



WATERFONT DEVELOPMENT MANAGEMENT IN GREECE

Exploring the case of "Lipasmata" in Piraeus, towards alternative approaches

> Themistoklis Papadopoulos 4521145

Master of Science Graduation Thesis

Managment in the Built Environment | TU Delft July, 2014

Colophon

P5 Graduation Report

Waterfront Development Management in Greece. Exploring the case of "Lipasmata" in Piraeus, towards alternative approaches.

Delft University of Technology

Faculty of Architecture and the Built Environment

Master's programme in: Architecture, Urbanism and Building Sciences

Master Track: MSc. Management in the Built Environment (MBE)

Themistoklis Papadopoulos

Student number: 4521145

Graduation Laboratory

Next Generation Waterfronts.

Redeveloping post-industrial areas into sustainable zones of innovation.

Ist Mentor

Tom Daamen (UDM)

2nd Mentor

Erik Louw (OTB)

External Examiner

Kees Dol (OTB)



Delft, 7 July 2017

I. Preface

The present thesis report is the final result of a graduation research, conducted during the last year of the Masters of Science in Management in the Built Environment (MBE) of TU Delft's Faculty of Architecture and the Built Environment. The studied research evolved within the boundaries of the Next Generation Waterfronts graduation laboratory of the MBE department. The main goal of the study is to explore the current waterfront development practice in Greece, as to understand the motives of managing (re)development projects during the current socio-economic context and create the conditions for alternative development approaches. By investigating the specific waterfront area in the port of Piraeus called "Lipasmata" as the main case study, the research focuses on drivers and barriers of the current development process in the country.

My interest in urban development had already been intrigued several years ago, during my studies in Architecture in the city of Turin and evolved further during the past two years in the Netherlands. In both cities, urban development is used, especially the last decades, as a tool towards socioeconomic growth. On the contrary in Greece, there are very few examples of urban development projects. Especially, during the financial crisis such projects are mostly seen as expenditure rather than a long-term investment, asset for the future.

During my studies, many times I tried to understand the reasons behind such opposing attitudes and questioned why such opportunities are not considered a way of adding value to the country and the society. While trying to answer such questions, I decided to dedicate this final part of my studies in researching the potential of such real estate developments in my home country. Since then, this thesis has been an enlightening experience in understanding these from an academic perspective, and functioned as an essential step for my personal, academic and professional development.

At this point, I would like to sincerely thank my first mentor, Tom Daamen, for his constant support, the constructive discussions and guidelines during this long period of study. His interest in my work and his determination to pass on his knowledge and experience, made this academic step even more exiting, and at the same time inspired me to complete my work. I also want to thank my second mentor Erik Louw, whom insights, remarks and considerations gave me a further insight and helped me complete this thesis project, by opting to achieve a higher academic level and validity.

Additionally, I would like to thank my friends, who during these two years, were supporting me in periods of ups and downs and made this experience in Delft even more unique and exciting. Finally, a special thanks goes to my family who is supporting me all these years, and besides the distance, is always there to listen to my preoccupations and give me strength to continue my journey.

Having profited myself from reading the work of fellow students as well as researchers, I hope that the content of this thesis will also help others into exploring this field further and contributing to its advancement.

> Themistoklis Papadopoulos, 07 July 2017

II. Abstract

The declining port/industrial activities near the urban structure of cities generate new challenges for contemporary societies. Among others, these challenges interest the desolation of urban districts and the creation of large urban voids, one of the major problems affecting, nowadays, the Greek cities. This phenomenon is witnessed in a larger extent during the last years of the strong socio-economic recession, particularly in coastal zone areas. Therefore, currently, there is a large amount of areas waiting for regeneration projects in order to be reconnected to the cities' built environment and society. Despite the large amount of such undeveloped areas, there is a lack of formal knowledge and experience in implementing regeneration strategies in Greece. For that reason, this research is seeking to identify and understand the motives, in terms of drives and barriers, of opting for (re)development schemes by focusing on an exemplary brownfield waterfront area in the seaport city of Piraeus, called "Lipasmata".

The purpose of analysing this case is to illustrate the conflicts between the stakeholders committed to the area, and the plans made until now, in order to examine the opposing views for the area's future. Additionally, based on the main case study's findings and the knowledge from the international practice of waterfront development, it is explored the possibility of implementing alternative strategies as a solution for the (re)development of the area. In particular the solution is searched within the boundaries of the community-orientated development approach, which has flourished in challenging socio-economic context, as the one in Greece.

The expectations of this research are to contribute to the academic knowledge and a policy debate regarding the management of waterfront developments in the country. This will help policy-makers and other stakeholders search for more effective solutions for managing and implementing waterfront development projects.

Keywords: Waterfront development, urban governance and planning, regeneration strategies, community developments Greece.

III. Summary

Introduction

Nowadays, the society is changing in a radical way and cities are growing fast. Some of them are growing denser others looser. The current socio-economic recessions force cities to adapt and innovate in order to develop and be resilient. In a continuously changing environment, port cities are called to face such particular character of waterfront areas. Many port facilities must undergo (re)development projects due to several changes in port land use, out-dated facilities or other factors. Such projects seek to enable the sustainable development of waterfront areas and create vibrant places with diversified operations and activities (Huang et al., 2011), by giving to cities opportunities to grow and innovate. The operation of (re)developing waterfront areas for many academic researcher's is perceived and described as a form of urban regeneration that aspires to give again life to places that for many years are seen as barriers for the city commonly known as brownfield areas. Urban development as a notion concerns the development or improvement of urban areas by operating in their built environment. On the other hand as an action in practice interests more complicated procedures. Operating in the built environment is a long-term process seeking to solve urban problems and create value for the city and the society. Such operation results to be very dynamic and complex by definition since it involves different relationships and perspectives that need to be combined towards a shared result (Daamen, 2010).

Although urban waterfronts represent an important morphological feature of Greek cities (Gospodini, 2001), in the country there is not much research done regarding the creation of (re) development strategies and projects for revitalizing abandoned waterfront areas. The minimum formal knowledge related to the topic is expressed also in the lack of experience, in terms of ability to propose and implement (re)development schemes provoked by the incapacity of collaboration between local, national and port authorities (Gospodini, 2001). The policies introduced by local authorities are limited in the creation of design projects, which interest the only redesign of episodic and fragmented parts of areas or the restoration of former industrial buildings, described as "over-localized" design approach. As a result, such projects, by focusing only in specific parts of the area, they are not taking into consideration the creation of a unique project to enable the whole area.

Therefore, the research addresses the topic of waterfront development as a way to create new transformation opportunities. Such opportunities are not only related to the physical space and the redevelopment of the degraded built environment but are related also to the socio-economic conditions of a greater area. The study by analysing a specific case in Greece, the former industrial area of "Lipasmata" in the port of Piraeus, is seeking to explore and understand a difficult reality. The aim of the research is two-fold. On one hand, it aspires to explore the current urban development process in Greece. This is achieved by focusing on the practice's drawbacks and motives. On the other hand, the research seeks to create the conditions towards the formulation of the strategy for the future and the governance of the development practice. The explored strategy concerns, mainly, steps to follow in order to give a potential solution to the current practice.

Such steps are explored based on alternative development approaches as presented in the international development practice and concerns mainly the community-led development approach.

In relation to the research two-fold goal, the leading research question is divided in two parts as well. This will help to have a clear overview of the problem while creating new conditions for the future, in terms of new academic knowledge and guidelines for the urban development practice. These two questions are formulated, in such way to depict the analytical and empirical character of the research as well as its operational one, by proposing a step-by-step plan towards a possible solution to the stated problem.

