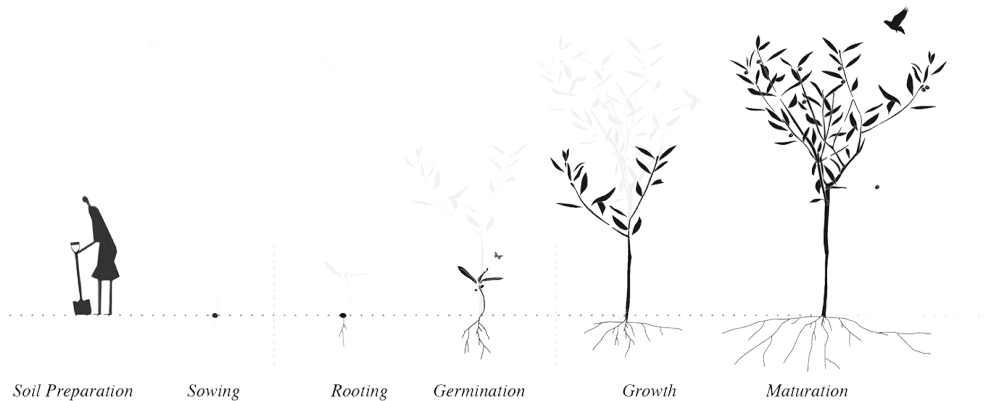


Figure.14
 Title: Cycle Life of Votanikos as living Organism
 Source: Author

-Step 1 (2022-2023), “*Soil Preparation*” and “*Sowing*”;

- Step 2 (2023-2025: it depends on the methodology used to reclaim the soil): “*Rooting*” and “*Germination*”;

- Step 3 (2026 and after): “*Growth*” and “*Maturation*”

The definition of these time frames is hypothetical, and some phases may also overlap each other considering the eventuality of delays for the implementation of the project actions by the Stakeholders until their possible withdrawal and non-adhesion.

In the following sections the project actions to be carried out for each established phase will be set, deepening and illustrating how they will be implemented in spatial, managerial and functional terms in order to make the reader understand the various steps that characterize the regeneration process proposed.

M.4 Step.1 [Figure.15]

The implementation of the preliminary phase, defined as Step 1, whose implementation is expected between 2022-2023, is divided into two sub-phases, “*Soil Preparation*” and “*Sowing*”, which must be respectively carried out in the order reported here.

This phase consists of the preparations aimed at making Votanikos accessible and usable by the citizens so that the first project actions can be implemented by the bodies involved.

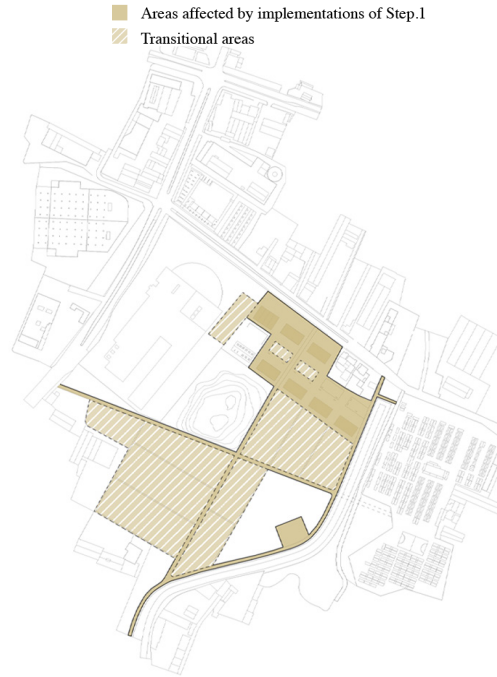


Figure.15
 Title: Step.1 Implementations
 Source: Author

M.4.1 *Soil Preparation* [Figure.16]

The first sub-phase of Step 1 can be metaphorically compared to the act “*Soil Preparation*” before “*Sowing*”.

In fact, careful preparation of the soil is essential for receiving the seeds and this operation can affect the results of the final harvest. First, it is necessary to start by cleaning the soil, digging, fertilizing, hoeing, all actions necessary to prepare the seedbed to promote the growth of vegetable crops. These are all preliminary actions carried out to obtain an adequate work plan as a result, in our case, the ground to be prepared consists of the area of Votanikos.

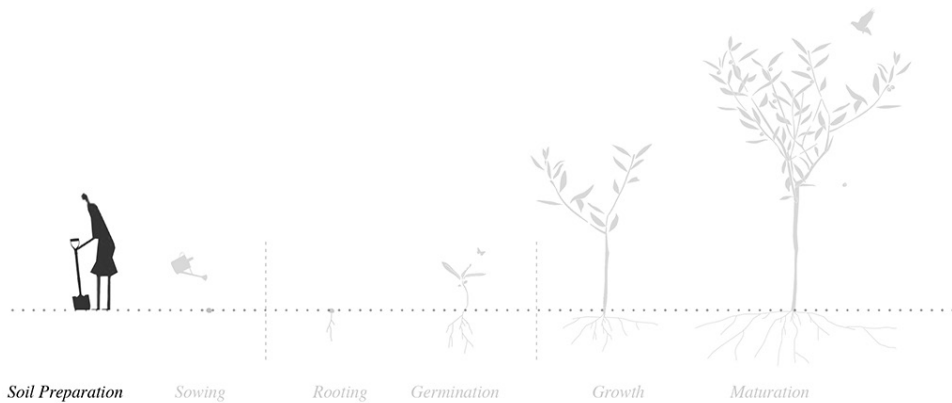


Figure.16
 Title: Step.1, Soil Preparation
 Source: Author

M.4.1.1 Project Actions and Stakeholders

In order to proceed with the completion of the first sub-phase “*Soil Preparation*” it is necessary to perform certain preliminary actions defined in the section below:

1) *Clearance of the Area* [Figure.17]: as emerged from the studies conducted (*Cf.* Paragraphs D.8 and L.2.10, Figure.45) Votanikos is used in several spots as an illegal landfill, with concentration of solid waste near the Prophet Daniel Canal in the North-East part of the bed and in the Central and South-West parts of the area.

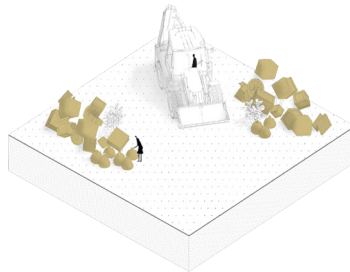


Figure.17
Title: Clearance of the Area
Source: Author

It is important that the administration of the Municipality of Athens (Δήμος Αθηναίων) takes care of this situation to make the area usable and allow other stakeholders to proceed with the implementation of subsequent and future project actions.

2) *Securing the Area* [Figure.18]: as it was stated in Paragraphs D.3.2 and L.2.5, the entire urban landscape of Eleonas is characterized by a constant repetition of elements of visual discontinuity, obstacles, barriers that compromise the visibility and accessibility of entire areas. Furthermore, Votanikos is characterized by some architectural artifacts, former industrial and commercial, which need to be restored as they are in a state of decay and abandonment, such as the former VOVOS shopping centre or the three warehouses located in the North-West part of the area (*Cf.* Paragraph F.1, Figures 6-7-8 and L.2.3, Figures 13-14-15) and their presence and absence of fences is a security problem. For these reasons it is important that the Administration of the Municipality of Athens (Δήμος Αθηναίων) can intervene to secure the entire area of Votanikos and to ensure its full usability through actions aimed at improving accessibility and limiting it in due points and in this state of facts, potentially dangerous.

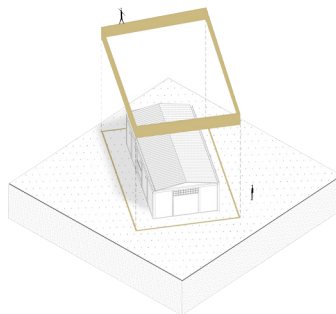


Figure.18
Title: Securing the Area
Source: Author

3) *Removal of selected spontaneous bushes and trees* [Figure.19]: through geometric surveys carried out directly in the area with the support of online platforms such as googlemaps [1], it was possible to map all the wild and spontaneous shrubs and trees of a certain size to have a first general picture of the vegetal architecture that characterizes Votanikos. (Cf. Paragraph L.2.8, Figure.37)

This step was important in order to define which vegetation can be maintained in certain spatial points, if not even increased in subsequent phases in order to protect the biodiversity of Eleonas, and which instead should be uprooted in order to make certain areas of Votanikos physically and visibly accessible and cultivable in a second phase.

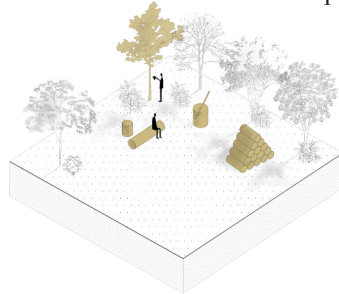


Figure.19

Title: Removal of selected spontaneous bushes and trees

Source: Author

This project action is included in the first acts that should be carried out by the Municipality of Athens (Δήμος Αθηναίων) in order to achieve the useability of Votanikos with few economic funds invested.

4) *Individuation of potential lots to be converted in Social Spaces* [Figure.20]: this step is entrusted to the designer who, after having analysed the area on different levels, from the morphological to the social ones, and after having dealt with the population and the interested stakeholders, can formulate and spatially identify potential areas within Votanikos for the establishment of social activities in order to compensate the absence of socialization and meeting spaces that distinguish the area nowadays.

(Cf. Paragraph L.2.3)

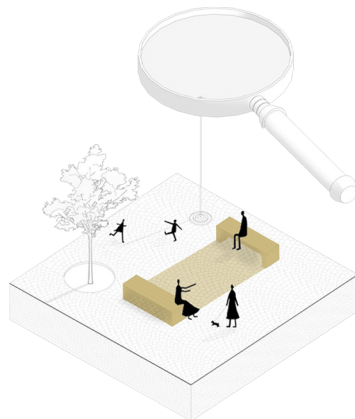


Figure.20

Title: Individuation of potential lots to be converted in Social Spaces

Source: Author

1 www.googlemaps.com

5) *Individuation of potential lots to be converted in Commercial Spaces* [Figure.21]: this step, like the previous one, is entrusted to the designer who must identify suitable spaces in the Masterplan for the future development of light structures to host Commercial activities such as “*The Scavengers Market*”. (Cf. Paragraph C.5.1)

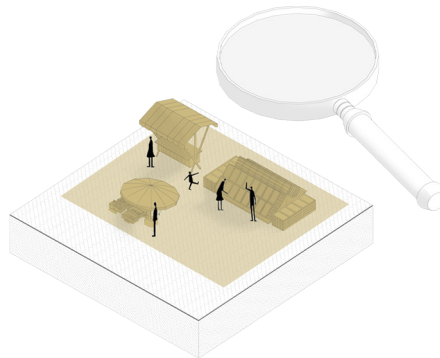


Figure.21
Title: Individuation of potential lots to be converted in Commercial Spaces
Source: Author

6) *Individuation of potential lots to be converted in Agricultural fields* [Figure.22]: after defining the role of the Hubs within the Urban Strategy (Cf. Paragraph.3), it is important that the designer selects the most suitable areas for hosting agricultural activities. (Cf. Paragraph I.6) After the identification of the eligible lands, it is then inevitable the integration of other professional figures so that it can be analysed the environmental state of health and pollution of the soil that will have to host these activities and in case, if necessary, start a process of purification of the soil.

In the case of Votanikos, this integrative process is supposed to be necessary given the state of environmental degradation that has characterized the area in the last century due to manufacturing and industrial activities. (Cf. Paragraph B.2 and D.8)

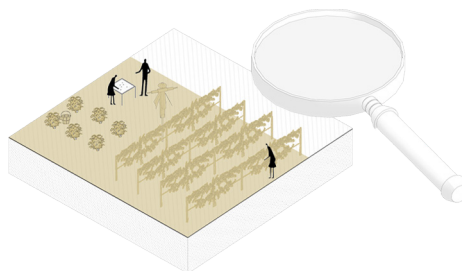


Figure.22
Title: Individuation of potential lots to be converted in Agricultural Fields
Source: Author

7) *Creation of Main Path axes within the Area* [Figure.23]: after having prepared the functional spatial arrangement of the social, commercial and productive activities, the hierarchical implementation of an internal connective system is necessary that allows usability, mobility and accessibility to the various parts of Votanikos, works that should necessarily be implemented by the administration of the Municipality of Athens. (Δήμος Αθηναίων) These new connections will represent the internal mobility within Votanikos and it will be completely integrated within the Links system network. (Cf. Paragraph I.3)

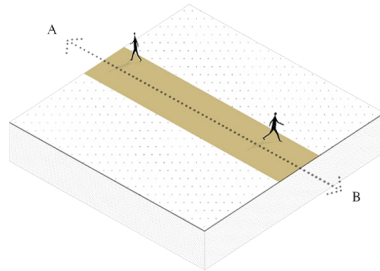


Figure.23
Title: Creation of Main Path axes within the Area
Source: Author

M.4.2 *Sowing* [Figure.24]

The second sub-phase of Step 1, in agricultural processes, can be compared to the action of Sowing. In fact, the act of entrusting the seed to the ground and the complex of operations that immediately precede or follow the act itself, to ensure a good outcome.

In the case of Votanikos, the seeds to be stored in the ground, in the areas outlined above, correspond to the human activities to be allocated in space and to be transferred to the first places in the area, through the embryonic realization of the first structures that can allow the use and in action of the social dynamics necessary to give new life to the area.

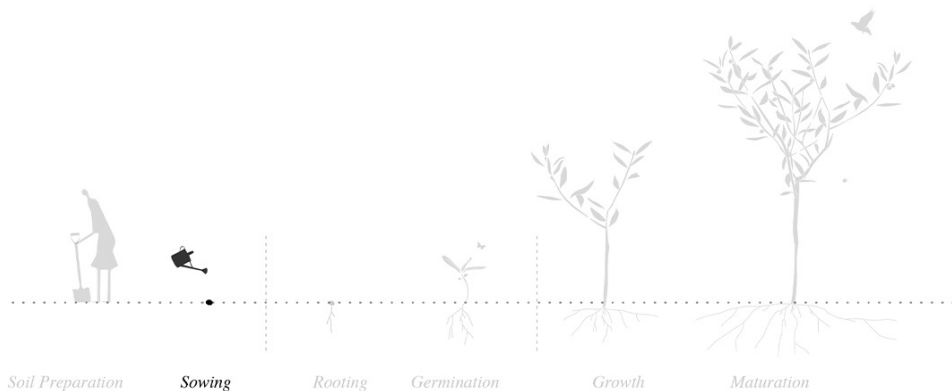


Figure.24
Title: Step 1, Sowing
Source: Author

M.4.2.1 Project Actions and Stakeholders

To proceed with the completion of the second sub-phase “Sowing” it is necessary to perform certain actions in order to make the organism Votanikos “alive”, operations defined in the section below and characterised by collaboration processes of self-construction. Self-construction, conceived as a collective process, is a tool that aims to promote the self-determination of those who live in a territory, the ability to collectively transform and treat places. Through this practice it is wanted to try to shorten that separation between man, the community and his living environment; increase and empower its management, transformation and governance of the territory. Self-construction therefore generates a material asset, the home, but an infinity of intangible assets: conviviality, cohesion, solidarity, mutual help, complicity and the re-appropriation of a way of living.

1) Creation of Social Spaces such as Square and an Inclusive Playground for kids [Figure.25]: after defining, in the previous sub-phase, the functional layout of the spaces, the participation

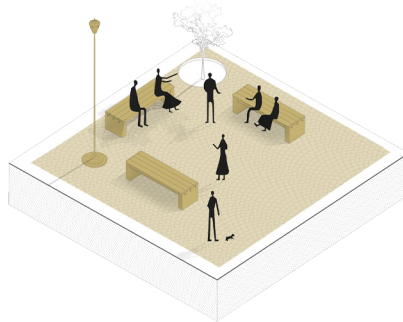


Figure.25
Title: Square
Source: Author

of the population is necessary in order to implement shared spaces, at the expense of the entire community.

As already demonstrated, the Eleonas and Votanikos areas lack places dedicated to socializing and meeting (Cf. Paragraph L.2.3 and L.3.2). Their creation is essential to provide the community with spatial tools dedicated to meeting and to promote the processes of socialization and integration.



Figure.26
Title: Square
Source: Author

The creation of new places for meeting is of vital importance to transform the Votanikos *Hub* into a place of memory and identification for the local communities. It is therefore necessary to implement social spaces defined as *Square* which is characterized by some elements such as seats, shading elements, a play area, etc., all elements that contribute to the socialization processes. [Figure.26]

In addition to the Squares, another space dedicated to children must absolutely be implemented, an *Inclusive Park* for everyone. [2] [Figure.27] Following the first survey carried out, the author remembers some children from the Eleonas refugee camp playing inside the Votanikos area, among the garbage because there are no spaces dedicated to children inside the structure or in its vicinity. (Cf. Chapter L, Figure.17) Also following the surveys conducted at the “*The Scavengers*” market, it was noted that the children of the sellers play in the midst of total confusion, between the stalls and the garbage. The creation of spaces dedicated to play and meeting activities is essential to allow children to play safely and is an opportunity to let the different ethnic groups to meet, interact and integrate.

After establishing the reasons why, the implementation of these spaces is needed, it must be



Figure.27
Title: Inclusive Park
Source: Author

emphasized who will be involved in their creation and future management, as this Square and Inclusive Park would be the realization of the local wishes expressed from the “*bottom*” of the community.

The Municipality of Athens (Δήμος Αθηναίων) will contribute partially for the implementation of these works. The local stakeholders possibly interested are, instead, IOM, The UN Migration Agency, Project Elea Association, the citizens’ committee for the rescue of Eleonas (Για τη διάσωση του Ελαιώνα) and “*The Scavengers*” and the participation of these associations aims the emotional involvement of citizens in the project even before the economic resources that will be collected and invested. [3]

2) *Creation of Commercial Spaces* [Figure.28]: as it emerged from the interviews with the sellers of “*The Scavengers*” market (Cf. Paragraph C.5.2.) and from the forecasts of “the Double Regeneration” agreement, the construction of PAO’s Stadium represent one of a multi number factors that highlight the constant risk of eviction of the Roma Community (Cf. Paragraph F.2), so it is important to provide public spaces to these minorities in order to let them set formally.

3 Bedetti R. and Protti C., “*Parco inclusivo partecipato*” <http://www.parchipertutti.com/parco-libera-tutti-un-parco-inclusivo-partecipato-a-certaldo/>

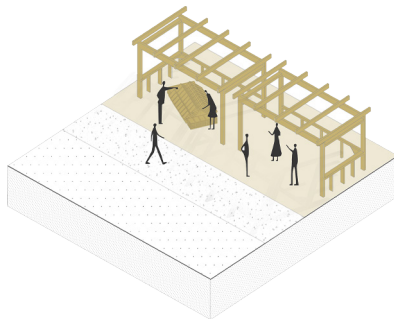


Figure.28
Title: Creation of Commercial Spaces
Source: Author

Therefore, it was necessary to establish future areas functional to commercial activities. (Cf. Paragraph M.4.1.1)

On these areas, the implementation of lightweight structures, managed by the community of “*The Scavengers*” and partially financed by the Municipality of Athens (Δήμος Αθηναίων), is planned and these support structures will be characterized by a system that guarantees protection from the sun and rain, shading points, spaces dedicated to the display and storage of goods keeping in reference the “*Dandjai Daily Market*” by Atelier Masomi. [4] [Figure.29] The involvement and collaboration of the Roma community that manages the current market in Votanikos, “*The Scavengers*”, is fundamental for the realization of this system of



Figure.29
Title: Dandjai Daily Market by Atelier Masomi
Source: Archdaily, Maurice Ascani

structures whose construction is planned to be set in the northern area of Votanikos and concurrently with the “*Square*” and “*Inclusive Park*”, in order to spatially compact all activities related to social dynamics.

4 Maurice A. for Archdaily, the “*Dandjai Daily Market*”

3) *Soil remediation from pollution* [Figure.30]: since Eleonas and Votanikos areas have been in a state of environmental degradation for about a whole century, it is necessary to integrate professional figures complementary to the assessment and identification of pollutants up to the possible need to carry out reclamation work on the soil so that the land can be used for agricultural purposes. A possible inexpensive tool for soil purification consists in *phytoremediation* method, that is a natural technology of soil remediation, and which employs the use of some species of plants, such as sunflowers or helichrysum, [5] which can extract heavy metals and induce the degradation of organic compounds in contaminated soils.[6] It must be stated that this method, although it is cheaper, it takes much longer than other remediation techniques. These procedures can be funded by the Municipality of Athens (Δήμος Αθηναίων) and the Agricultural University of Athens (Γεωπονικό Πανεπιστήμιο Αθηνών, Γ.Π.Α), would ensure the filtration of the soil and its future use for local crops in Votanikos.

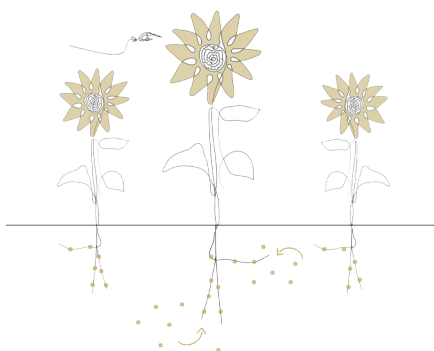


Figure.30
Title: Soil remediation from pollution
Source: Author

4) *Recover Warehouse (C)* [Figure.31] (Cf. Chapter L, Figure.13): the recovery of the built heritage could be integrated into the area's regeneration strategy as a potential enrichment tool. The reuse of these spaces is in fact a possibility to consider, following an in-depth analysis of costs and benefits, and would represent potential places where it is possible to set up

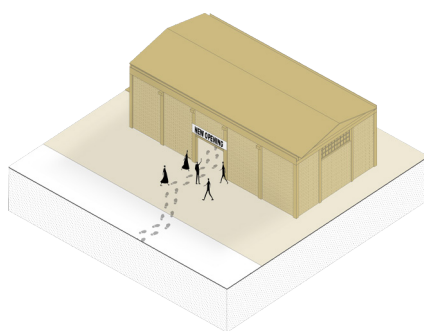


Figure.31
Title: Recover Warehouse (C)
Source: Author

educational and preparatory activities, giving in usufruct the spaces to the Agricultural University of Athens (Γεωπονικό Πανεπιστήμιο Αθηνών, Γ.Π.Α), so that it can transform this warehouse in a branch on the territory of Votanikos and to facilitate management processes.

5 *Helichrysum italicum* subsp. *Microphyllum* is a widespread species in Mediterranean basin often used to remediate the soil.

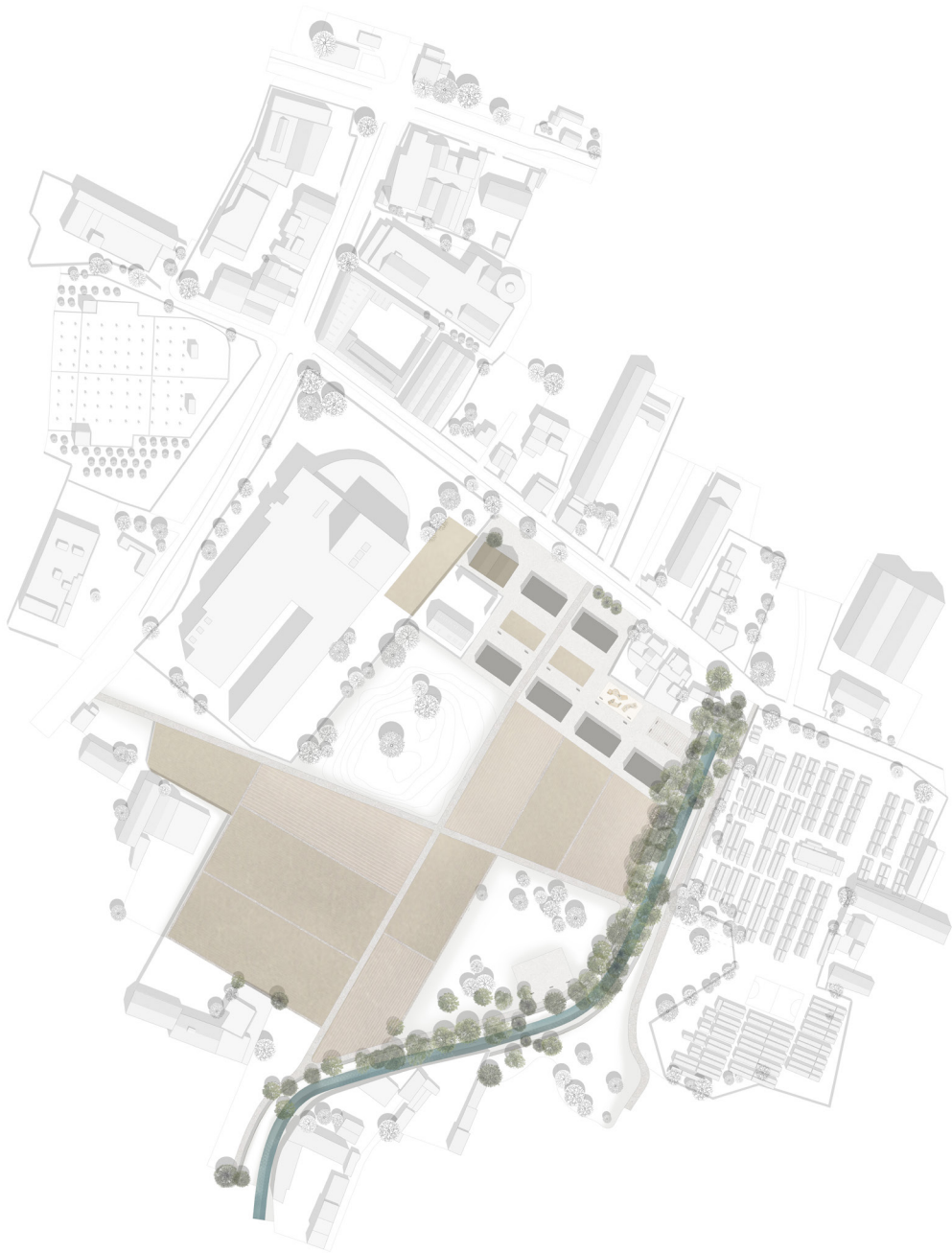
6 Sconocchia A. and De Angelis P., “*Bonifica, recupero ambientale e sviluppo del territorio: esperienza a confronto sul fitorimediaio*”, s.l., RemTech Expo, 2018

M.4.3 Resuming [Figure.32]

N.	Project Actions, Step.1	The citizens' committee for the rescue of Eleonas (Για τη διάσωση του Ελαιώνα)	The Scravengers Market	Agricultural University of Athens (Γεωπονικό Πανεπιστήμιο Αθηνών, Γ.Π.Α)	NBG, National bank of Greece (Εθνική Τράπεζα της Ελλάδος)	IOM, The UN Migration Agency	Project Elea Association	Private Bodies	Municipality of Athens (Δήμος Αθηναίων)	Prefecture of Attica (Νομός Αττικής)	Greek State (Ελληνική Δημοκρατία)
SOIL PREPARATION											
1	Clearance of the Area										
2	Securing the Area										
3	Removal of selected spontaneous bushes and trees										
4	Individuation of potential lots to be converted in Social Spaces										
5	Individuation of potential lots to be converted in Commercial Spaces										
6	Individuation of potential lots to be converted in Agricultural fields										
7	Creation of main path axes within the Area										
SOWING											
1	Creation of Social Spaces such as Square and a Playground for kids										
2	Creation of Commercial Spaces										
3	Soil remediation from pollution										
4	Recover Warehouse (C)										

Figure.32
 Title: Step.1, Project Actions and Stakeholders
 Source: Author

M.4.4 Preliminary Masterplan [Figure.33]



- Tree
- Market Light Structure
- Playground
- Square
- Paved area
- Branch of Agriculture University of Athens centre
- Prophet Daniel
- Area in a recovery state through Phytoremediation

Figure.33
 Title: Preliminary Masterplan
 Source: Author





Figure.33.1
Title:Axonometry of Preliminary Masterplan and territorial sections
Source: Author

■ Areas affected by implementations of Step.2

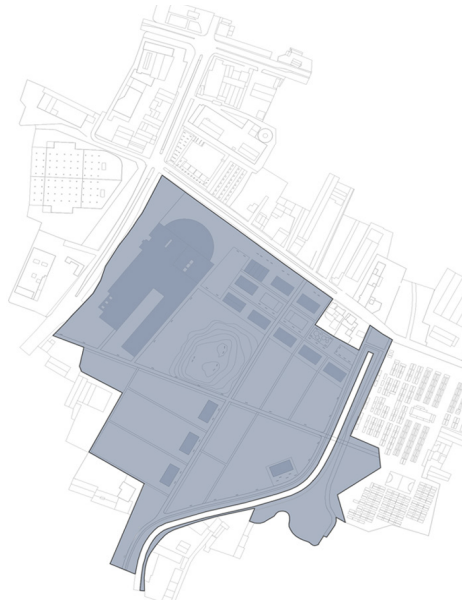


Figure.34
Title: Step.2, Implementations
Source: Author

M.5 Step.2 [Figure.34]

For the complete realization of the second phase, defined as Step 2, whose realization is expected between 2023-2025 (or more, it is up to the used approach to reclaim the soil) it is necessary to outline two sub-phases, “*Rooting*” and “*Germination*”, to be implemented chronologically in this order.

This phase consists in the rooting of social dynamics and practices in the territory, where the outlined spaces can effectively germinate becoming places of reference for the community, places of meeting and identification.

M.5.1 *Rooting* [Figure.35]

The first sub-phase of Step 2 can be understood as the process of forming the roots of a plant which in botany is defined as “*Rooting*”.

In fact, in this sub-phase it is witnessed the profound settlement of the human activities proposed and implemented in the previous phases.

With the affirmation of these “*new*” places that can be defined as permanent and definitive, they have become social elements of reference within the urban fabric of Eleonas and it is possible to proceed with the creation of integrative and support elements for the usability of the spaces.

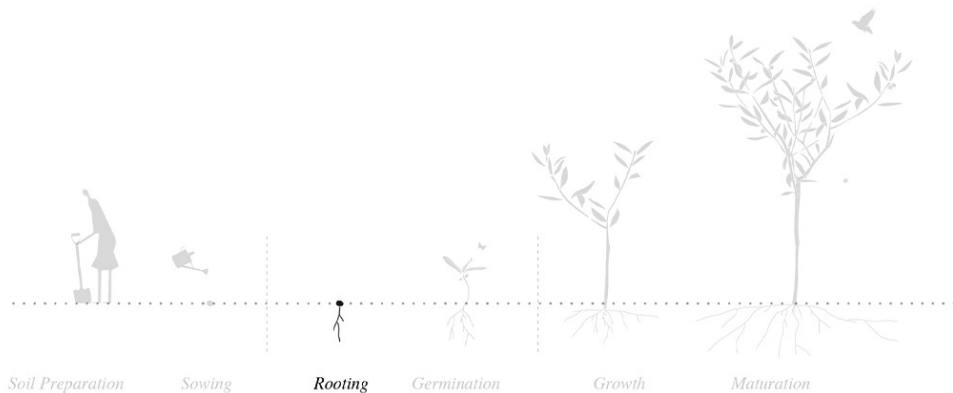


Figure.35
 Title: Rooting
 Source: Author

M.5.1.1 Project Actions and Stakeholders

In order to proceed with the completion of the first sub-phase “*Rooting*” of Step.2 it is needed to perform certain actions defined in the section below:

1) *Subdivision of the agricultural lots in smaller ones and allocation of the arable areas to the various stakeholders involved* [Figure.36]: after the conclusion of the processes used for land reclamation, only when the land can be used for cultivation again, it can be subdivided and assignment to the various interested bodies such as Project Elea Association, Agricultural University of Athens (Γεωπονικό Πανεπιστήμιο Αθηνών, Γ.Π.Α) and The citizens’ committee for the rescue of Eleonas (Για τη διάσωση του Ελαιώνα), who will act as intermediaries with residents interested in applying directly to the families’ usufruct of one of these areas, needs that will spatially be transformed into different gardens typologies such as shared gardens, kitchen gardens up to monoculture agricultural fields etc. The conversion of these lands into spaces dedicated to urban agriculture is a key tool for creating additional meeting and socializing places and for facilitating the integration processes of the population. They are necessary for the economic support of families, to fight the phenomena of urban poverty and to reduce per capita expenditure for basic food products, for nutrition education and the way humans eat, having a greater awareness of the necessary production cycles to arrive at the final product. (Cf. Paragraph H.3 and H.5)

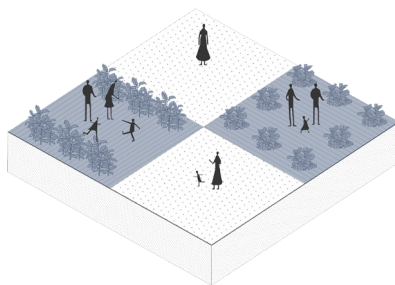


Figure.36
 Title: Subdivision of the agricultural lots in smaller ones and allocation of the arable areas to the various Stakeholders involved
 Source: Author

2) *Creation of Natural cisterns for water supply* [Figure.37]: the constant supply of water, especially in Southern European countries, is becoming an increasingly frequent problem

because of desertification and the decrease in fresh water sources on the territory. For this reason, to support agriculture activities, which use up to 70% of total water resources [7], it is necessary to create support infrastructures for the collection of rainwater which can then be used in irrigation processes depending on the shortcomings and needs of the agricultural fields.