Hence, the main research questions are established as follows:

- What are the main drivers and barriers of managing waterfront redevelopment projects in Greece?
- How can a community-led waterfront development strategy for "Lipasmata" area be implemented in order to create new transformation opportunities?

Methodological framework

Considering the research's aim and the leading research question introduced before, different kinds of data analyses need to be conducted in order to obtain a satisfactory final result. Therefore, a qualitative research strategy is mainly used to ensure the effectiveness of the main research's outcomes (Bryman, 2012). In order to combine the theoretical knowledge with the empirical research a case study analysis has been conducted in order to explore the complex character of "Lipasmata" waterfront area in the port of Piraeus. In order to execute the case study analysis the triangulation of data is used as a way to validate in the most appropriate way the case study results. Triangulation, involves the use of more than one research methods-techniques or source of data in the study of social phenomena (Bryman, 2012). The main methods used are: literature review, document review and analysis, site observation, semi-structured interviews and SWOT analysis.

Background information

Greece is a country full of waterfront areas due to the developed port and industrial activities. Urban waterfronts represent an important morphological feature of Greek cities (Gospodini, 2001). Despite this fact, in the country there is not much research done regarding the creation of (re)development strategies and projects for revitalizing abandoned waterfront areas. This limitation is also underlined by Gospodini (2001), who suggests that the lack of experience, in terms of ability to propose and implement (re)development schemes is provoked by the incapacity of collaboration between local, national and port authorities. She argues that the policies introduced by local authorities are limited in the creation of design projects that concern the only redesign of episodic and fragmented parts of areas or the restoration of former industrial buildings, described as "over-localized" design approach.

In addition to the above-mentioned considerations, (Zazzara et al., 2012) mention that another problem of the current waterfront development practice is that in Greece, there is a tendency of creating monothematic development projects, which is not in line with the findings of the literature regarding the revitalization of the areas towards a sustainable urban development. This approach of transforming urban areas is in contradiction with the international experience in the field of regeneration strategies (Gospodini, 2001). The existing literature in the field of urban planning and design is arguing that opting for more mixed-use plans integrated with public and leisure activities is crucial in order to create successful development plans (D.Adams & Tiesdell, 2012) for the revitalization of the waterfront areas and the growth of the entire city/society.

In relation to the process of urban practice, on the other hand, Nagy et al. (2014) state that the current practice in Greece present several drawbacks. Such drawbacks are influencing the outcome of the (re)development projects by creating long-term process. The last long (re) development process is mainly related to several conflicts at the local and national level, because of the current centralized spatial and urban planning system, in which the central government plays the main role. The spatial planning of Greece is described as a "planning system: [with] multiplicity of laws and regulations, predominance of a centralized, regulatory and hierarchical planning style" (Nagy et al., 2014). The multiplicity of laws and regulations do not give any added value to the planning process but on the other hand create a lot of problems.

Greece as part of the Southern Mediterranean countries is mainly governed by the Napoleonic planning system, which uses abstract legal norms and enjoys a greater theoretical debate. The degree of centralization in these cases is extremely related to the economic prosperity of the country. In cases of economic recession a more centralised approach is likely. Although there is this categorization of the countries between the applications of planning systems and the implied governance, there are several trends in national governmental approaches, which deviate from the general lines. For instance, in the Southern European countries, there is a tradition of alternative informal mechanisms and greater flexibility in conforming to the law. This means that in countries such as Italy or Greece, it is very likely to come up against a disparity between the formal laws and regulations and implementation. More precisely in Greece, this more "flexible" attitude provokes a series of discussion and more bureaucratic inertia since it results to a high fragmentation between laws and implementation and increases more the complexity of creating development plans (Newman & Thornley, 1996).

Discussion on research findings

Based on the case study analysis, which approached the area of "Lipasmata" through a series of parameters, several initial conclusions are drawn regarding the development character of the area, its current situation and its programmatic role through the longitudinal examination of the different planning levels. The main characteristics that give to the area a special identity and a differentiated role are its connection with the industrial zone of Attica, with similar buildings and equipment, the strong elements of its coastal natural landscape and the dominant uses prevailing in the surrounding area housing, manufacturing, crafts-industry, retail and services. New potentialities

are presented thanks to the development of new facilities in the port area while the willingness of the city to enter more dynamically to the international competitive landscape brings new horizons for the possible future use of the area (Piraeus Municipality, 2017; R.S.A., 2011).

This first approach to the case study underlings the complicated ownership status of "Lipasamta", which involves several private and public parties. From the stakeholders analysis is witnessed the power of the several landowners to the strategy implementation process. As presented by the plan analysis most of the parties involved have their personal perspectives on the area while their interests are also emphasized in their proposals and the proposed development methodology/approach. Private parties are targeting to more profitable development to maximize their potential revenues and profits while the public administration seeks of a more social-orientated development for the citizens' good. This leads on the creation of conflicts between the main bodies of power something that is supported by the multiple plan proposals during the last years. Main drivers of this incapacity are the opposing opinions mainly related to the development approaches to be used for instance bottom-up vs. top-down approach as illustrated in the plan analysis. The main differences are based on the character of the area after the completion of the project. This creates an even complicated decision-making process, and additional delays on the planning of the development and the initiation of any activities.

Based on the interviews' results the possible future must be search in between those opposing views. From one side the private owners must collaborate with the public ones in order to achieve a consensus based on a win-win situation for both sides. On the other side the public authorities (mainly the Municipality) need to understand that the size of this area does not permit the creation of only public activities (Metropolitan Park as stated) without any economic activities as resources to support the project during the construction and after during the maintenance phase.

In addition to the previous issues, other institutional drawbacks are also influencing the process. Such issues interest the low power of local administration and the interventional character of the State in any initiatives for development processes. The out-dated legal framework based on the centralized planning system of Greece is a crucial aspect in need of a structural change.

Further complications on an institutional level are created due to the multiple laws and regulation that governs such big development projects. The several laws including planning regulation, building laws etc., as introduced by the interviews, influence the outcome of the project and create additional complexity to the process. Towards this direction, the obsolete General Land Use Plan of the extensive area steers to further discontinuities in the proposed plans. As presented in the plan analysis, multiple activities and land uses with different character and target group orientation are proposed and make difficult the discussions for a unique general strategy. A revision of the current Plan needs to be taken into consideration in order to limit or promote the stakeholders ambitions to the area.

As a consequence of the multiplicity of laws and regulation and the interventional character of the State in the process there is witnessed a bureaucratic attitude of the public domain, which imply

long-term process that consequently discourages the attraction of investments for the area and the implementation of any development plan. In this way the existence of multiple public offices do not facilitate the development procedures, while creating additional frictions to any private initiative.

Answering the research questions

This research has addressed the topic of waterfront area development as a way to create new transformation opportunities. Such opportunities are not only related to the physical space and the redevelopment of the degraded built environment but are related also to the socioeconomic conditions of a greater area. The study by analysing a specific case in Greece, the former industrial area of "Lipasmata" in the port of Piraeus, tried to explore and understand a difficult reality. This reality considers the incapacity of executing big scale regeneration projects as well as the current socio-economic conditions of the country, which was worsened the last decade due to the financial crisis.

Drivers and barriers

By considering the case of Greece it was possible to analyse main obstacles regarding the current planning practice and define the possibilities for future development. In answering the main research question, the main possibilities, in order to create waterfront development strategies for the area of "Lipasmata" are also its limitations. More in detail the continuous creation of brownfield areas, in relation to its geographical position, is a possibility of creating new regeneration projects beneficial for both the population as well for the whole country. Such projects can create new financial and development opportunities by introducing again Greece to the competitive European landscape.