The construction of these infrastructures can be implemented by intermediary bodies between the Municipality and local realities such as Project Elea Association, Agricultural University of Athens (Γεωπονικό Πανεπιστήμιο Αθηνών, Γ.Π.Α) and the citizens' committee for the rescue of Eleonas (Για τη διάσωση του Ελαιώνα)

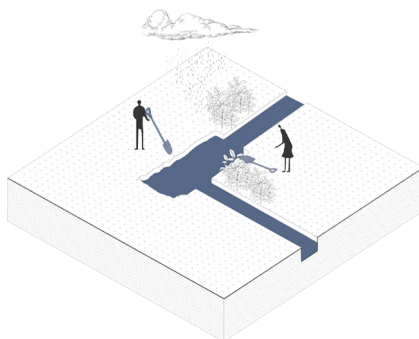


Figure.37
Title: Creation of Natural cisterns for water supply
Source: Author

3) *Creation of secondary paths* [Figure.38]: after having realized in the preliminary phase “Soil Preparation” the main axes to guarantee an effective internal mobility and integrated with the general system of Links, it is necessary to implement a second class of cycle and pedestrian paths to make the area more accessible and to better connect the new part related to the Productive area to the Social and Housing one.

Such work must potentially be carried out Municipality of Athens (Δήμος Αθηναίων)

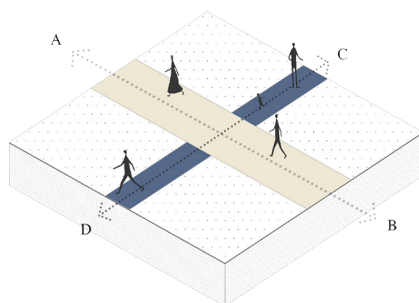


Figure.38
Title: Creation of secondary paths
Source: Author

4) *Creation of Light Structures within the Agricultural fields* [Figure.39]: following the opening of the production section it is necessary to create *ex-novo* light structures in order to implement the spaces for the storage of products and tools used in agricultural processes.

These light structures can be built due to the collaboration of various bodies such as Project Elea Association, Agricultural University of Athens (Γεωπονικό Πανεπιστήμιο Αθηνών, Γ.Π.Α) and the citizens' committee for the rescue of Eleonas (Για τη διάσωση του Ελαιώνα).

7 Mandrioli M., “*Nove Miliardi a Tavola, Droni, big data e genomica per l’agricoltura 4.0*”, Ozzano Emilia, Zanichelli, 2020

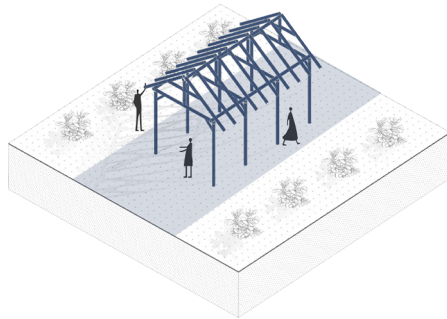


Figure.39
 Title: Creation of Light Structure within the Agricultural Fields
 Source: Author

5) *Public announcement to allocate spots for recreational activities* [Figure.40]: in order to be able to offer a higher number of services to potential city users and to the communities who will experience Votanikos in their daily lives, it is possible to consider the option of setting up a public tender for the concession of some strategic spaces for the installation of new light structures for the establishment of new refreshment and entertainment activities in order to diversify and increase the service offer of the area. The notice must be announced by the public body of the Municipality of Athens (Δήμος Αθηναίων) and to which all private bodies, interested in obtaining a contract for the use of land in Votanikos for a pre-established period, can apply.

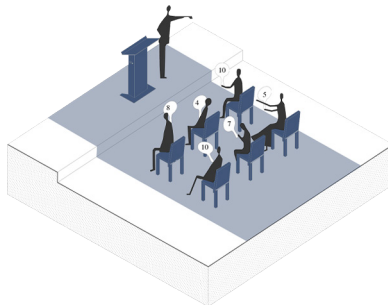


Figure.40
 Title: Public announcement to allocate spots for recreational activities
 Source: Author

6) *Planting of trees* through public initiatives such as “*Adopt a tree*” [8] [Figure.41]: to further

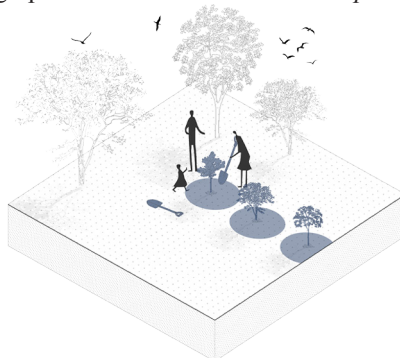


Figure.41
 Title: Planting of trees through public initiatives such as “Adopt a tree”
 Source: Author

8 <https://novoville.com/adopt-a-tree/>

reduce the costs for the acquisition of new trees to be placed in Votanikos, public initiatives can be launched by entities such as The citizens' committee for the rescue of Eleonas (Για τη διάσωση του Ελαιώνα) for the purpose of raising money.

The goal is to collect budgets that can be invested to protect and increase the biodiversity of Eleonas.

M.5.2 Germination [Figure.42]

“Germination” is a key stage in the development of the organism, where the plant takes on a specific shape that aims to protect it from adverse circumstances, so that its development can be preserved and guaranteed.

In this sub-phase, it is witnessed the implementation of the latest project actions identified so that the urban organism can assume its complete autonomy and final shape.

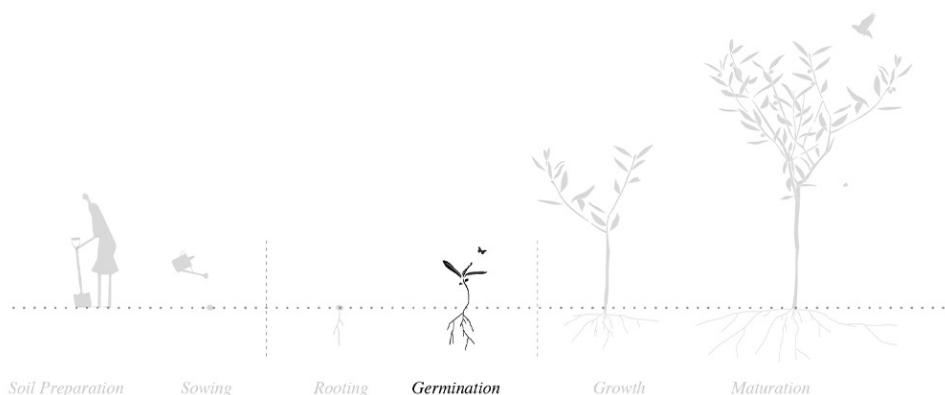


Figure.42
Title: Germination
Source: Author

M.5.2.1 Project Actions and Stakeholders

To proceed with the completion of the second sub-phase “Germination” of Step.2, it is necessary to perform certain actions related to the possible Opening and transformation of the nowadays VOVOS’s Abandoned Shopping Centre into a new Head Office, operation conducted by NBG, National Bank of Greece (Εθνική Τράπεζα της Ελλάδος). (Cf. Paragraph F.3)

1) *Public announcement to allocate to a private body the recovery of the Warehouse (A)* [Figure.43] (Cf. Paragraph L.2.3, Figure.13): the opening of a new office building will represent a positive externality for the entire Votanikos area as it would become an attractive point for thousands of people, which will need spaces near the offices dedicated to entertainment, recreational activities in order to pass the time and all the services related to them. This factor promises to be a good investment opportunity for the opening of new businesses in

Votanikos. Therefore, the Municipality of Athens (Δήμος Αθηναίων) can set up a public competition for the use of warehouse (A) with an open-ended contract in exchange for the works of restoring the building whose costs will be on the private investor.

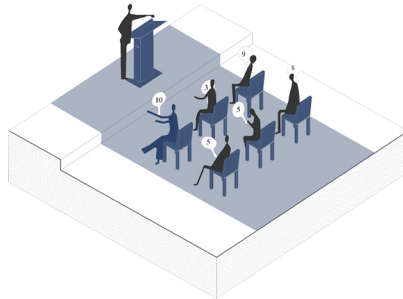


Figure.43
Title: Public announcement to allocate to a private body the recovery of warehouse (A)
Source: Author

2) *Whole implementation of urban furniture* [Figure.44]: with the opening of the offices on behalf of NBG, the regeneration of Votanikos would in turn become a positive externality for the company which is required to periodically maintain the adjacent spaces owned by the National bank of Greece (Εθνική Τράπεζα της Ελλάδος) and invited to invest funds for the improvement of street furniture, including the lighting system, waste collection and division, information panels, benches etc.

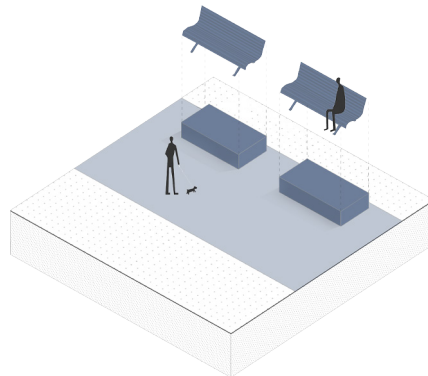


Figure.44
Title: Whole implementation of urban furniture
Source: Author

M.5.3 Resuming [Figure.45]

N.	Project Actions, Step.2	The citizens' committee for the rescue of Eleonas (Για τη διάσωση του Ελαιώνα)	The Scravengers Market	Agricultural University of Athens (Γεωπονικό Πανεπιστήμιο Αθηνών, Γ.Π.Α)	NBG, National bank of Greece (Εθνική Τράπεζα της Ελλάδος)	IOM, The UN Migration Agency	Project Elea Association	Private Bodies	Municipality of Athens (Δήμος Αθηνών)	Prefecture of Attica (Νομός Αττικής)	Greek State (Ελληνική Δημοκρατία)
ROOTING											
	Subdivision of the agricultural lots in smaller areas and allocation of the arable areas to the various stakeholders involved										
1	Creation of Natural cisterns for water supply										
2	Creation of secondary paths										
3	Creation of Light Structures within the Agricultural fields										
4	Public announcement to allocate spots for recreational activities										
5	Planting of trees through public initiatives such as "Adopt a tree"										
6											
GERMINATION											
	Public announcement to allocate to a private body the recovery of the Warehouse (A)										
1	Whole implementation of urban furniture										

Figure.45
 Title: Step.2, Project Actions and Stakeholders
 Source: Author

M.5.4 Intermediate Masterplan [Figure.46]



- | | | |
|--------------------------|---|--|
| ● Tree | ■ Paved area | ■ Crops |
| ■ Market Light Structure | ■ Brunch of Agriculture University of Athens centre | ■ Lawn |
| ■ Playground | ■ Prophet Daniel | ■ Office |
| ■ Square | ■ Agriculture channels | ■ Food Court |
| — Main Path | ■ Area for urban agriculture practices | ■ Open Food Court |
| — Secondary Path | — Bench | ■ Agricultural warehouse light structure |

Figure.46
Title: Intermediate Masterplan
Source: Author



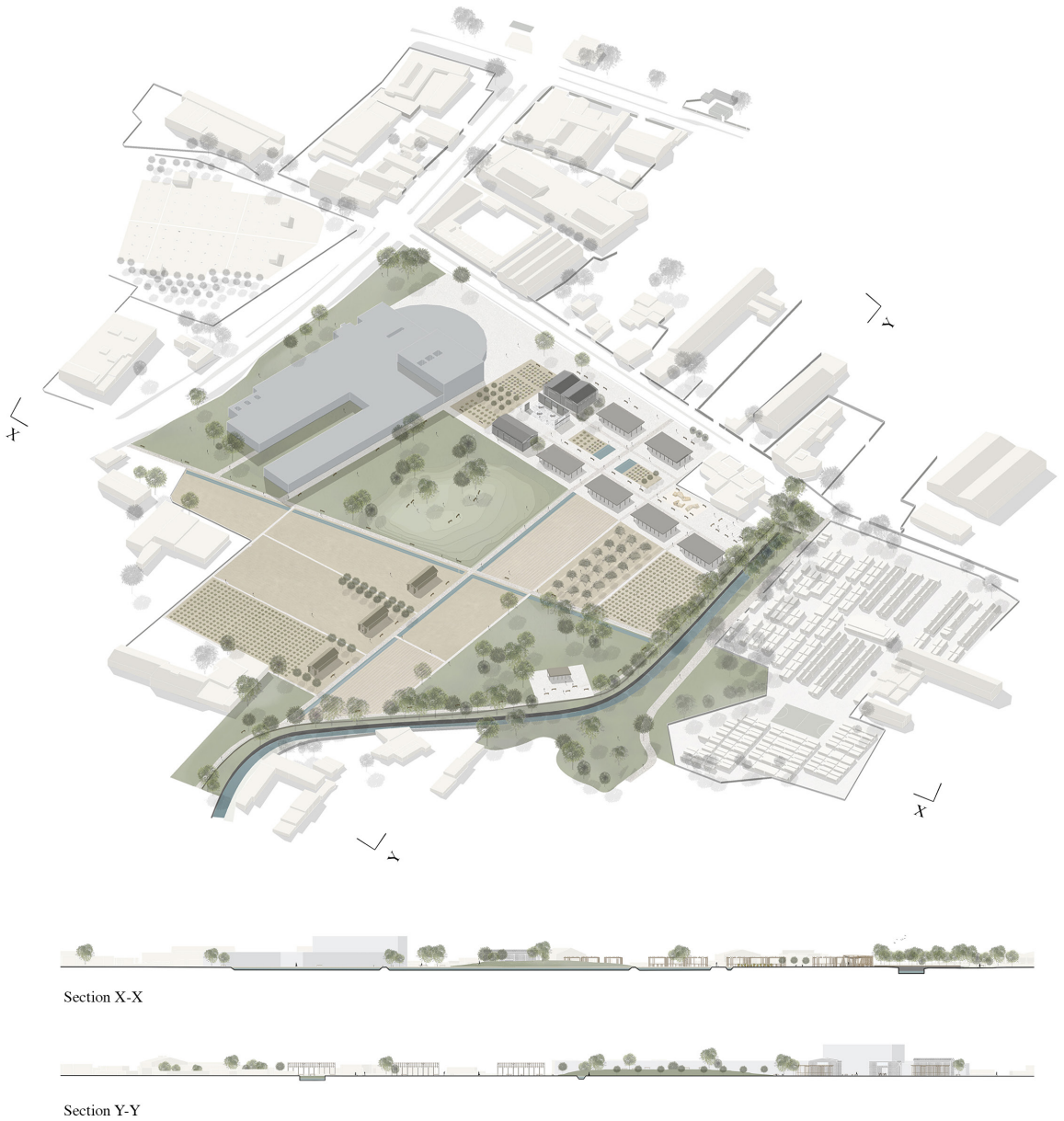


Figure 46.1
Title: Axonometry of Intermediate Masterplan and territorial sections
Source: Author



Figure.47
 Title: Step.3, Implementations
 Source: Author

M.6 Step.3 [Figure.47]

Step 3 consists in the completion of the definitive Masterplan, which was proposed as the objective to be achieved once the previous phases were carried out, in order to demonstrate the validity and functionality of an area recovered and returned to citizens at residual costs. It can be stated that Step 3 is supplementary but not necessary as the Masterplan has already achieved its autonomy within the social and urban fabric of Eleonas with the completion of Step 2.

In fact, already at the achievement of Step 2 the urban organism has already reached its definitive form. The intent is to interest the public administration in investing, in case of financial possibilities, and allocate additional funds to crown the whole Masterplan by implementing everything that was not necessary for the start-up and functionality of the area.

Step 3, whose implementation is expected in 2026 and onwards, is also divided into two sub-phases which can be defined respectively as “*Growth*” and “*Maturation*”.

In this Step, it is witnessed the definitive growth of the organism, its maturation and production of fruits whose seeds can be methodologically disseminated in the other areas of Eleonas.

M.6.1 *Growth* [Figure.48]

In this sub-phase, it is witnessed the “*Growth*” of the organism: the plant further develops its roots, the trunk expands, the branches grow, and it consolidates on the territory in which it grew.

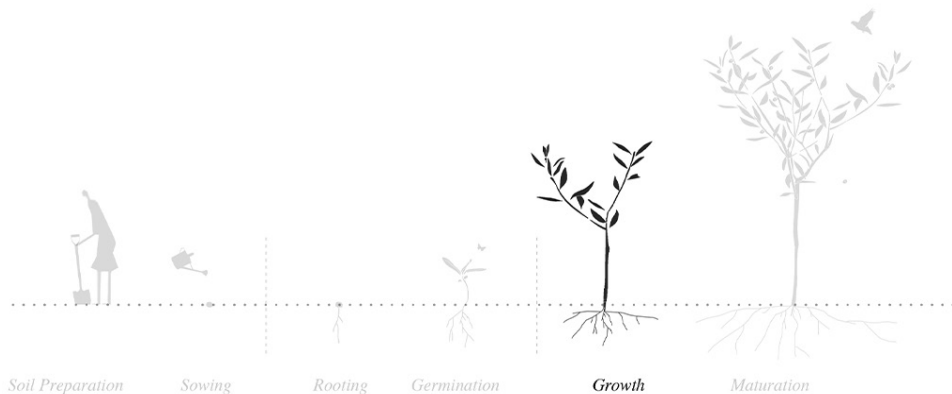


Figure.48
Title: Growth
Source: Author

In this step, the intent is to stimulate the body to extend and take root in the entire surrounding area, creating connections with all the organisms in its proximity.

It is the phase in which the implementation of the *Links* (Cf. Paragraph I.3.6 and I.4.2) is envisaged, of those green corridors necessary to integrate the Votanikos *Hub* and all the other *Hubs* with each other and with the urban fabric of Athens.

This phase was considered as supplementary, whose implementation can take place later, as the absolute priority has been identified in the development of the *Hubs* (Cf. Paragraph I.4.1) and because its realization requires substantial funds invested by the Municipal Administration or by Supralocal Stakeholders. (Cf. Paragraph M.2.2)

M.6.1.1 Project Actions and Stakeholders

The first sub-phase of Step.3 defined here as “*Growth*”, consists in a set of actions aimed at the implementation of the connective systems, the *Links*, which relate the *Hubs* and the built environment of Eleonas and Athens.

The operations consist of:

1) *Securing the road through the implementation of a constant pavement for pedestrian* [Figure.49]: as emerged from the analysis conducted on mobility (Cf. Paragraph L.2.6), the primary and secondary roads that cross Eleonas are for the most part lacking a continuous system of pedestrian crossings. In fact, the pedestrian paths are often discontinuous and when there are they are used illegally as parking spaces for cars.

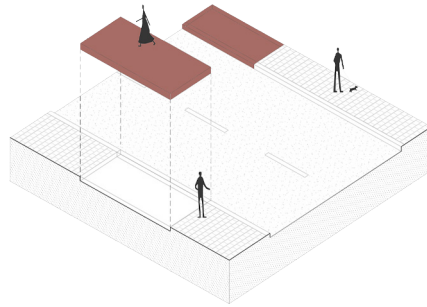


Figure.49
 Title: Securing the Road through the implementation of a constant pavement for pedestrian
 Source: Author

Structural interventions are needed in order to create a cohesive and continuous system to favour and facilitate internal mobility between the various parts of Eleonas.

The implementation of this system is expensive and must be achieved through the allocation of substantial public investments by the Municipality of Athens (Δήμος Αθηναίων), the Greek State (Ελληνική Δημοκρατία) and the Prefecture of Attica (Νομός Αττικής).

2) *Planting trees for the alley* [Figure.50]: the implementation of tree-lined avenues is required in the previously defined *links* (Cf. Paragraph I.4.2.).

In fact, the creation of these tree-lined avenues contributes to the perceptual consolidation of the *Links* and is necessary to absorb the CO₂ produced by vehicular traffic, also reducing noise pollution, and to create shading points in addition to the protection of biodiversity within the urban fabric.

The implementation of these works must be undertaken by local and supra-local public bodies such as the Municipality of Athens (Δήμος Αθηναίων), the Greek State (Ελληνική Δημοκρατία) and the Prefecture of Attica (Νομός Αττικής).

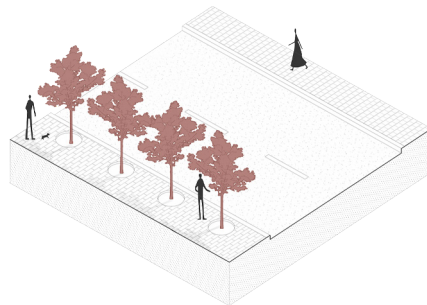


Figure.50
 Title: Planting trees for the alley
 Source: Author

3) *Implementation of Urban Furniture* [Figure.51]: the analysis carried out show a lack of urban furniture along the first and second order roads. (Cf. Paragraph D.9 and L.2.6) It is necessary to create a continuous public lighting system to increase safety levels and the integration of spaces for socializing. Works whose realization is borne by the Municipality of Athens (Δήμος Αθηναίων), by the Greek State (Ελληνική Δημοκρατία) and by the Prefecture of Attica (Νομός Αττικής)

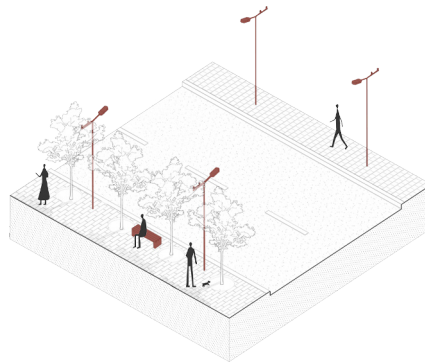


Figure.51
Title: Implementation of Urban Furniture
Source: Author

4) *Increasing the permeable surface of the road* [Figure.52]: as it was possible to ascertain previously, the area of Eleonas is lacking in drainage infrastructures and sewage systems (Cf. Paragraph D.8 and E.3.2) and the heavy rains often cause flooding phenomena in the area that make the use of roads is impracticable.

In addition, especially in summer, the high temperatures and the high rate of built environment and asphalted surface contribute to the absorption of heat by forming heat islands that raise the perceived temperature, transforming the city into a sultry and unliveable place. For these reasons it is necessary to methodologically reduce, in each new intervention, the waterproof surface and increase the permeable one to facilitate water drainage and reduce the effect of heat islands.

These works must be carried out by the Municipality of Athens (Δήμος Αθηναίων), the Greek State (Ελληνική Δημοκρατία) and the Prefecture of Attica (Νομός Αττικής).

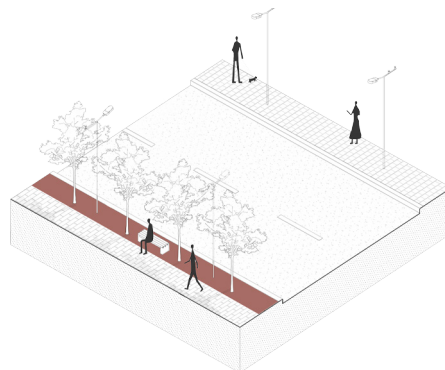


Figure.52
Title: Increasing the permeable surface of the road
Source: Author

5) *Implementation of bike paths*[Figure.53]: the city of Athens is absolutely lacking in infrastructure to facilitate alternative mobility systems to that of the car. In order to decongest traffic, improve noise pollution and reduce CO₂ levels, it is necessary to allocate investments for the construction of new cycling infrastructures that can offer the use of the road by means of slow mobility in complete safety. The restructuring of the road axes for the creation of the *Links* is a unique opportunity for the creation and integration of these new mobility systems.

Links is a unique opportunity for the creation and integration of these new mobility systems. (Cf. Paragraph I.3) It is also recommended the implementation of a bike-sharing system currently absent in the city. These works must be carried out by the Municipality of Athens (Δήμος Αθηναίων), the Greek State (Ελληνική Δημοκρατία) and the Prefecture of Attica (Νομός Αττικής).

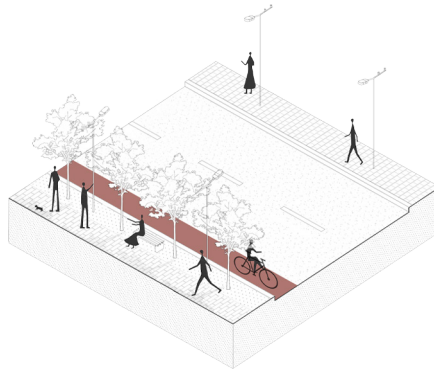


Figure.53
Title: Implementation of Bike Paths
Source: Author

M.6.2 *Maturation* [Figure.54]

Ripening is the final phase of the morphological and physiological development of a vegetal organism and when it is ready to generate the seeds and fruits necessary for its replication in the surrounding area.

With the implementation of this phase, the urban organism will have reached its complete maturity and therefore, its seeds can be replanted on the territory to allow its replication.

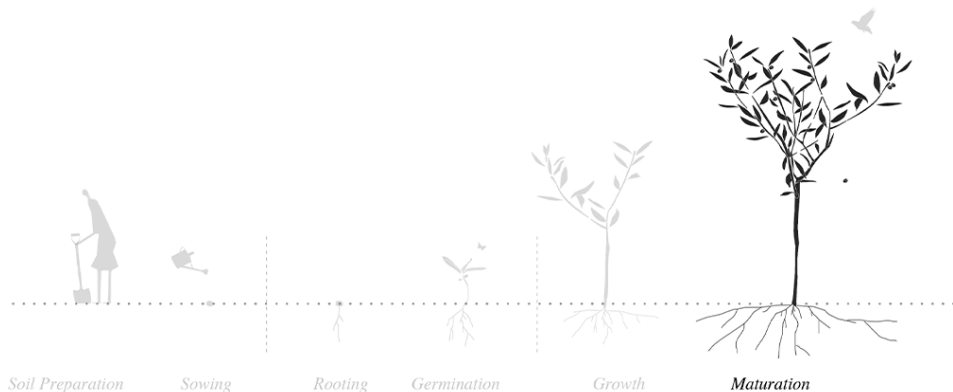


Figure.54
Title: Maturation
Source: Author

M.6.2.1 Project Actions and Stakeholders

The second sub-phase of Step.3 defined here as “*Maturation*”, consists in a set of actions aimed at structural interventions that can be performed in any time frame as their implementation does not compromise the functioning of the Masterplan as they are operations aimed at an aesthetic improvement of the area and closing elements of the regeneration work.

The identified actions consist of:

1) *Removal of Concrete Banks of Prophet Daniel’s in the selected point in order to restore the natural banks* [Figure.55]: As stated in the previous sections (Cf. Paragraph L.2.9, Figure.42) the banks of the Prophet Daniel were redone in the 1960s and completely replaced the natural embankments of the canal.

Currently the canal is inaccessible, both visually and physically and its historical role and value is no longer perceived by the population. Its presence is a strong point for the area and a redevelopment intervention to restore, where possible, the natural embankments and create a promenade that allows a walk or stop along its path could be an opportunity to make it known and make emerge the value it held within Eleonas.

Works of this kind have high costs and for this reason it is an intervention to be carried out if there are adequate financial resources to cover the costs of construction and they must be carried out by the Municipality of Athens (Δήμος Αθηναίων), the Greek State (Ελληνική Δημοκρατία) and the Prefecture of Attica (Νομός Αττικής).

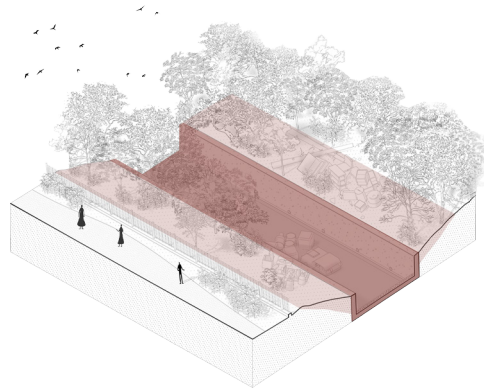


Figure.55
Title: Removal of Concrete Banks of Prophet Daniel’s in the selected point in order to restore the natural banks
Source: Author

2) *Implementation of connections* [Figure.56]: as it was possible to see in Paragraph L.2.5, the Prophet Daniel consists of an impassable barrier, apart from its north end, which divides the Votanikos area in two.

If possible, in a better financial condition, it would be necessary to implement some light connection structures to allow direct and fast mobility between the two areas. The works may coincide with the restoration of the natural banks of the canal, and they will be carried out by the Municipality of Athens (Δήμος Αθηναίων), the Greek State (Ελληνική Δημοκρατία) and the Prefecture of Attica (Νομός Αττικής).

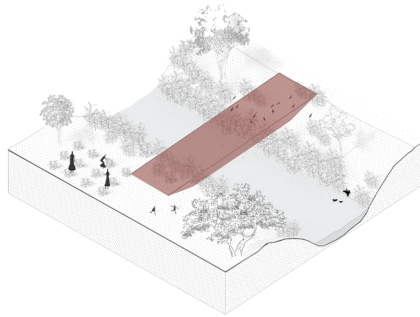


Figure.56
Title: Implementation of connections
Source: Author

3) *Implementation of a Stage* [Figure.57]: in the Masterplan the spatial position for the creation of a secondary square that represents a sort of pocket of the Promenade along the canal has been identified.

The intention to implement this square stem from the desire to create open spaces pockets along the canal that have an attractive value along the way.

To crown the complete vision would be the creation on the west bank of the Prophet Daniel of a small stage that can host entertainment, religious and any other kind of events, as there are no such places in the area, as well as inside the Housing structure of the Eleonas Refugee Camp.

The works must be carried out by the Municipality of Athens (Δήμος Αθηναίων), the Greek State (Ελληνική Δημοκρατία) and the Prefecture of Attica (Νομός Αττικής).

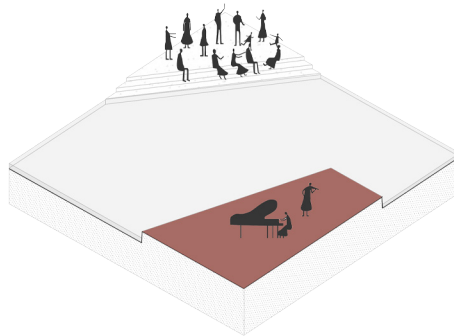


Figure.57
Title: Implementation of a stage
Source: Author

4) *Provide a Fixed structure for the Scavengers Market and the Agricultural Activities* [Figure.58]: at this stage, the Masterplan has already assumed its functional autonomy and its functioning can be an incentive for the administration to provide for the construction of fixed structures for the various activities present within the Masterplan.

The works for the realisation of this interventions has to be carried out by the Municipality of Athens (Δήμος Αθηναίων), the Greek State (Ελληνική Δημοκρατία) and the Prefecture of Attica (Νομός Αττικής).

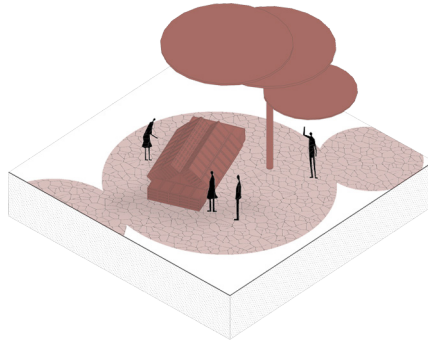


Figure.58

Title: Provide a Fixed structure for the Scavengers Market and the Agricultural Activities

Source: Author

5) *Provide Fixed furniture and pavements*[Figure.59]: as previously written, Step.3 consists of an additional and integrative phase aimed at improving the quality of the materials and infrastructures present.

If the municipal administration deems it appropriate, it can invest extra funds for the replacement and insertion of fixed street furniture and permanent flooring.

These interventions must be taken over by the Municipality of Athens (Δήμος Αθηναίων), the Greek State (Ελληνική Δημοκρατία) and the Prefecture of Attica (Νομός Αττικής).