A resulted from the case study analysis and the semi-structures interviews with the several experts the main limitations as described can be divided into two categories. The first is related to the development process and the way of their management, while the character itself of the regeneration projects influences the second category. The main issues referred in the first category are related to institutional issues that affect the process. Those are related to the obsolete land use plan, the complicated legal framework with the multiple regulations and laws implying long-term processes, the incapacity of the public authorities to facilitate as much as possible the procedures of creating and adopting a transformation plans, the difficulties of the public sector to attract and manage private investment or funds from the European Union.

Other limitations, defined also as "strategic barriers, interest mainly the current practice of creating development projects as well as in the Greek planning system, which can be defined as out-dated.

These possibilities and limitation can be described in the following main points:

- The ways of governance of such challenging process (power to local authorities);
- The multiplicity of stakeholders involve and the way that they collaborate;

- The involvement of the civic to the creation of the best solution;
- The creation of economically attractive and advantageous solutions;
- The contribution of the development to the economic and social growth of the city (social inclusiveness, creation of job opportunities);
- The contribution of the development to improve the city's outlook (competitiveness);
- The use of a poly-thematic development schemes.

Community-led development

In relation to the second research question and the possibility of exploring alternative approaches towards the (re)development of the area, a first step is to understand the current governing "Lipasamta". As introduced by some of the interviewees during the case study analysis the previous strategy for "Lipasmata" was mainly related concentrated in top-down development approaches based on the initiatives of the key private landowners (NGB, LAFRAGE). Such initiatives interested mainly real estate developments and an essential number of new economic activities towards the profitability. In parallel local authorities or other public institutions proposed several plan that where more orientated to public values. Such plans proposed mainly the creation of parks, public services or also educational activities with a low amount of constructions and economic activities, by targeting to a more bottom-up process. This controversy in the are proposing approaches lead for a long period of time to delays and therefore the area remains still undeveloped. This way of operating is considered by the experts as inefficient, while they stated the importance of an alternative approach targeting to the society.

In this direction, one of the interviewed experts Grozopoulos (2017) stated that given the current socio-economic conditions, in order to create an alternative strategy for the implementation of a development project the key actors need to open their minds and learn some lessons based on previous successful examples of participatory planning, collaborative approaches or even bottom-up practices. Therefore the community-led development approach could be a solution for a new strategy creation.

The current practice in Greece and consequently the current strategy of "Lipamsata" are not aligned with the planning culture of such more collaborative development approaches. The main problem is of course related to the current rigid State-drive planning system and the discontinuity of laws and regulations that limits the potential initiative of local authorities or other stakeholders. Moreover, another limitation of this system in relation to the community-led approaches is the marginalisation of the interests and the limited power of the civic sector. Citizens or other important stakeholders (experts, students etc.) are neglected from the decision-making process, while they could contribute towards a more innovative outcome. Additionally, nowadays, there is a tendency, confirmed also by the academic literature, for the stakeholders to see such brownfield areas a whole. This characteristic is part of a more integrated top-down development approach and thus not aligned to the plot-by-plot planning of a community-driven strategy.

Finally, in order to opt for such approach in the Greek reality, several structural changes based on institutional levels need to be evaluated. There is a need for shifting power in public administration as to give more power to local authorities (municipality) and to enable the participation of the

civic sector in the decision-making process. Therefore are proposed the following steps for "Lipasmata" as potential action plan for the implementation of community-driven initiatives:

- Launch the community-led program by informing the citizens and other stakeholders;
- · Identify the key actions based on community resources;
- Understand and inform the community;
- Enable and engage the communities to take part on the discussions;
- Create dialogues and communication;
- · Build trust and alliances;
- Empower citizens and build in their interest. Create initiatives that will attract people to the area such as festivals, flea markets, open air activities and exhibitions while promoting local businesses to participate in such activities as to support the local economy;
- Take action. Make choices for allocating certain types of development/activities in specific parts of the area enable temporary activities to the area that will contribute to create a new vision for the area.

As starting point and incubator of theses community-driven initiatives the plots of "Lipasmata" owned by public actors (municipality) can be considered. This could create a chain of potential development based on the idea of plot-by-plot regeneration and the engagement of the rest of the private owners.

Conclusions

In order to support the process of exit from the crisis and return to economic recovery, by implementing development projects, is required a thorough review of the existing spatial planning system and planning legislation and consequently multi-level policy (Γιαννακούρου & Καυκαλάς, 2014). Central objectives of this spatial and urban reform and in particular of its institutional framework are; to "clean" the existing legislation from obsolete and redundant rules, tools and institutions, enhance the efficiency and effectiveness of the spatial planning system and the planning regulations by removing spatial barriers, towards the entrepreneurship and exploitation of the real estate, as well as the active support of other public policies and structural reforms in order develop and improve a better business environment and attract new investment opportunities.

The creation and implementation of a new development strategy requires a new way of thinking, bold steps, disengagement from obsessions of the past as well as new legal tools and institutional approaches that will exploit common knowledge and creativity, as well as the dynamics and good practices of both the private and an upgraded public sector (Γιαννακούρου & Καυκαλάς, 2014). As the old development system is becoming out-dated, the possible reactions and resistances that have occurred in the past, mainly because of the traditional land use and dwelling system plan, seem to be weakened or shifted to other fields.

In this sense, the crisis seems to be an opportunity for total remodelling of the Greek spatial planning system, in other words, a true model change.

There are multiple and complex issues to be addressed by a spatial and urban reform in order to achieve the creation of the new development strategy. Spatial planning and urban planning require a planning program, with specific objectives, axes and actions at each stage, monitoring an evaluative mechanisms of results, as well as building the appropriate alliances in institutional and economic level (Γ Iαννακούρου & Καυκαλάς, 2014). Towards the creation of this strategy there are several limitations that need to be considered as they can compose an unfriendly, institutional environment to promote and, above all, implement this reform. Those are related to the lack of financial resources, the bureaucratic inertia, the conservatism and the inertia of the spatial planning and town planning administration bureau.

To conclude, "Lipasmata" has all the potentials of becoming a strong urban manifestation for the post-crisis era. The prime location of the site and its valuable natural assets can symbolize a fundamental turn the way of thinking and governing. The fact that so many years of its former operation "Lipasmata" remains underdeveloped reveals a need for a strong institutional and social statement about how spatial organization should respond to the challenges of our times. For that reason the questions is not which is the best proposal for the development of the area (a park, a new residential or activity-based district or a combination of them) but the way that the involved parties can manage such development. Based on the analysis of the case and on the academic roots the thesis concludes by providing an alternative strategic vision for "Lipasmata", based on a community-led approach.

Table of Contents

I. Prefa	ce	5
II. Abst	ract	6
III. Sun	nmary	7
IV. Res	earch guide	17
Part I	Research Proposal	19
I. Fo	preword	20
1.1.	Motivation	20
1.2.	Vision of the research project	20
1.3.	Learning objectives and ambition	21
1.4.	Relation of the research with the thesis laboratory and the MBE programme	22
2. In	troduction	
2.1.	Problem definition	23
2.2.	Problem statement	
2.3.	The case of "Lipasmata" area in the port of Piraeus	
2.4.	Research relevance	
2.5.	Problem analysis	
2.6.	Research aim, goal and objectives	
2.7.	Hypothesis and main research questions	34
Part 2	: Theory and Concepts	37
3. W	aterfront development in the age of crisis	38
	Waterfront development as a form of urban (re)development	
3.2.	The role of planning in waterfront development	
3.3.	Development (planning) approaches in the current practice	
3.4.	Development in the age of "crisis"	45
4. Re	esearch design & methodology	47
4.1.	Research process	
4.2.	Research questions	
	Research strategy & methodology	

Part 3: Empirical Research-Practice	57
5. Waterfront development: a strategic approach for G	reece 59
5.1. The "Lipasmata" of Piraeus: a brief introduction	59
5.2. Analysing the broader context through the different scales	
5.3. Towards a new future for "Lipasmata"	
·	
6. Exploring the mosaic for the waterfront developmen	
mata"	
6.1. Historical background and future developments	
6.2. "Lipasmata" Stakeholder analysis	
6.3. "Lipasmata" Plan analysis	
6.4. Exploration of "Lipasmata" case based on the results of qualita	
results	
6.5. S.W.O.T. Analysis	103
7. Findings of the case study analysis	111
Part 4: Synthesis	115
8. Discussion on research findings	117
9. Handmade development: towards a community-led a for "Lipasmata"	1 22
10. Conclusions and recommendations	128 130
II. Reflection	133 134
12. References	138
13. Appendices	
Appendix I - Semi-structured Qualitative Interviews Protocol	
Appendix II – Interviewee Schedule and Details	

IV. Research Guide

The thesis is divided into four main parts that seeks to answer the main questions.

Part one consists of the motives of conducting this research followed by a general introduction to the researched subject and the research proposal.

In the proposal the aim of the research is explained together with the way, how the research questions have been constructed.

The second part of the research, called theory and concepts, presents the theoretical framework of the research; it summarizes the findings gathered through the literature review. More specifically, it describes the problem field of the waterfront development practice and the theories behind managing such regeneration projects. Finally, the research methodology and strategy design is presented pointing out methods of answering the main research questions and concludes the analytical framework of the research by summarizing the main points in a conceptual model.

Part three describes the main focus of this research (practice): the empirical study, consisting of the Case study analysis combined with the semi-structured interviews, to give an insight on the waterfront development practice in Greece. During this analysis, the local context of the case study's market is elaborated, followed by the empirical research based on the case study analysis. This analysis is based on the 4P's (place, person, process, product) presented in the urban development management cycle. This tool will be further elaborated in this research. Finally, the main findings gathered through the empirical research are presented and discussed, explaining the current state of art in the Greek waterfront development practice and exploring to what extent an integrative, more collaborative approach is possible.

The last part of the research aims to answer the research questions and give insights and conclusions regarding the main research gaols. These are related to the proposal of a governance strategy towards the more effective "waterfront development management" in Greece and observations to generalise such strategy to a larger range of areas in the Mediterranean region. To conclude the research and the thesis ambition a reflection on the research strategy is presented as well as recommendations for the possibilities of a future research.

Finally, a full list of references, used to support the research, together with the relevant appendices, is presenting further information about the ways the thesis research was constructed and performed.



PART 1 RESEARCH PROPOSAL

I. Foreword

I.I. Motivation

I have been interested in urban scale projects almost since my first year of Architecture studies, in the Polytechnic University of Turin (Italy). During that period, I had the opportunity to work on several projects aiming to (re)develop greenfield or brownfield areas, in order to connect them with the rest of the urban structure and create attractive and liveable urban spaces. The enthusiasm for this type of projects combined with the curiosity of exploring such multidimensional phenomena, in which are involved multiple stakeholders with different objectives and interests (DeFilippis, 2007), was further evolved thanks to my long stay in a city such as Turin. During the last years, Turin is considered an "open laboratory", full of resources in terms of undergoing processes of urban (re)development, as drivers towards a new socio-economical and urban renewal. The city is trying to change its image of a single factory-city to a cultural, touristic and international city by transforming its urban fabric to a more open and friendlier system for its daily users (De Rossi & Durbiano, 2007).

After finishing my studies, I had the opportunity to accomplish an internship in an architectural and urban design office in Athens (Greece) and participate in several big scale project plans. During this internship, for the first time, I came across with real-life cases in Greece, where I noticed many differences as well as some similarities compared with the Italian practice. One of the main projects that I was involved in, was the creation of an urban design plan for the (re) development of the waterfront area of "Lipasmata" in Drapetsona, part of the port of Piraeus. For several reasons, mainly related to the economic crisis and the political instability of that period, the proposal did not have the opportunity to be further developed. Although this project concerned only the creation of a design product (proposal for the transformation of the area), it intrigued me a lot and enhanced further my fascination on urban development projects and especially in the waterfront development topic that results to be very challenging and demanding (Daamen & Van Gils, 2006).

1.2. Vision of the research project

Now, two years later and after having gained extra knowledge during the MBE masters in TU Delft, I would like to research further the topic of waterfront (re)development in Greece by focusing, this time, on the process of creating such projects and how to manage them.

Hence, in this thesis project questions such as who, how and why, regarding the management of waterfront development projects, will be addressed. By focusing on the specific case of "Lipasmata" (former industrial area in the port of Piraeus), it will be possible to understand the reasons why is important to implement waterfront development projects given the present circumstances in Greece, while identifying the main obstacles of creating effective governance strategies. As a result of analysing the particular waterfront situation, in order to identify solutions towards new opportunities of developing large brownfield areas, it will be possible to generalise the outcome in a wider population of brownfield sites in Greece or other Mediterranean countries with

similar characteristics. Such generalization can give the opportunity to regenerate areas, once used for port, military, shipping and industrial purposes and transform them into vibrant places for commercial, office, residential, educational, cultural and leisure uses. This conversion will create, again, alive waterfront sites connected with their inner cities by having simultaneously positive implications on the city's spatial organization, image, social cohesion and economic growth.

By exploring the opportunities of implementing a more integrative and collaborative approach, applied in international practice of (re)development projects, will bring into focus the institutions that constrain such an approach to "Lipasmata", and thus provide ideas for planning actions that may help to overcome them. Therefore, this research can be beneficial to set the basis for re-thinking the current way of practice, in cases such as Greece, by contributing to the academic knowledge as well as a policy debate on 'waterfront development management' in large Mediterranean seaports.

1.3. Learning objectives and ambition

By focusing on an urban development project as central theme of my thesis project, I can come closer to a reality that affects the current society a great lot. Nowadays, there is a need of operating in the built environment as strategy for the future development, due to the limitation of available resources. Urban projects have a dynamic and multidimensional character, which needs particular attention. Therefore, this research will help me to understand and deepen my knowledge on matters that are not only related to one dimension of urban problems, the design of the physical environment, but have to deal with this multidimensionality. Such multidimensional character interests the different objectives, interests and stakeholders that may cause the creation of several conflicts, delays or other problems.

In addition, talking about urban regeneration projects it is obvious that except from the multiple stakeholders' interests and objectives, such decision-making processes can be affected by multiple factors related to political and socio-economic issues. These issues are influencing such projects by rising their uncertainty and complexity.

In the continuously changing and challenging globe, design projects have become more demanding and complex. Having knowledge and skills regarding the process and the management of such projects is essential to understand and perform better the practices of architecture and construction.

In this extent, this research will help me to broaden my horizons by building a more interdisciplinary identity based on my field of studies and practice, the architecture and the management. In addition the exploration of such a topic, will give me food for thought in order to understand better my focus and interests towards my future working field. Since in the future I would like to work on my basic field of studies, architecture, I feel that the urban development domain is one, in which I can combine my passion and my knowledge and thus, the one that I would like to work. In addition, with the focus of this research, the waterfront areas' development, I would like to explore the peculiarities of such areas as opportunities to revitalize the entire port-city interface

as strategy for the development of the built environment. Greece has the longest coastline in Europe and a strategic geographical position (Anastasopoulos, Kolios, & Stylios, 2011) and by focusing on a specific case in Greece, it will give me the opportunity to explore strategies that could work as promoters of growth and development for the whole country.

I.4. Relation of the research with the thesis laboratory and the MBE programme

This thesis project is in line with the main theme of the graduation laboratory, named "Next Generation Waterfronts" tutored by T. Daamen and E. Louw, since it analyses and explores the possibilities of creating waterfront development projects in Greece given the current socioeconomic difficulties and the obsolete planning system.