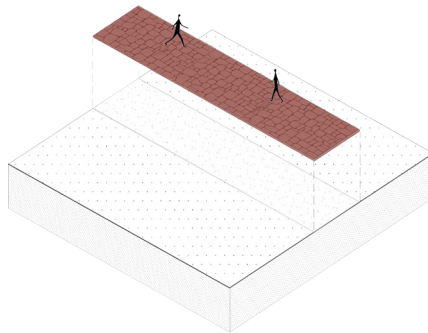


Figure.59

Title: Provide Fixed furniture and pavements

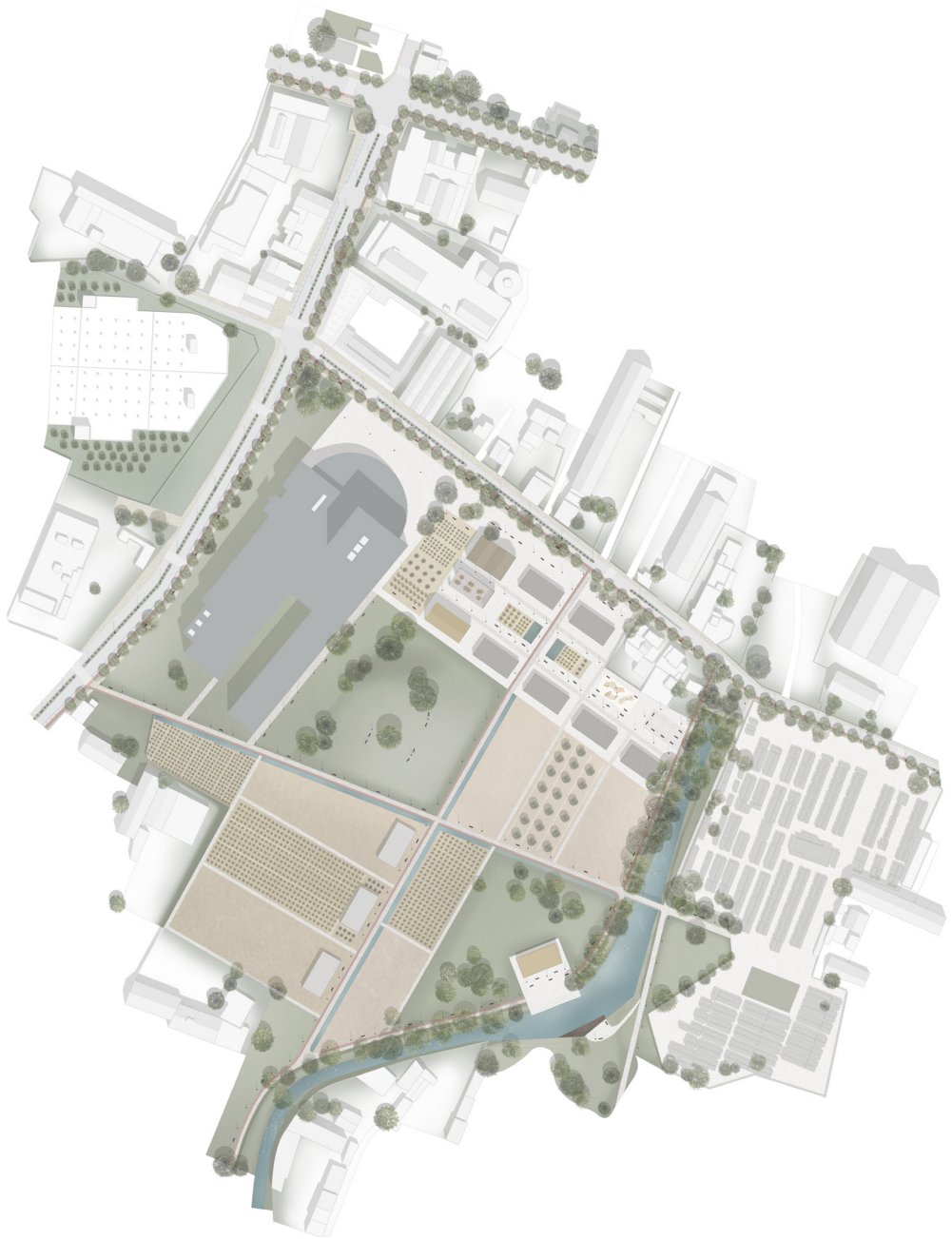
Source: Author

M.6.3 Resuming [Figure.60]

N.	The citizens' committee for the rescue of Eleonas (Για τη διάσωση του Ελαιώνα)	The Scravengers Market	Agricultural University of Athens (Γεωπονικό Πανεπιστήμιο Αθηνών, Γ.Π.Α)	NBG, National bank of Greece (Εθνική Τράπεζα της Ελλάδος)	IOM, The UN Migration Agency	Project Elea Association	Private Bodies	Municipality of Athens (Δήμος Αθηνών)	Prefecture of Attica (Νομός Αττικής)	Greek State (Ελληνική Δημοκρατία)
GROWTH										
	Securing the road through the implementation of a constant pavement for pedestrian									
1	Planting trees for the ally									
2	Implementation of Urban Furniture									
3	Increasing the permeable surface of the road									
4	Implementation of bike paths									
5										
MATURATION										
	Removal of Concrete Banks of Prophet Daniel's in the selected point in order to restore the natural banks									
1	Implementation of connections									
2	Implementation of a Stage									
3	Provide a Fixed structure for the Scravengers Market and the Agricultural Activities									
4	Provide Fixed furniture and pavements									
5										

Figure.60
Title: Step.3, Project Actions and Stakeholders
Source: Author

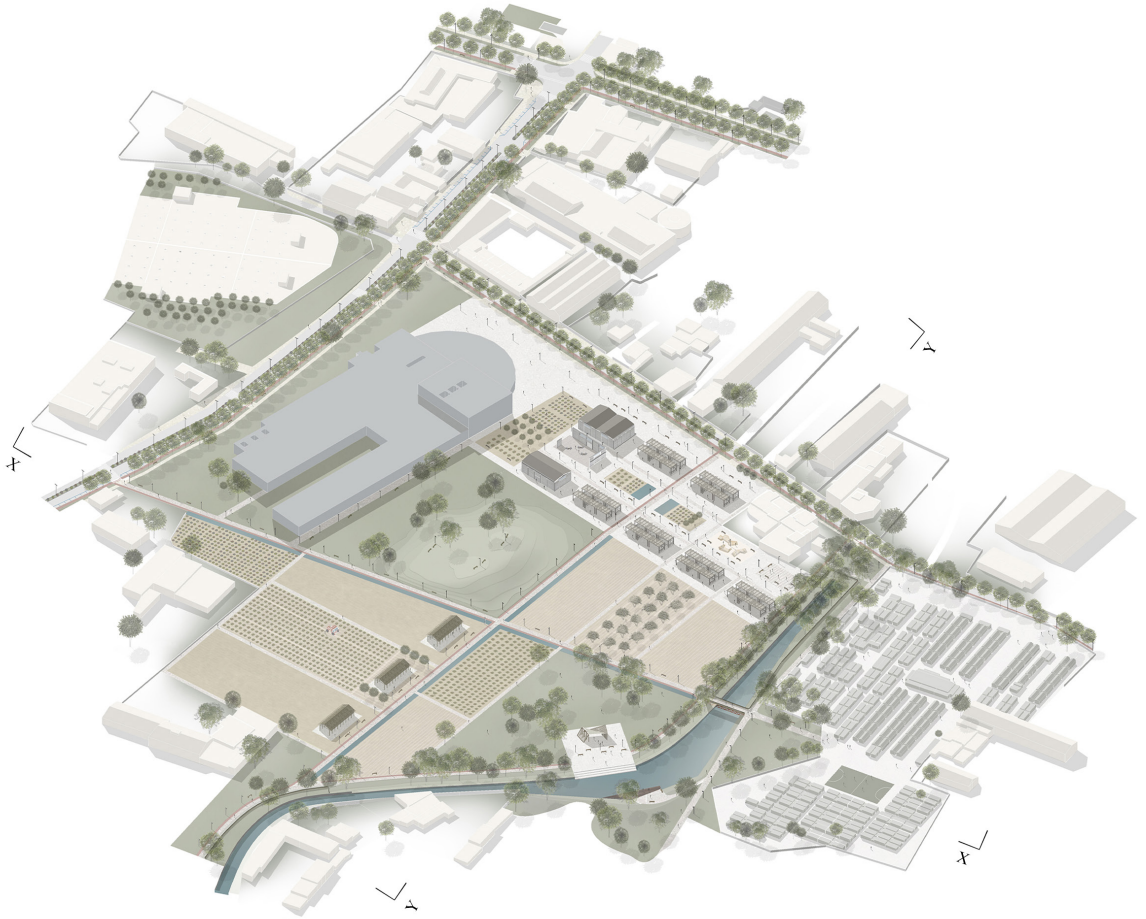
M.6.4 Final Masterplan [Figure.61]



- | | | | |
|--------------------------|---|--|-----------------------|
| ● Tree | ■ Paved area | ■ Crops | ■ Open Stage |
| ■ Market fixed Structure | ■ Brunch of Agriculture University of Athens centre | ■ Lawn | — Bicyclelane |
| ■ Playground | ■ Prophet Daniel | ■ Office | — Traffic divider |
| ■ Square | — Agriculture channels | ■ Food Court | ■ New road pavement |
| — Main Path | ■ Area for urban agriculture practices | ■ Open Food Court | ■ Parking Lot |
| — Secondary Path | — Bench | ■ Agricultural warehouse fixed structure | ● Lighting spot |
| | | | ■ Pedestrian crossing |

Figure.61
Title: Final Masterplan
Source: Author





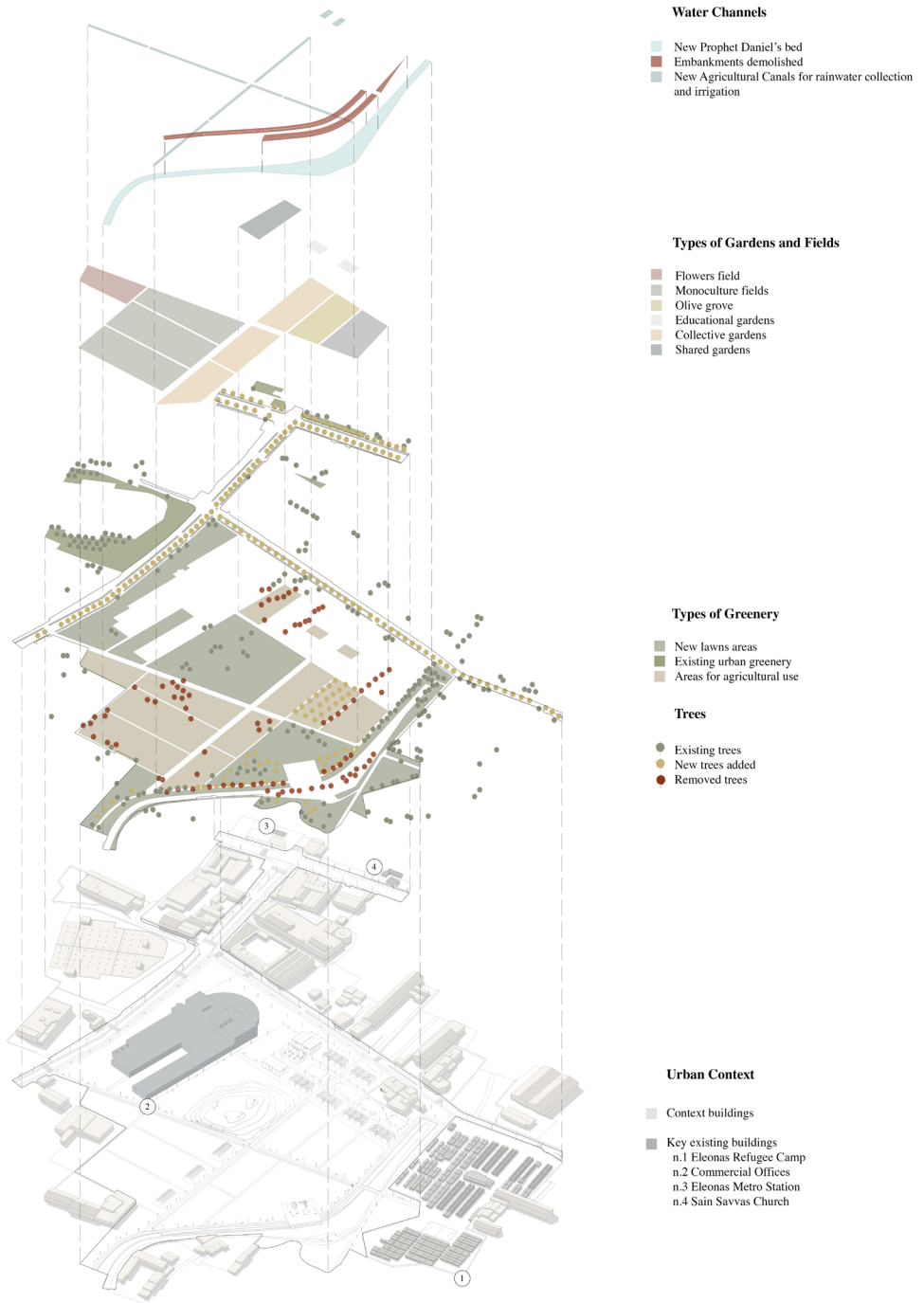
Section X-X

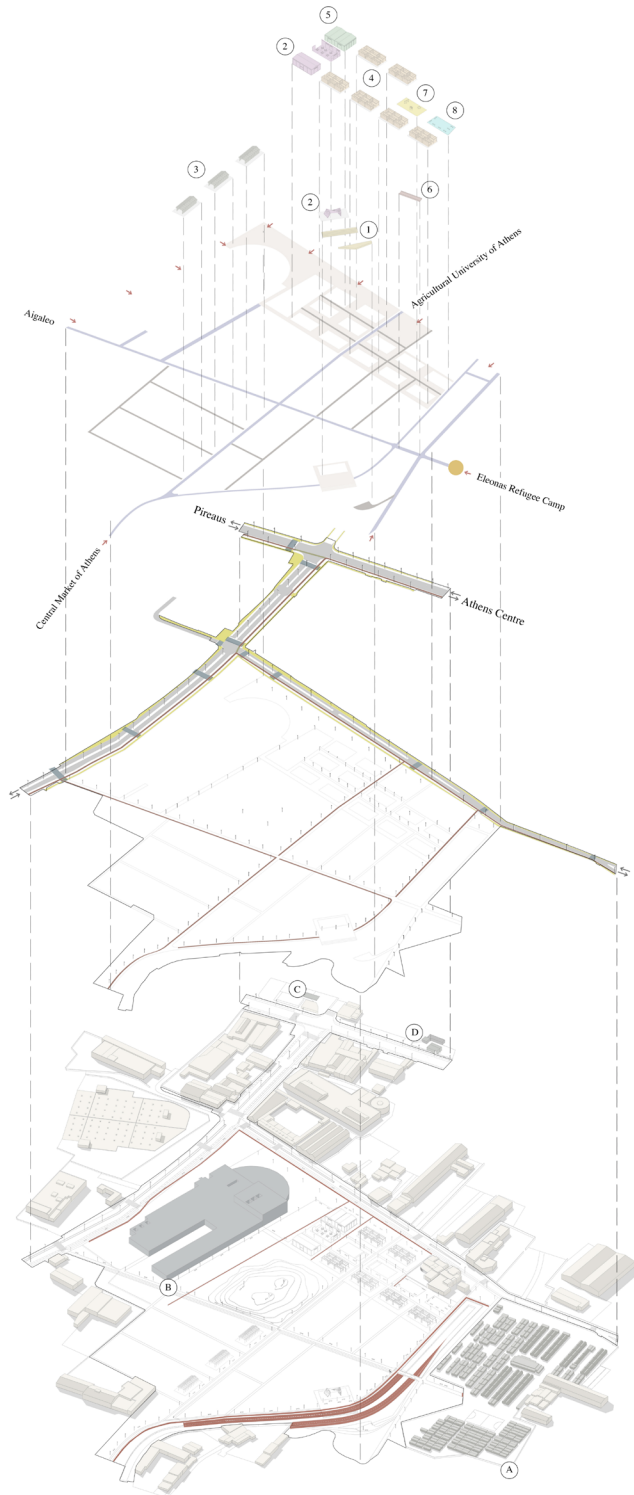


Section Y-Y

Figure.61.1
Title:Axonometry of Preliminary Masterplan and territorial sections
Source: Author

M.6.5 Descriptive diagrams of the planned interventions of the final Masterplan





New Structures and its functions

- n.1 Open Theater
- n.2 Refreshments Area
- n.3 Agricultural Warehouses
- n.4 The Scavengers Market
- n.5 Exhibition and Culture
- n.6 Bridge
- n.7 Inclusive Playground for kids
- n.8 Square

Pedestrian Mobility within the Area

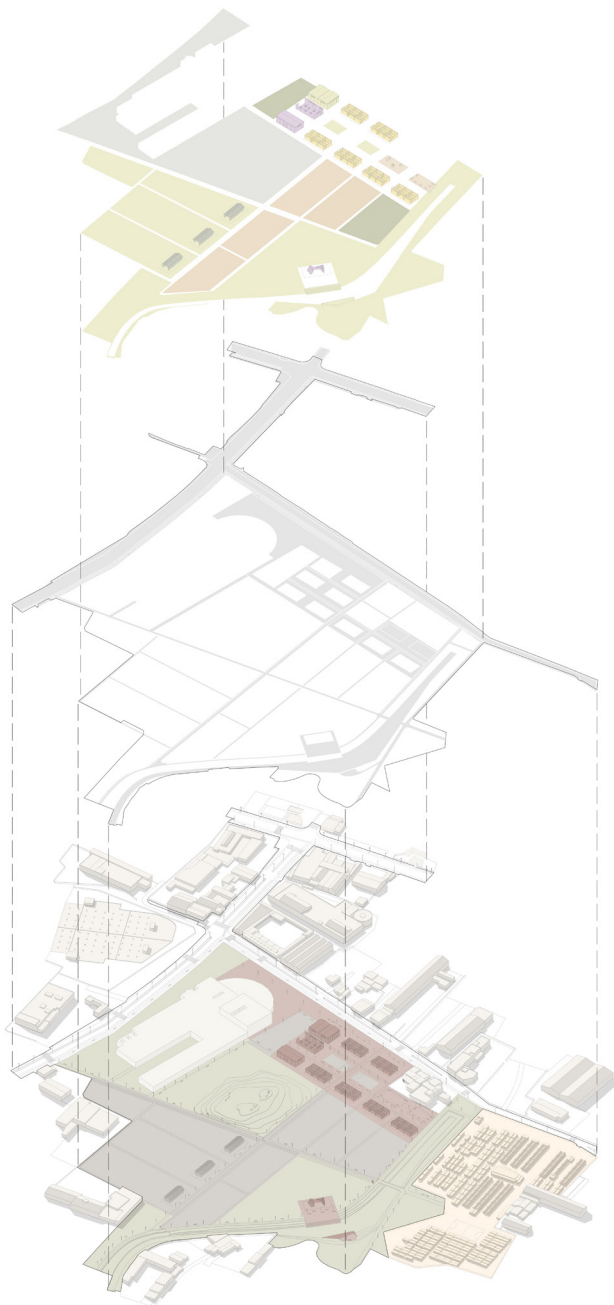
- Primary paths
- Secondary paths
- Stopover areas
- Pedestrian accessibility
- New pedestrian access to Eleonas Refugee Camp