The main relation, except of studying the waterfront development, arises in the need of creating innovative concepts for managing such complex development process. Such concepts will focus in the international practice of waterfront development and are related to collaborative strategies as a solution to give to Greek port-cities the opportunity to grow by investing on projects that can upgrade its socio-economic and urban environment.

The research is extremely related to the MBE program since it can be located in two of its four main researches domains. These are the Urban Development Management and the Real Estate Management, since it concerns the creation of development strategies to face the deindustrialization problem of urban areas combined with the effective management of such operations in order to create an added value for the society.

Introduction 2.

The first step of this thesis research aims to introduce and elucidate the main focus of this study by comprising the research proposal. This chapter will introduce the topic of the research followed by a brief synopsis of the main literature in the field in order to determine the knowledge gap and research's goals, while underlining its relevance.

2.1. Problem definition

The economy of port cities has been influence, historically, from its ability to adapt its port to the several political, economic, social and technological changes (Hein, 2014). The recent decline of old industrial harbours gave the opportunity to many Western countries reinvent themselves and adapt their physical environment by redeveloping such empty infrastructures (Galland & Hansen, 2012). The transformation of such outdated infrastructure, driven by public and private entities, enhanced many cities with vibrant waterfront areas for corporate use, housing, entertainment, and cruise ship tourism (Hein, 2014). Such adaptations of the urban environment, gave to cities a connection with its waterfront areas by establishing places of urban, economic and social resilience, innovation and opportunities of creating wealth for the locals (Hein, 2014).

Crisis is a Greek word, [from the Greek "κρίση-krisi"], which commonly refers to events or conditions that lead to threatening situations. Such situations affect individuals, communities or even the whole society. In the present circumstances of recession, many political, economic, social and ethical issues arise, especially when exploring the spatial extensions of crisis in Greece. With regard to the increased challenges that Greek cities are currently facing, the importance of developing waterfront areas will be addressed. Understand, analyse and solve the current urban problems is crucial, while finding effective management solutions for this challenging development process, as a first step to create new growth opportunities.

In the past years the industrialization had a direct and significant impact on the evolution of the Modern Greek cities as well as on the country's economy. Nowadays, new problems have arisen that affect even more the doubtful urban pattern of Greek cities. These problems are mainly caused by the continuous economic downturn. Consequently, in combination with the financial crisis, hundreds of companies went bankrupt; young population is migrating from cities towards suburban areas or other countries; and the city centres are malfunctioning because of violence and the increasing poverty (Figure 1, Figure 2). These modern ruins, together with the abandoned facilities, warehouses, vacant malls and industries, either at the city centres or the suburbs depict, the second half of the 20th century (Gospodini, 2001).

Internal migration of the (youth) resident population aged between 15-34

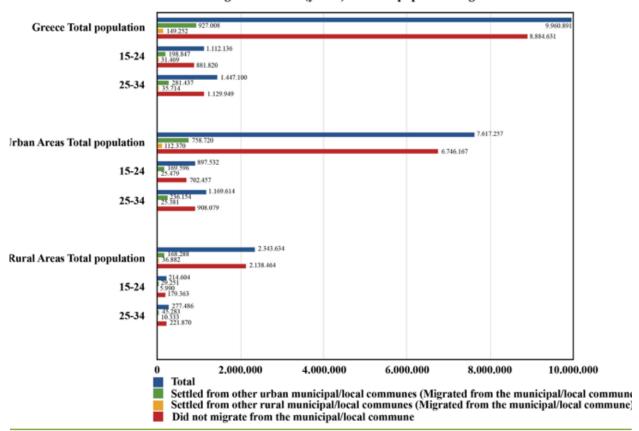


Figure 1: Greek internal migration of the youth population aged 15-34. (elaboration from Hellenic Statistic Authority, 2014)

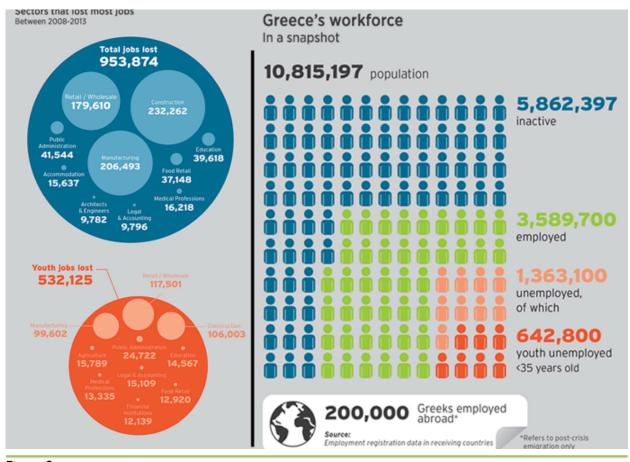


Figure 2: Greece's workforce and unemployment rates by sectors. (Hellenic Statistic Authority, 2014)

2.2. Problem statement

In Greece, the phenomenon of urban desolation is broadly witnessed in areas close to the sea, which historically had a very important role in the development of the country. During the urban expansion of the Greek cities, multiple industrial activities were placed close to the water in order to take advantage of the possibilities that such strategic location offers. Such potentialities are, mainly, linked to the use of the sea as main transportation route that facilitated the communication and transportation of products between cities and countries. As a result many waterfront areas grew from industrial and trading areas to ports (Shamsuddin, Latip, et al., 2008). Therefore, such strategic locations together with the developed port activities gave the opportunity to several cities to evolve and grow (Girard et al., 2014). As a consequence, Greece is a country full of waterfront areas and port cities that in a large number are suffering from the presence of abandoned and degraded spaces, following the decline of old harbour sites and waterfront industrial areas in the second half of the 20th century (Gospodini, 2001).

As a response to the growing challenges, (re)developing such brownfield areas could create a lot of opportunities for the country. Gospodini (2001) in her research, regarding the Urban Waterfront Redevelopment in Greek Cities, recognizes the importance of developing waterfront areas of the Greek cities as a way to be more competitive in the European landscape. She mentions the potentials of such operation, as a mean of economic development and spatial resilience. Additionally, she observes the importance of improving the quality of such transition spaces within the cities' fabrics and the need for the development of urban tourism for the Greek cities.

Consequently, it is evident that in the challenging practice of urban (re)development, urban waterfront revitalisation is one of the most interesting and demanding phenomena of urban renewal (Giovinazzi & Moretti, 2009). Despite the large amount of undeveloped areas, there is a lack of formal knowledge and experience in implementing regeneration strategies in Greece. For that reason, the research seeks to understand the problematic situation and try to draw recommendations regarding a strategy to overcome the existing barriers. In order to be more specific in terms of content and place, the research takes into consideration a specific case area of waterfront development in Piraeus, the main port of Greece, called "Lipasmata". Accordingly, the main problem that emerges is to find new strategies for the urban regeneration of such waterfront areas. Such solutions concern both strategies in order to re-activate and re-connect the brownfield waterfront areas with their inner cities, as well the exploration of new cooperational models as a tool to, efficiently, manage the process and the relations between the involved parties.

2.3. The case of "Lipasmata" area in the port of Piraeus

As previously highlighted, the research is based on the analysis of a specific case study as an example of a long-term and ambiguous development process in the Greek practice. This paragraph aims to briefly introduce the case study as to give an overview of its main characteristics.

The case concerns the former industrial site, called "Lipasmata", situated in the waterfront area of the municipalities Drapetsona-Keratsini (port of Piraeus). The city of Drapetsona is situated on the north side of the inlet to the Port of Piraeus and together with Keratisini form a municipality that lie 1.5 km West of Piraeus city centre, and 10 km Southwest of Athens city centre (Figure 3, Figure 4). Lipasmata (fertilisers) for many years, started from its establishment in 1910, used to host industrial activities related to the production of fertilizers and other chemical products. The industrial site was built in the coastal area, between a breakwater ("Krakari") and the bay of "Slaughterhouses", in the industrial zone of Drapetsona-Keratsini, Piraeus. In the area were presented also other industrial facilities such as small factories, dominated the economic life of Piraeus (Banakos, 2014). The "Lipasmata" factory suffered great losses during the period of the Second World War, but remained in operation followed by a new boom in early '50s. In 1993, the company became property of the National Bank of Greece and in 1999 has definitively ceased to operate. Today the area is totally abandoned that aims for many years to be under transformation (Banakos, 2014). Due to its location, close to the sea and in between different municipalities, the area is seeking for regeneration opportunities in order become a recreational space for residents (and visitors), who previously suffered from the industrial activities.

The area of study is characterized as of metropolitan significance. This character arises both because it is part of the main port of the country (Piraeus port) and because of the direct contact with the metropolitan centre of Piraeus. According to the regulatory plan of Athens-Attica (R.S.A.) (N.4277/2014) the entire metropolitan area of Piraeus constitutes a strategic development axis of Attica of national and international importance. This significance will be further analysed during the case study analysis in order to underline the importance of developing such waterfront areas.

2.4. Research relevance

Main ambition of this research is to explore the current waterfront development practice in Greece by focusing on its drawbacks as a way to create strategic solutions for managing in a more effective way such processes. Questions such as, "How the stakeholders are involved in the decision-making process?" or "What is the relation between private and public sector and how this relation could lead to more effective solution?" will arise and try to be answered within this thesis. Therefore, the relevancy of this research, given the character of this type of development projects is twofold and is determined as follows.

2.4.1. Societal relevance

Creating and managing waterfront development projects is a challenging practice, where several stakeholders, interests and objectives are involved (Koppenjan & Klijn, 2004). As stated by Hein (2014) the UN Habitat (United Nations Human Settlements Programme) declares that urban prosperity involves five different aspects. One of these aspects is related to the social dimension of urban transformation projects. Given the multidimensional character of such projects improving the quality of life and promoting social inclusion are key aspects to create successful place-making projects and guarantee a new way of urbanity (D.Adams & Tiesdell, 2012; Montgomery, 2007).



Figure 3: Position of the area "Lipasmata" in the Greater area of the Attica Region and proximity to Athens-Piraeus.



Figure 4: Position of the area "Lipasmata" in relation to the port of Piraeus.

Thus, this research by taking into consideration the problematic Greek context aims to bring an overview of the drives, barriers and possible solutions regarding how the overall waterfront development may be better facilitated and what are the main problems that obstruct such developments in Greece. Such solutions aims to deliver to the society liveable places that will benefit in different domains people life. The possibility to generalize the research outcome to a wider range of waterfront areas in Greece and in general in the Mediterranean seaport will contribute to a policy debate on "waterfront development management" and provide ideas for more effective planning actions.

2.4.2. Scientific relevance

On the other hand, the scientific or academic relevance of the research, as stated before, is extremely related to the lack of formal and practical knowledge regarding the waterfront development schemes in Greece (Gospodini, 2001). The few examples developed during the last decade need to be taken into consideration as starting point towards the creation of the new development strategies.

Thus, the research aims to contribute to the body of knowledge, related to urban development management in the context of a large Mediterranean seaport. This is achieved by introducing the real life case study of Drapetsona's waterfront area, as an example of an in-depth case study project situated in contemporary Greece. The search for potential solutions to the addressed and tackle the possible problems, will be essential for the academic validity of the research as well as for the society, given the case analysed.

2.5. Problem analysis

During the last decades, many urban and waterfront areas have been affected by decline, as existing economic functions became out-dated or had to shut down their activities. This has left cities with a large amount of vacant inner city or harbour areas, source of urban and environmental deterioration. This phenomenon opens new questions related to the future of such areas and their relation to the cities' development as a whole. The need of transformation projects is emerging, given the capacity of such projects to turn brownfield sites into areas of opportunities. Such projects are therefore part of a process of renewal of the identity of the entire city by creating new conditions for its further development. The choice of exploiting such sites is made, mainly, because they are increasingly becoming available due to de-industrialization. Consequently, such development processes interest, consolidated areas, parts of the cities, the complexity of which requires much time and well-defined actions.

Roberts and Sykes (2002) consider transformation projects as the comprehensive and integrated action that leads to the solution of urban problems. It does so, by attempting to bring a lasting improvement in the economic, physical, social and environmental conditions of an area that has undergone significant changes. According to this definition, it is clear that operating in the built environment is not only a practice based on the physical design, in terms of buildings and streets, but requires a more sophisticated and multidisciplinary approach that includes the

management of the most important interests and objectives related to the project by considering the main stakeholders of the decision-making process. Such approach, more in detail, seeks to identify, analyse and manage an heterogenic group of actors -the national government, local authorities, private owners, entrepreneurs or investors interested in the project, and community and environmental groups- that need to come together to construct the governing processes for social, economical and spatial change.

As McLoughlin (1996) states, the new approaches, towards the creation of urban development strategies, have to gradually give a major concern to social and economic aspects related to the greater environment. Consequently, the required new ways of urban practice have to take into consideration such increasing complexity. For instance, in cases of cities' development, such as waterfront areas' transition from industrial sites to new vibrant places of innovation and creativity, failures may occur.

2.5.1. Managing waterfront development projects

The development of urban transformation projects can be seen as a complex decision-making problem, which has a long term impact on society and can be a source of social conflict (DeFilippis, 2007). Thus, urban development projects can be considered as having a large amount of uncertainty due to the several interests, objectives and multiple stakeholders involved, issues that contribute to the creation of delays, conflicts and other problems (Koppenjan & Klijn, 2004).

Urban waterfront redevelopment has become an essential phenomenon in many Western countries since the decline of old industrial harbours (Galland & Hansen, 2012). Nowadays, operating in such areas is a very challenging activity in relation with the complexity involved for trying to restructure declined areas into urban places of quality (Daamen & Louw, 2016). Ports and industrial waterfronts are facing problems related to the environmental contamination of their physical site, which adds more complexity to the transformation process by affecting the ability of local governments to plan and execute waterfront development projects (Vayona, 2011).

Therefore, these brownfield areas due to their strategic location and the proximity to the inner cities have become a source of policy-concern and have stimulated the emergence of various land use initiatives in order take advantage of the unused economic, social, cultural and environmental opportunities of such areas (Girard et al., 2014).

2.5.2. Waterfront development in Greece

As introduced previously, Greece is a country full of waterfront areas due to the developed port and industrial activities. Urban waterfronts represent an important morphological feature of Greek cities (Gospodini, 2001). Despite this fact, in the country there is not much research done regarding the creation of (re)development strategies and projects for revitalizing abandoned waterfront areas. Indeed, according to Gospodini (2001), the renewal of Thessaloniki's central harbour pier in 1997, was the only redevelopment project implemented while only four Greek cities (Patras, Alexandroupolis, Kavala and Volos) have launched research programs and design competitions to re-evaluate derelict areas and old port infrastructures. During the last decade Greece and especially Athens, by organizing the Olympic Games in 2004, had a great opportunity of implementing two urban waterfront development schemes: the waterfront redevelopment of Faliron Bay and waterfront redevelopment in Agios Kosmas (Zazzara et al., 2012). These two examples are of particular interest because they are the result of two-brownfield ex-industrial sites (re)development.