Cycle and Road mobility

- Pavement
- Bicycle lane
- Pedestrian crossings
- Cycle crossings
- Roadway
- Lighting points
- Direction of Travel

Urban Context and demolitions

- Context buildings
- Key existing buildings
 - n.A Eleonas Refugee Camp
 - n.B Commercial Offices
 - n.C Eleonas Metro Station
 - n.D Sain Savvas Church
- Demolitions



Management of areas by stakeholders

- The Scravengers Market
- Agricultural University of Athens
- NBG, National Bank of Greece
- IOM, the UN Migrant Agency
- Project Elea Association
- Private Bodies
- The citizens' committee for the rescue of Eleonas

Management of areas by stakeholders

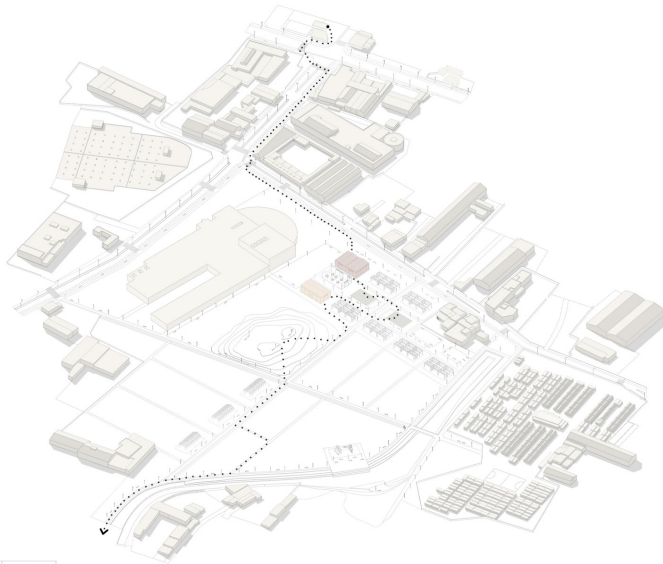
- Municipality of Athens

Macro Areas

- Housing
- Agricultural Production
- Socialization and Commerce
- Entertainment

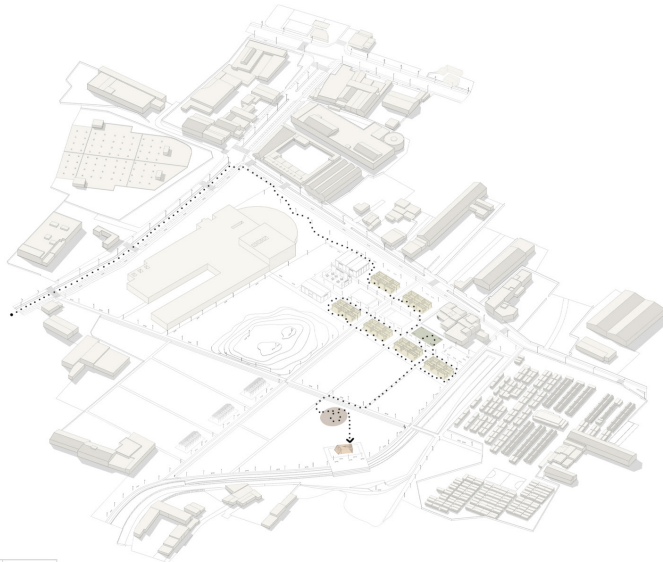
A typical day in Eleonas for a...

Schoolchildren group (Average age: 10 years old)



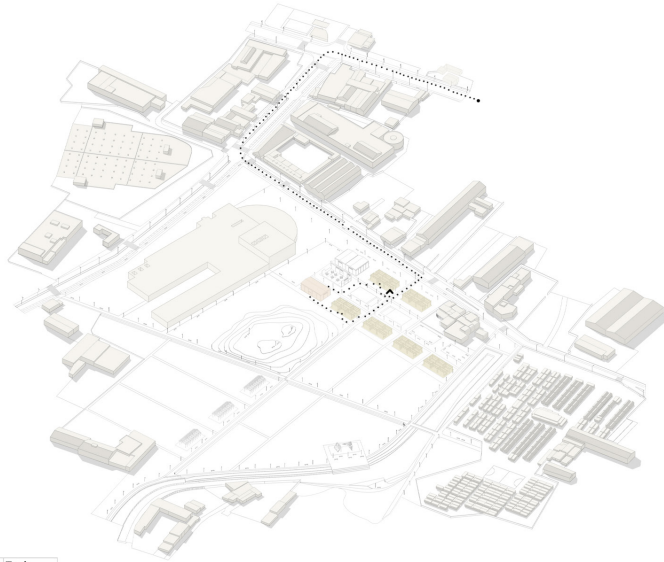
Mode of transport		Time																	
Metro		6.00 - 7.00	7.00 - 8.00	8.00 - 9.00	9.00 - 10.00	10.00 - 11.00	11.00 - 12.00	12.00 - 13.00	13.00 - 14.00	14.00 - 15.00	15.00 - 16.00	16.00 - 17.00	17.00 - 18.00	18.00 - 19.00	19.00 - 20.00				
					Listening to the professor	Learning through practice in the Gardens			Lunch	Walking in the park									

Parents (35 years old) with two kids (7 and 9 years old)



Mode of transport		Time																	
Car		6.00 - 7.00	7.00 - 8.00	8.00 - 9.00	9.00 - 10.00	10.00 - 11.00	11.00 - 12.00	12.00 - 13.00	13.00 - 14.00	14.00 - 15.00	15.00 - 16.00	16.00 - 17.00	17.00 - 18.00	18.00 - 19.00	19.00 - 20.00				
						Looking for unique pieces in the market	Playing at the playground		Picnic in the Park	Coffe break									

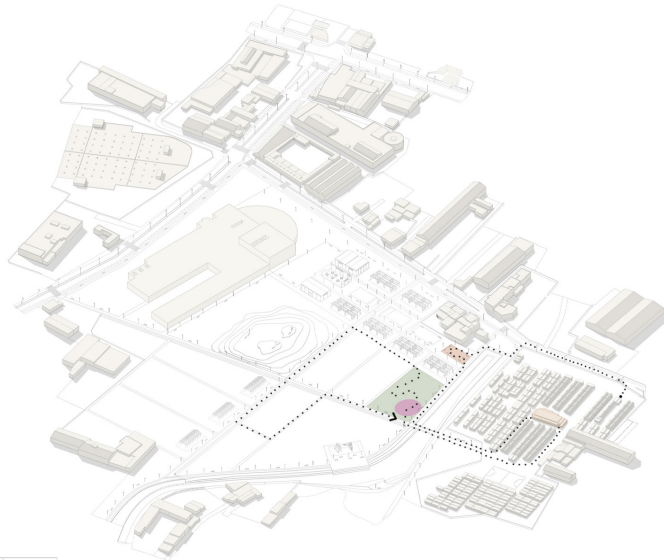
Market Worker (55 years old)



Mode of transport Truck

6.00 - 7.00	7.00 - 8.00	8.00 - 9.00	9.00 - 10.00	10.00 - 11.00	11.00 - 12.00	12.00 - 13.00	13.00 - 14.00	14.00 - 15.00	15.00 - 16.00	16.00 - 17.00	17.00 - 18.00	18.00 - 19.00	19.00 - 20.00
Preparing the stands for the opening			Selling the goods			Lunch	Selling the goods			Closing			

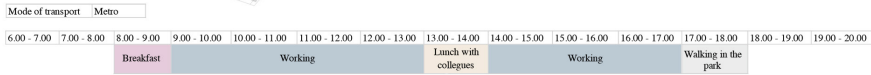
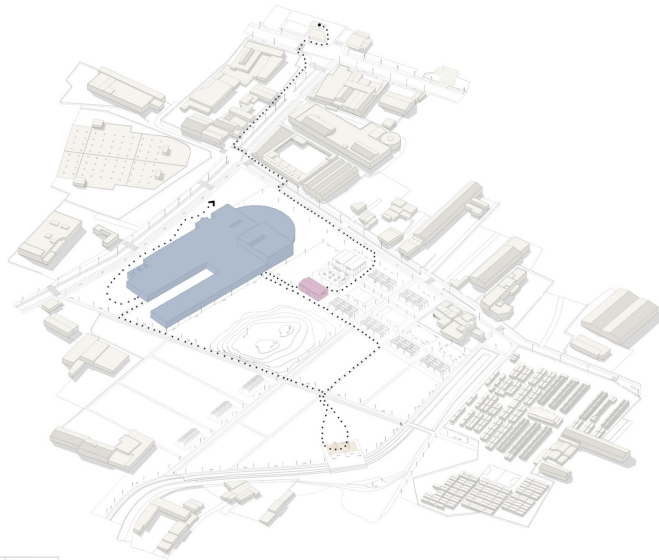
Guest of Eleonas' Refugee Camp (27 years old)



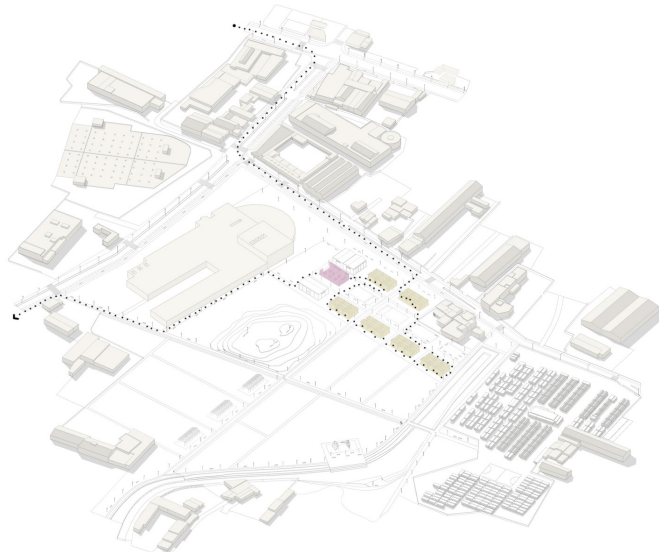
Mode of transport Walking

6.00 - 7.00	7.00 - 8.00	8.00 - 9.00	9.00 - 10.00	10.00 - 11.00	11.00 - 12.00	12.00 - 13.00	13.00 - 14.00	14.00 - 15.00	15.00 - 16.00	16.00 - 17.00	17.00 - 18.00	18.00 - 19.00	19.00 - 20.00
Sharing ideas and talking with friends			Lunch	Workshop	Learnig and working in the gardens			Walking in the park					

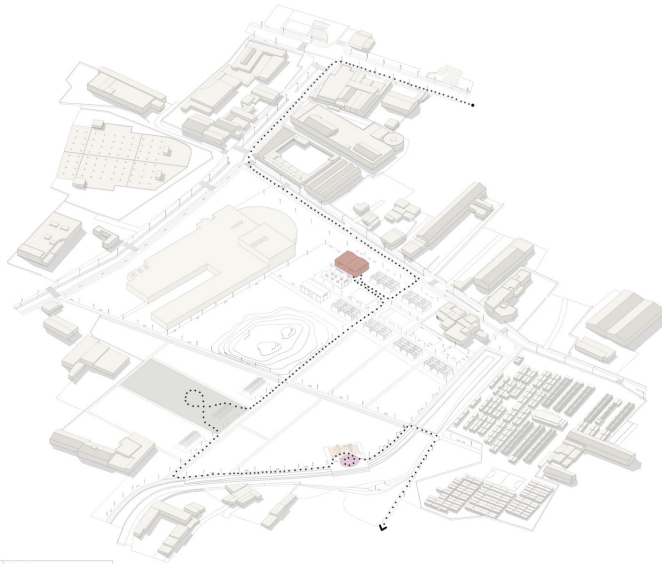
Office Employee (32 years old)



City User (45 years old)

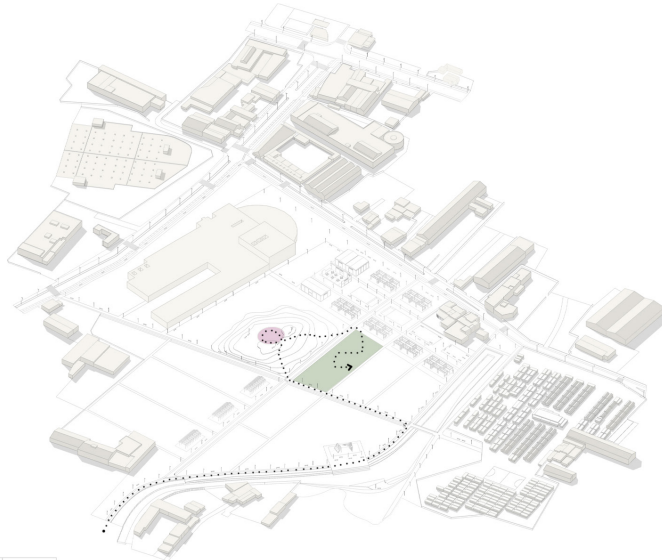


Student of Agricultural University of Athens (22 years old)



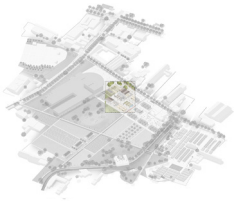
Mode of transport		Electric scooter																	
6.00 - 7.00	7.00 - 8.00	8.00 - 9.00	9.00 - 10.00	10.00 - 11.00	11.00 - 12.00	12.00 - 13.00	13.00 - 14.00	14.00 - 15.00	15.00 - 16.00	16.00 - 17.00	17.00 - 18.00	18.00 - 19.00	19.00 - 20.00						
					Lecture	Experimenting with new agricultural techniques			Lunch with the colleagues	Playing a game of cards	Walking in the Park								

Eleonas' resident (65 years old)



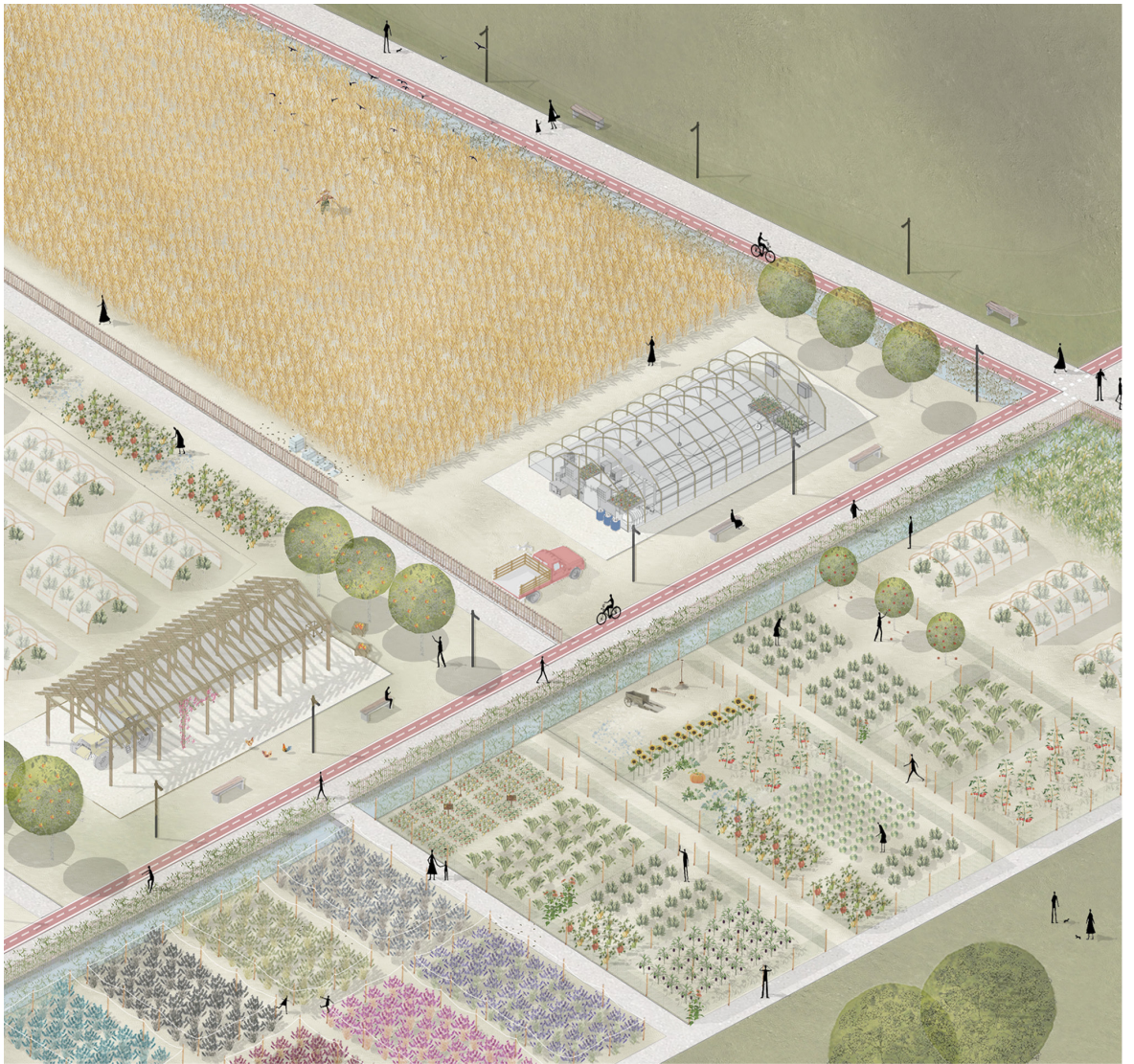
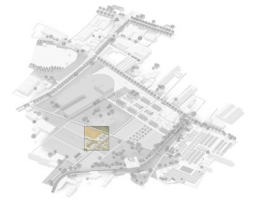
Mode of transport		Bicycle																	
6.00 - 7.00	7.00 - 8.00	8.00 - 9.00	9.00 - 10.00	10.00 - 11.00	11.00 - 12.00	12.00 - 13.00	13.00 - 14.00	14.00 - 15.00	15.00 - 16.00	16.00 - 17.00	17.00 - 18.00	18.00 - 19.00	19.00 - 20.00						
								Walking in the Park	Meeting the neighbor	Watering the plants	Picking tomatoes								

M.6.6 Zooms



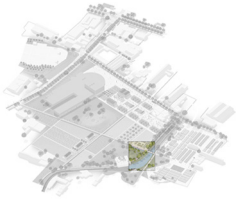
- Lawn
- Concrete Tile
- Timber
- Colored Asphalt
- Farmland
- Concrete Self-Locking

Title: The Market Area
Source: Author



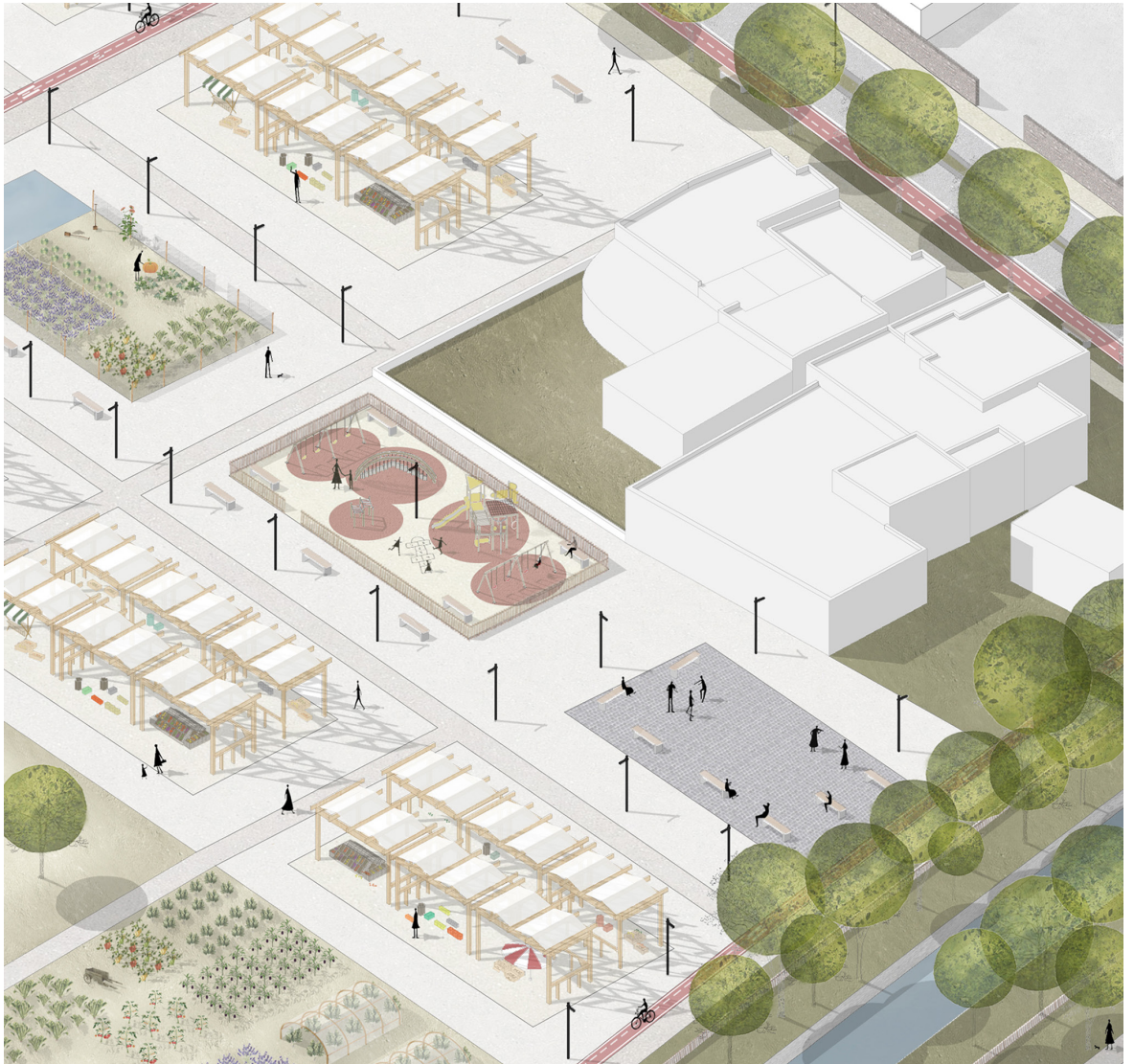
- Lawn
- Concrete Tile
- Timber
- Colored Asphalt
- Farmland
- Concrete Self-Locking
- Water

Title: The Agricultural Area
Source: Author



- Lawn
- Timber
- Farmland
- Water
- Colored Asphalt
- Concrete Self-Locking

Title: The Prophet Daniel
Source: Author



- Lawn
- Concrete Tile
- Timber
- Colored Asphalt
- Farmland
- Concrete Self-Locking
- Water

Title: The Square
Source: Author

M.6.7 Views



Title: *Drinking a cup of Ouzo at the Bar*
Source: Author



Title: *Current Situation*
Source: Author



Title: *Taking a walk in the Market*
Source: Author



Title: *Current situation*
Source: Author



Title: *Walking within the park*
Source: Author



Title: *Current Situation*
Source: Author

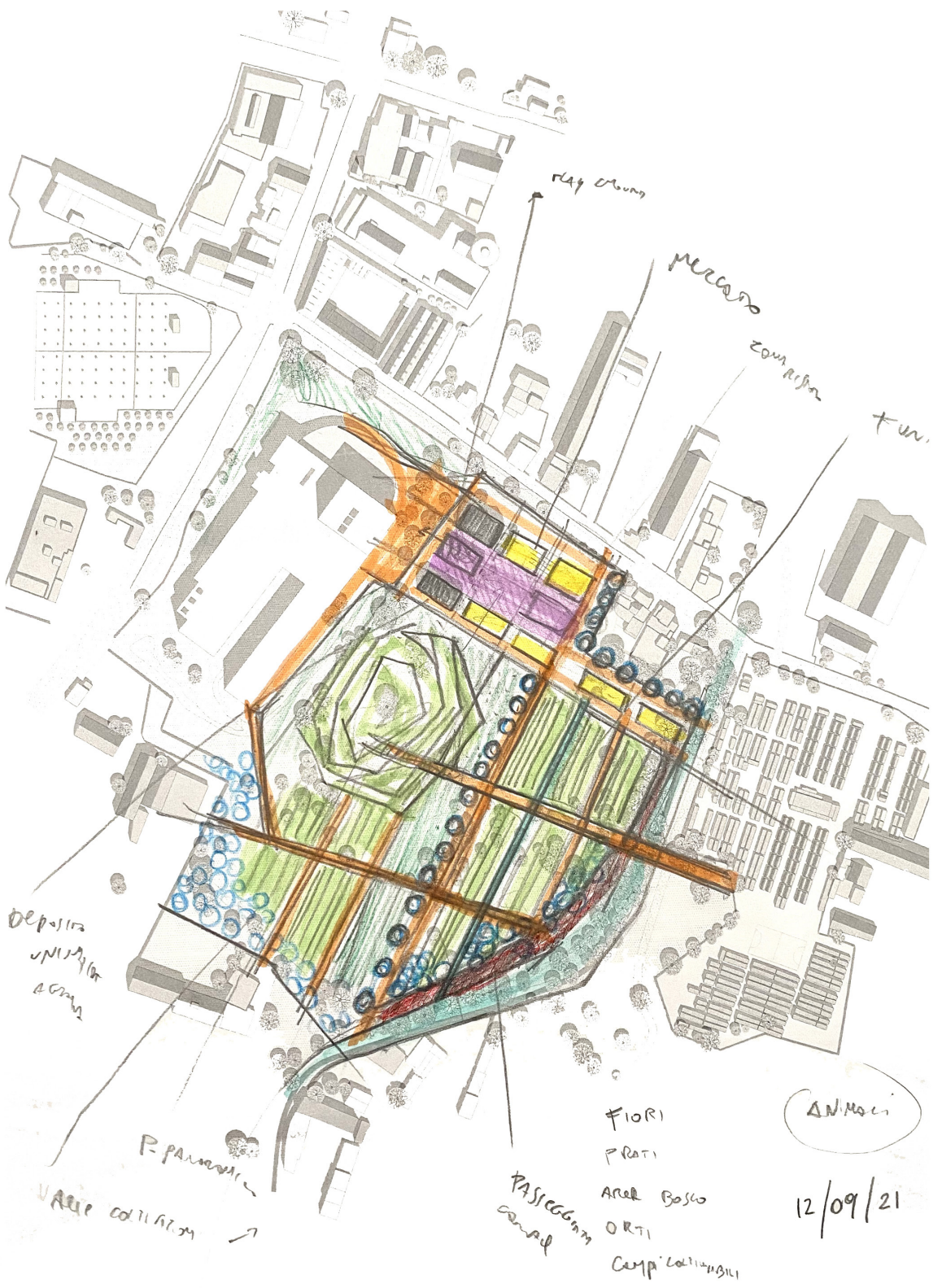


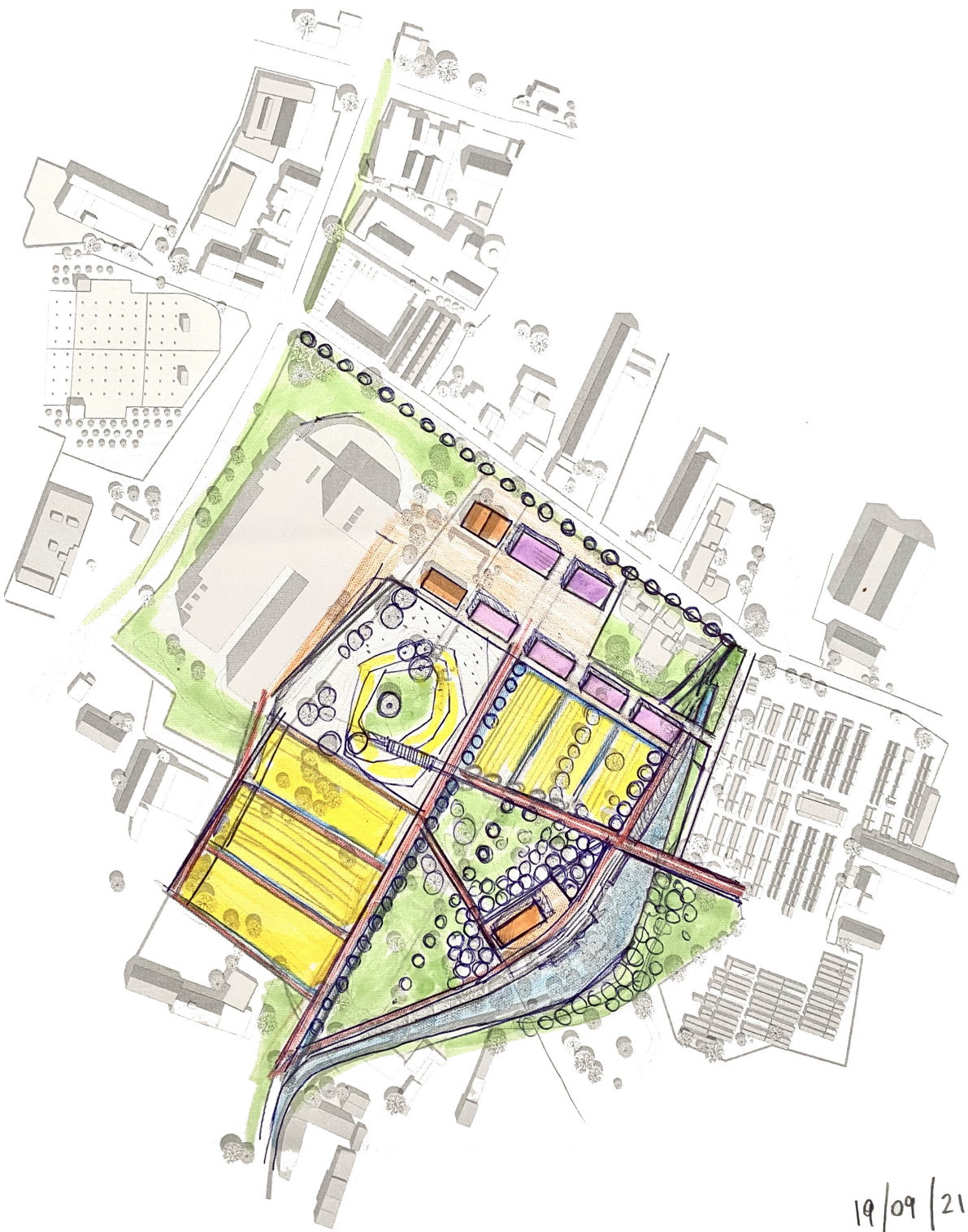
Title: *Sitting by Prophet Daniel*
Source: Author



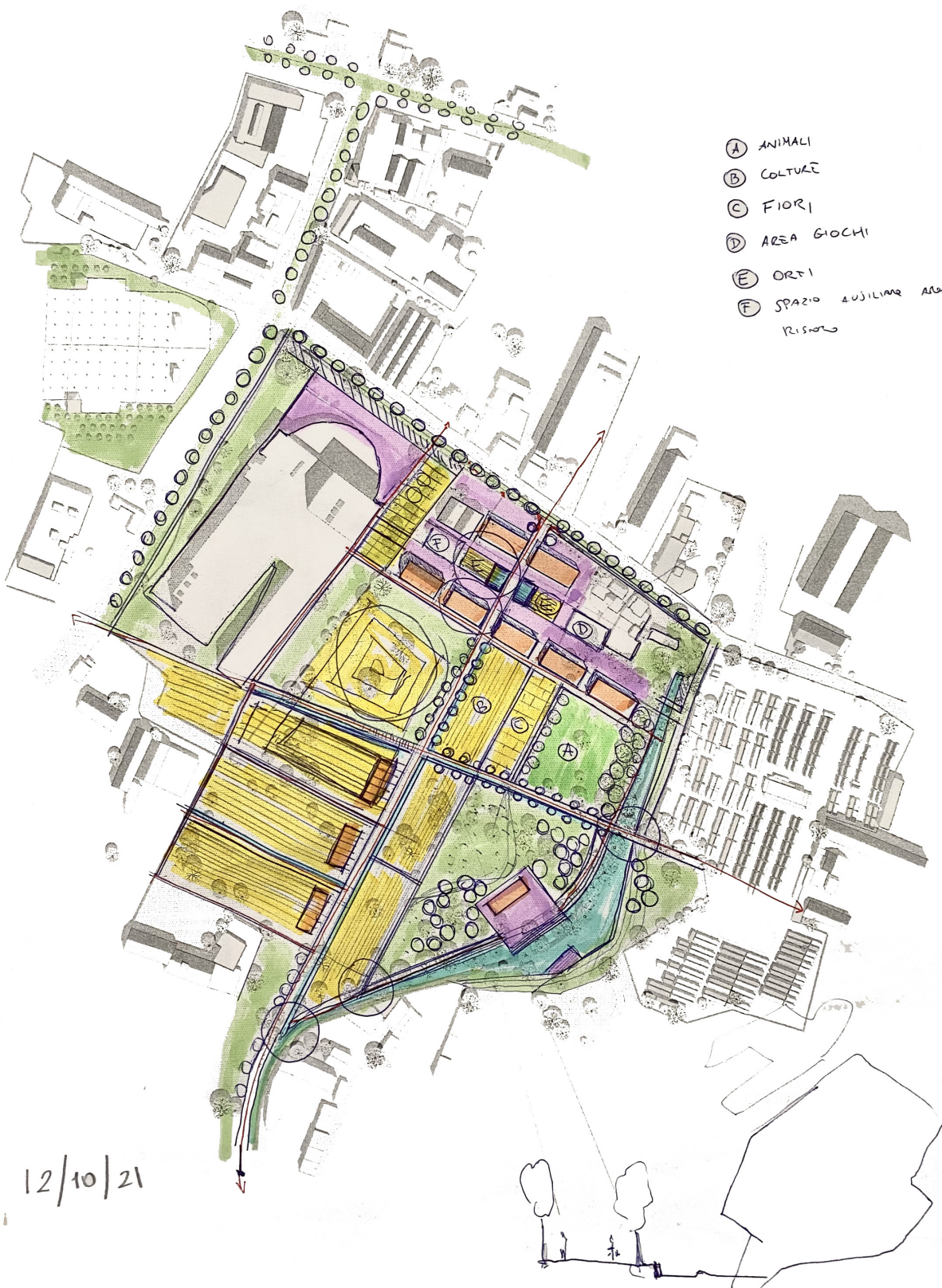
Title: *Current Situation*
Source: Author