Therefore it is evident that there is a minimum of formal knowledge related to the topic. This limitation is also underlined by Gospodini (2001), who suggests that the lack of experience, in terms of ability to propose and implement (re)development schemes is provoked by the incapacity of collaboration between local, national and port authorities. She argues that the policies introduced by local authorities are limited in the creation of design projects. Such projects most of the time concern, the only redesign of episodic and fragmented parts of areas or the restoration of former industrial buildings, described as "over-localized" design approach. This means that the few examples of intervention in waterfront areas, interest the transformation of specific parts of the area or the only renovation and re-use of single buildings, characterized as heritage. As a result, such projects, by focusing only in specific parts of the area, they are not taking into consideration the creation of a unique project to enable the whole area.

This approach of operating in waterfront areas, by redesigning them, has been established as framework policy but presents a lot of limitations (Gospodini, 2001). Such limitations as presented in Figure 5 are summarized in the following main points (Gospodini, 2001):

- The physical redesign of waterfront areas may get restricted;
- The development potentials of waterfront areas may get limited;
- International experience in the practice of developing waterfront development projects may get marginalized.

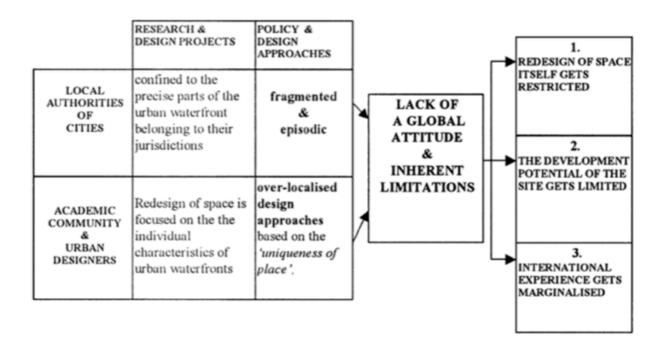


Figure 5: The emerging framework of policy and physical redesign of space in Greek urban waterfronts (Gospodini, 2001)

In addition to the above-mentioned considerations, Zazzara, D'Amico & Vrotsou (2012) mention that another problem of the current waterfront development practice is that in Greece, there is a tendency of creating monothematic development projects, which is not in line with the findings of the literature regarding the revitalization of the areas towards a sustainable urban development. This approach of transforming urban areas is in contradiction with the international experience in the field of regeneration strategies (Gospodini, 2001). The existing literature in the field of urban planning and design is arguing that opting for more mixed-use plans integrated with public and leisure activities is crucial in order to create successful development plans (D.Adams & Tiesdell, 2012) for the revitalization of the waterfront areas and the growth of the entire city/ society. This approach is important while considering to what extent a contemporary strategy of the waterfront development of "Lipasmata" is aligned with the international knowledge and practice.

By concluding her research, Gospodini (2001), affirms that it is time to change the current urban design practice and invest on the built environment by creating more efficient frameworks of redesigning Greek urban waterfronts. By taking as starting point the creation of a strategy for "Lipasmata" it is possible to provide insight for a wider range of similar projects in Greece. Creating and adopting such frameworks, which can derive from the international practice and strategies will be fundamental in order improve the quality of the cities built environment and people's life, while targeting to create more internationally competitive cities with aim to grow and further developed.

2.5.3. Urban practice in Greece

In relation to the process of urban practice, on the other hand, Nagy et al. (2014) state that the current practice in Greece present several drawbacks. Such drawbacks are influencing the outcome of the (re)development projects by creating long-term process. The last long (re) development process is mainly related to several conflicts at the local and national level, because of the current centralized spatial and urban planning system, in which the central government plays the main role. The spatial planning of Greece is described as a "planning system: [with] multiplicity of laws and regulations, predominance of a centralized, regulatory and hierarchical planning style" (Nagy et al., 2014).The multiplicity of laws and regulations do not give any added value to the planning process but on the other hand create a lot of problems.

Greece is a country, where "ex post" planning is the main method of operation and thus, the regulations are not explicit; moreover, plans and programmes are established by law but never drawn up. This situation leads to a bureaucratic inertia that combined with the political instability has led to long development processes and other institutional problems (Nagy et al., 2014). It is evident that new policies and governance models are required in order to create the best conditions towards the urban (re)development projects as ways to overcome the several barriers. In order to create the conditions for a better decision-making process, it is needed the collaboration between the local administration and other competent stakeholders (private sector). According to Nagy et al. (2014) in this way it will be possible to progress towards a more decentralised planning system with clear competences and a suitable financial system that will promote the articulation and harmonisation of the interests of the concerned stakeholders towards the simplification of the planning procedures.

In relation to the ineffective planning system in Greece as described by Nagy et al. (2014), Tosics et al. (2010) state that Southern European countries such as Greece present a higher potential control resulting from the national government and planning system and have more fragmented local government systems, but stronger control by supra-local levels. Therefore, given the current system it is essential to understand that the political uncertainty in the country is affecting even more the strategy creation process (Figure 6).

Given this information it is important to further analyse, during the literature review, the impact that planning systems have in urban development projects in order to see the main factors that affect negatively the development practice based on the planning culture presented in Greece.

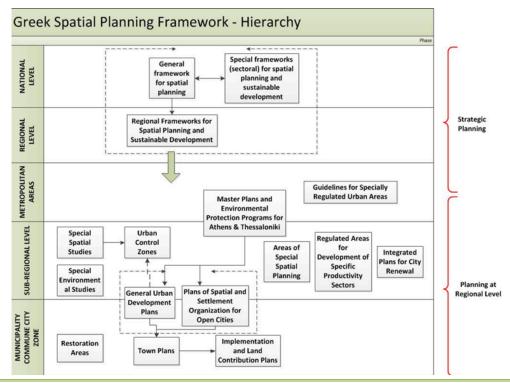


Figure 6: Scheme of the hierarchy of the Greek Spatial Planning System. (Ryser & Franchini, 2015)

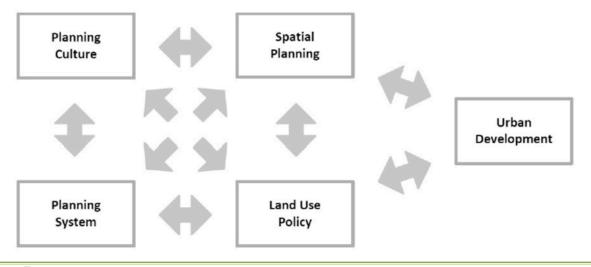


Figure 7: Conceptual institutional planning framework (based on Buitelaar, 2011)

2.6. Research aim, goal and objectives

The existing literature in the field of urban and waterfront development in Greece emphasizes on the complexity of developing such projects. This complexity is increasing by the last long decisionmaking process and by the conflicting relations created in a local and national level. Additionally, the lack of knowledge related to how (re)development strategies may be implemented and managed is creating more obstacles (Gospodini, 2001). According to Nagy et al. (2014) many of problems are created, also, by the out-dated spatial planning system in Greece, where the government has a central role and by the existence of multiple regulations and rules that promote the bureaucratic inertia of the current system.

Therefore, the research aims to identify the motives of creating development projects as well as to the possibilities of such developments in terms of strategy creation. A particular attention will be allocated on how to manage such process, by analysing the main strategic barriers that need to be overcome in order to implement more efficient development projects in Greece. The term barriers refers to the main issues or actions that potentially discourage the implementation of a strategy for the (re)development project of an area. In order to identify the main problems and the way to overcome them, the urban development management cycle will be used. This UDM framework will drive the research analysis mainly by focusing on two specific topics the actors (who/why?) and the process (strategy-how?).