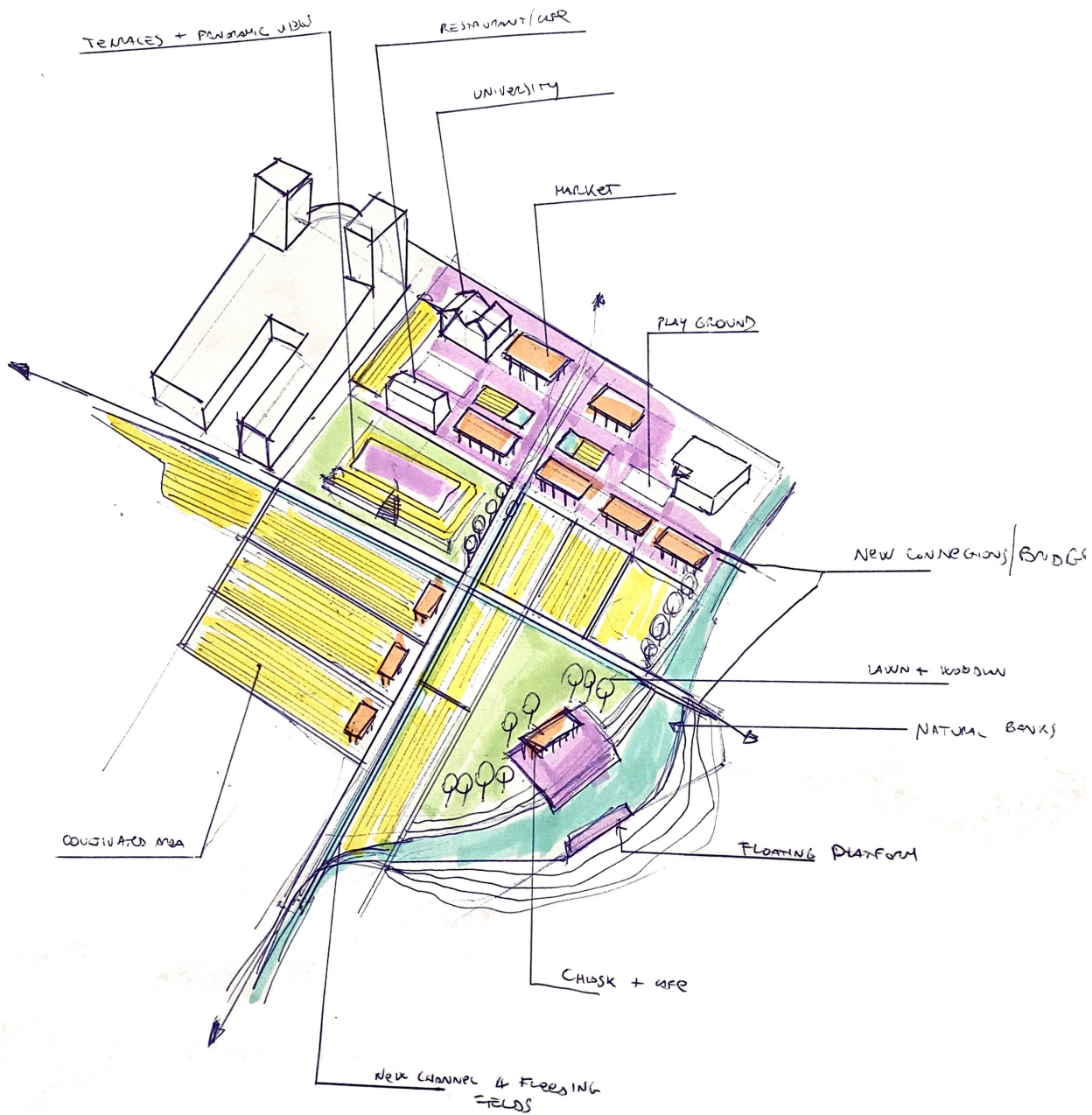
M.7 Sketches





19/09/21





12/10/21

Conclusions

The thesis provides a strategic design solution built around existing productive and social structures specific to the case study. The intent is to relate different people and functions, transforming marginal spaces into inclusive places, to combat the phenomenon of urban poverty and to strengthen the sense of territorial belonging through a scheme of progressive strategic interventions managed directly by local communities and which can then be proposed and applied in future similar experimental projects.

Bibliography

- A Agriantoni C., Bournova E., Papathanassopoulos K., Progoulakis G., Riginos M., Charlaftis and Kremmidas, V., *“Introduction to modern Greek economy history (18th-20th century)”*, Athens, Printed George Dardanos, 1999.
- Anthopoulou T. and Nikolaidou S., *“City growers: the municipal urban vegetable garden of Maroussi”*, Athens, Athens Social Atlas, 2015.
- B Belavilas N. and Vatavali F., *“Green and Open urban Spaces”*, Athens, WWF Hellas, 2009.
- Belavilas N., Vatavali F., Soureli N. and Prendou P., *“Open spaces, urban and suburban green spaces in the metropolitan area of Athens”*, Volos, University of Thessaly Press, 2012.
- Benedict M. and McMahon E., *“Green Infrastructure: Smart conservation for the 21st century”*, s.l., Renewable Resources Journal, 2002.
- Beriatou E., *“Suburban Forests -the green walls of Greek cities: protection and enhancement issues”*, Athens, City Park Forum, 2014.
- Biris K.H., *“Arvanites: The Dorians of Modern Hellenism”*, Athens, s.n., 1960.
- Biris K.H., *“Athens: from the 19th to the 20th century”*, Athens, Melissa, 1966.
- Bonnefoy S., *“Ville et agriculture périurbaine: la trajectoire française”*, s.l., Scienze del territorio, 2014.
- Boudouraki G. and Gitzias A., *“Continuities and Discontinuities in a Changing Post-industrial Landscape”*, Athens, NTUA, 2008.
- Burdett R. and Sudjic D., *“Living in the endless city: the urban Age Project of London School of Economics and Deutsche Bank”*, New York, Phaidon Press, 2011.
- C City Parks Forum paper., *“How cities use parks for green infrastructure”*, Chicago, American Planning association, 2003.
- D Donadieu P., *“Urban campaigns. A new proposal for the landscape of the city”*, Roma, Donzelli Editore, 2013.
- Dritsa M., *“Industry and banks in Greece during the interwar period”*, Athens, Educational Institution National bank, 1990.
- Dubbeling M., *“Cities, poverty and food: multi-stakeholder policy and planning in urban agriculture”*, s.l., RAUF Foundation, 2010.
- E ELSTAT Survey., *“Labour Force Survey”*, Athens, ELSTAT, 2015.
- Evans J. and Jones E., *“Urban regeneration in the UK”*, s.l., Routledge, 2013.

Bibliography

- F Fondazione Robert Hollman., “*Pensiamo, costruiamo e giochiamo...Insieme*”, s.l., s.n.
- FAO, “*Profitability and sustainability of urban and peri-urban agriculture*”, s.l., Agricultural Management Paper, 2007.
- H Heynen N., Kaika M., and Swyngedouw E., “*In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*”, London, Urban Geography vol.28, 2006.
- J Jacobs J., “*The economy of cities*”, New York City, Random House, 1969.
- K Kanetakis G., Beneki E. and Sarigiannis G., “*Agios Iannis Rentis: the historical and urbanistic evolution*”, Athens, AIRM, 2002.
- Karen F. and Queentin S., “*Loose Space: possibility and Diversity in Urban Life*”, New York City, Routledge, 2006.
- Karydis D., “*Urban planning of Athens during the Turkish occupation*”, Athens, NTUA, 1981.
- Kasimis C. and Papadopoulos A. G., “*Family farm and capitalistic development in Greek Agriculture: A critical review of the literature*”, s.l., Ruralis, 1997.
- Kasimis C. and Papadopoulos A. G., “*The De-Agriculturisation of Greek Countryside: the changing characteristics of an Ongoing Socio-economic transformation*”, Aldeshot, Ashgate, 2001.
- Koàcs Z., “*Cities between Competitiveness and Cohesion: discourses, realities and implementation*”, s.l., IJURR, 2009.
- Kotsikou E.A., “*De-fragmenting Athens: Drosscape as a device for integration between the metropolitan and the local scale*”, Delft, TU Delft, 2010.
- L Leontidou L., “*A place of hope and architectural initiative: Informal work and residence in the refugee neighbourhoods of Nikaia*”, Athens, Livani Publications, 2002.
- Leontidou L., “*Beyond the Borders of Mediterranean Cities: The Mediterranean City in Transition*”, Cambridge, U.P, 2006.
- Lentidou L., “*Cities of silence. Labour settlement of Athens and Piraeus, 1909-1940*”, Athens, PIOP, 2013.
- Lohrberg F., Licka L.; Scazzosi L. and Timpe A., “*Urban Agriculture Europe*”, Berlin, Jovis, 2020.
- Lolos S.; and Papagiannakis L., “*Greek industry in the European Community*”, Athens, Academy of Athens, 1993.

Bibliography

- L Loukopoulos D. and Kosmaki-Loukopoulos P., *“Athens 1833-1979: the dynamics of urban growth”*, Boston, MIT, 1980.
- M Mandrioli M., *“Nove Miliardi a Tavola, Droni, big data e genomica per l’agricoltura 4.0”*, Ozzano Emilia, Zanichelli, 2020.
- Mantouvalou M., Skoufoglou M. and Paliou X., *“The Historic Centre of Athens”*, Athens, Melissa, 2011.
- N Nazzaro C., *“Rural development, multifunctionality and diversification in agriculture”*, Milan, Franco Angeli, 2008.
- NTUA., *“Commercial triangle of Athens City Centre”*, Athens, NTUA, 1989-1991.
- NTUA., *“Study of Recording and Sustainability of its Industrial Activities in the Olive Grove”*, Athens, NTUA, 1992.
- NTUA., *“Eleonas Area Development Agency Design”*, Athens, NTUA, 1997-1998.
- NTUA., *“The planning principles for the Metropolitan Green Park of Athens Elliniko Airport”*, Athens, Geografie, 2011.
- O Opitz I., Berges R. and Priorr A., *“Contributing to food security in urban areas: differences between urban agriculture and peri-urban agriculture in the Global North”*, s.l., Agriculture and Human Values, 2016.
- P Papageorgiou M. Venetas, A., *“Three gardens, two visions and a presence in Attica land, the Historical and Ethnological Society of Greece”*, Athens, Menandros, 2016.
- Philippides D., *“Was Le Corbusier guilty or not? Architecture in Greece 21”*, s.l., s.n., 1987.
- Polychronopoulos D., *“Urban voids: the void as a place”*, s.l., ARCHITECTONES, 2006.
- R Ropaitou Z. and Tsapareli., *“Eleonas of Athens, the place and its people in the passing of time”*, Athens, Editions Filippoti, 2006.
- S Salvati L., *“Neither Urban or Rural: Urban growth, Economic functions and the Use of Land in the Mediterranean Fringe”*, London, Esmerald, 2016.
- Sapountzaki P. and Wassenhoven L., *“Spatial discontinuity and fragmentation of urban areas - The example of Eleonas of Athens and Barcelona”*, s.l., V Biennial of urban planners, 2003.
- Sapountzaki P. and Wassenhoven L., *“Spatial Discontinuities and Urban Transformation: The example of Eleonas in Athens”*, Siena, ATINER, 2004.
- Sconocchia A. and De Angelis P., *“Bonifica, recupero ambientale e sviluppo del territorio: esperienza a confronto sul fitorimedia”*, s.l., RemTech Expo, 2018.

Bibliography

- S Secchi B. and Vigano P., “*Le ville poreuse, a project for the great Paris and the metropole de l’après-Kyoto*”, s.l., Metis Presses, 2011.
- Soja E., “*Postmetropolis, Critical Studies of cities and regions*”, Oxford, Blackwell, 2000.
- Sotiriou A.G., “*The oils of Athens in Diary of Travel Association*”, Athens, ESTIA, 1926.
- v Vaiou D., Mantouvalou M. and Mavridou M., “*Social dynamics and urban development space. Readings in Greek town planning*”, Athens, NTUA, 2009.
- Van Kamp I., Leidelmeijer K., Marsman G. and Hollander A., “*Urban environmental quality and human well-being: towards a conceptual framework and demarcation of concepts; a literature study*”, s.l., Landscape Urban Plan, 2003.
- Vounatsis P., “*The problem of the Olive Grove and Industrial Activities that Load with liquid waste*”, Athens, University of the Aegean, 2009.
- w Wassenhoven L., “*Urban Organization and Reform of the Eleonas Area, research program*”, Athens, NTUA, 1922.
- WWF HELLAS., “*Fire in North Attica*”, Athens, WWF HELLAS, 2009.

Sitography

- A A&A ARCHITECTS: <http://www.aa-agiostatitis.gr/>
- Anthopoulou T. and Nikolaidou S., “*City growers:*”, 2015: <https://www.athenssocialatlas.gr/en/article/city-growers/>
- Aureli P., Giudici M. and Issaias P., “*From Dom-ino to Polykatoikia*”, Domus, 2012 : <https://www.domusweb.it/en/architecture/2012/10/31/from-dom-ino-to-em-polykatoikia-em-.html>
- B Bedetti R. and Protti C., “*Parco inclusivo partecipato*” <http://www.parchipertutti.com/parco-libera-tutti-un-parco-inclusivo-partecipato-a-certaldo/>
- C Committee for the rescue of Eleonas: <https://elaionas.wordpress.com/>
- E EPT’s papers: <https://www.ertnews.gr/eidiseis/ellada/epesan-oi-ypografes-gia-to-elliniko-ependysi-8-dis-eyro/>
- European Forum of Official Gazettes: <https://op.europa.eu/en/web/forum/greece-oj1>
- G Greekscapes: <http://www.greekscapes.gr/index.php/2010-01-21-16-47-29/landscapes-cat/34-attica/100-elaionas-athina>
- H Hellenic Statistical Authority, 1991: <https://www.statistics.gr/el/statistics/-/publication/SAM05/1991>
- Hellenic Statistical Authority, 2001: <https://www.statistics.gr/el/statistics/-/publication/SAM05/2001>
- Hellenic Statistical Authority, 2011: <https://www.statistics.gr/en/2011-census-pop-hous>
- K Kritikou I. and Myrillas M., “*Greece’s only refugee camp*”, 2015: <https://www.aljazeera.com/gallery/2015/9/30/greeces-only-refugee-camp>
- L Leontidou L., “*Slum of Hope*”, 2017: <https://www.athenssocialatlas.gr/en/article/slums-of-hope/>
- M Maurice A., “*Dandaji Daily Market*”, https://www.archdaily.com/922161/dandaji-daily-market-atelier-masomi/5d41f0f5284dd1d5f500052d-dandaji-daily-market-atelier-masomi-photo?next_project=no
- Municipality of Athens: <https://www.cityofathens.gr/en/>
- N NASA, 2004: <https://visibleearth.nasa.gov/images/4739/athens-olympics-sports-complex>
- Novoville: <https://novoville.com/adopt-a-tree/>
- NTUA: <https://dspace.lib.ntua.gr/xmlui/>

Sitography

- P** PeakVisor: <https://peakvisor.com/park/mount-parnitha-national-park.html>
- Project Elea Association: <https://projectelea.org/>
- S** Stavros Niarchos Foundation: <https://www.snfcc.org/en/snfcc/stavros-niarchos-park>
- T** Triantis L., “*The spatial planning for Athens*”, 2017: <https://www.athenssocialatlas.gr/en/article/spatial-planning/>
- U** University of West Attica: <https://www.uniwa.gr/en/the-university/infrastructure/ancient-olive-grove-campus/>
- Unnamed., “*Plato Academy is highlighted – The archaeological Museum of Athens is created*”, 2021: <https://www.athina984.gr/en/2021/04/15/anadeiknyetai-i-akadi-mia-platonos-dimioyrgeitai-to-archaiologiko-moyseio-athinas/>
- W** WWF HELLAS: <https://www.wwf.gr/>