The relation of the strategy creation with the raised problems in the current urban development practice in Greece will be discussed in detail during the research in order explore possible solutions based on the lessons of the international practice in the field. It will be assessed to what extent a community-driven and more collaborative approach is possible for the specific case study in relation to its socio-economic context. Finally, the spatial, societal and economic implications of such projects will be considered as a way to change the image of the area and the whole city, while trying to generalise the lessons learned from the case study to a wider range of cases.

Thus, the main objectives of the research are to:

- · Analyse the theory behind the theme of managing waterfront development projects;
- · Understand the drivers and barriers of performing waterfront development projects in Greece:
- Explore the current state of theory and practice based on the specific case study;
- · Examine the possibilities of proposing an effective approach based on the international experience, as a strategy to implement waterfront development projects in Greece and other Mediterranean port cities;
- Establish possible future direction of the research on this topic.

2.7. Hypothesis and main research questions

The aim of the thesis is to provide a framework that can govern the development practice in Greece by changing the current state of art. Based on an interdisciplinary perspective grounded on the analysis of the academic literature and the in-depth exploration of the case study, the thesis aspires to understand the motives affecting the creation of a development strategy, while creating new conditions for the future of the development practice in the country.

Given the introductory analysis, described in the problem analysis, there are several characteristics, affecting the current development practice in Greece. Such characteristics in relation with the current context of crisis lead to the creation of new perspectives for the future of the development practice of Greek cities. The current socio-economic conditions have a large impact on the urban structure of cities, affecting them to a large extent as described in the introduction. During the last decays has been witnessed a strong recession in the build environment followed by the economic downturn. It is evident that such continuously growing challenges have to be taken into consideration in order to search a possible solution to the posed problem. The research proposes how the urban (re)development must be seen as an opportunity towards a new future for cities focusing on the case of waterfront areas.

This consideration drives to the formulation of a hypothesis for the research, which will help establish the main research question. The hypothesis being tested during this research is the following:

"The current planning system in Greece is characterised as inefficient and outdated, while the changing socio-economic conditions influence the development processes in the country."

The proposed problem as stated in the previous paragraphs and emerged by the research hypothesis can be considered as twofold. Therefore the leading research question is divided in two parts as well. This will help to have a clear overview of the problem while creating new conditions for the future, in terms of new academic knowledge and guidelines for the urban development practice.

These two questions are formulated, in such way to depict the analytical and empirical character of the research as well as its operational one, by proposing a step-by-step plan towards a possible solution to the stated problem.

Hence, the main research questions are established as follows:

- What are the main drivers and barriers of managing waterfront redevelopment projects in Greece?
- How can a community-led waterfront development strategy for "Lipasmata" area be implemented in order to create new transformation opportunities?

On one hand, the first question presents a more descriptive and explorative character that seeks to understand the problem posed in this thesis. This is obtained by analysing the existing literature and the case study. On the other hand, the second one has a more evaluative character and aims to investigate a solution to the defined problem. For that reason this part of the question can be described as design-orientated, as it aims to produce knowledge for policy makers and/or city administrations by proposing a specific development approach. In combination these questions aim to validate the initial hypothesis by creating new theoretical and practical conditions for the future debate on "waterfront development management" in Greek port cities.

In order to answer these research questions, a qualitative research is conducted using the case of "Lipasmata" area as main case study. The several topics to be addresses in the research contain several sub-research questions that will contribute to answer the main questions.

Thus in Chapter 4, related to the research design and methodology, the research questions will be further discussed, analysed and implemented by other sub-research questions that will help to structure the whole thesis. In addition the methodology of the study will be further explained as steps to achieve the final result.



PART 2 THEORY AND CONCEPTS

3. Waterfront development in the age of crisis

This chapter is dedicated in the analysis of the main theoretical concepts that drive the research and will help to explore the background information necessary to reach the research's results and lead to the thesis conclusion.

Waterfront areas have been for many years in the centre of attention worldwide due to their significant contribution in the historical development of the cities. Many cities are developed along the waterfront to facilitate communications and transportation between other cities and countries. During the pre-industrial era, factories and port related buildings were built along the waterfronts, fact that made for a long period of time such areas one of the liveliest and busiest places in the city and important nodes of the morphological development of their urban fabric (Shamsuddin, Abdul Latip, et al., 2008).

Nowadays, after a strong recession of the old industrial harbours and the continuously declining urban fabric new questions arise regarding the future of such waterfront areas. Therefore the last decades, urban waterfront redevelopment has become a focal point in the development practice and requires sophisticated actions given its complex character (Galland & Hansen, 2012).

The ambition of this chapter is, thus, to provide the theoretical framework of waterfront development practice as a form of urban regeneration and reconnection of such areas with the rest of the city. Main focus will be given in understanding the potentials and possibilities of such practice especially in the "austerity" era followed by the recent economic and social recession in countries such as Greece. First of all the waterfront development practice as a form of urban development will be discussed while afterwards its relation to the several planning systems will be explored in order define the possible approaches of operation. Finally the evolution of the waterfront development practice will be discussed through examples in order to give insights regarding the possibilities of applying such processes during the current period of crisis.

3.1. Waterfront development as a form of urban (re) development

As Huang et al. (2011) declare that waterfronts are essential areas for the human culture and economy, starting from the early settlements to new accessible waterfronts transformed from old ports and other former industrial establishments. This statement is affirmed by the academic research that has developed through the years multiple views regarding the definition of waterfront. According to Sairinen and Kumpulainen (2006) urban waterfront is a collective term for a body of water in the urban area. This definition underlines the connection of such areas with the rest of the city as well as its multidimensional character. Urban waterfronts are, consequently, perceived as highly exploitable areas due to their unique characteristic of being the interface between the built environment and the water (Gospodini, 2001).

In a continuously changing environment, port cities are called to face such particular character of waterfront areas. Many port facilities must undergo (re)development projects due to several changes in port land use, out-dated facilities or other factors. Such projects seek to enable the sustainable development of waterfront areas and create vibrant places with diversified operations and activities (Huang et al., 2011), by giving to cities opportunities to grow and innovate. The operation of (re)developing waterfront areas for many academic researcher's is perceived and described as a form of urban regeneration that aspires to give again life to places that for many years are seen as barriers for the city commonly known as brownfield areas.

The United States Department of Environmental Protection Agency (EPA) defines as brownfield areas, places that have the necessity to be redeveloped in order to be again vital part of the cities' urban structure, such areas are mainly abandoned or unused industrial and commercial properties (Ferdinand & Yu, 2014). Thus brownfield areas must be seen as resources of potential social and economical growth and require better planning and design of the urban areas as well as an objective way of making decisions (Saaty & Sagir, 2012).

Urban development as a notion concerns the development or improvement of urban areas by operating in their built environment. On the other hand as an action in practice interests more complicated procedures. Operating in the built environment is a long-term process seeking to solve urban problems and create value for the city and the society. Such operation results to be very dynamic and complex by definition since it involves different relationships and perspectives that need to be combined towards a shared result (Daamen, 2010).

Thereupon, such projects, which have the aspiration to deliver areas that can lead to the urban regeneration of nowadays cities, have the complexity as a common ground. This complexity characterizes the issues and the tools used to decide, plan, manage and implement a transformation. The presence of both public and private interest (Ferdinand & Yu, 2014) is one of the elements that characterize the transformation projects and the redevelopment of cities. Simultaneously, in the current society the need to develop the built environment by opting its lasting future arises new features that decision-makers needs to pay attention (Saaty & Sagir, 2012). With high responsibility to future generation the development of urban areas must lead to healthier and more sustainable way of acting and developing the environment.

It is clear that urban development projects according to the previous statements is seen as a collaborative process of social interaction, where individual and collective knowledge must be shared. This process can be translated to a network of actors and actions that need to interact in order to achieve the required results and a better management of decision-making process. As Koppenjan and Klijn (2004) state in such complex decision-making environment, the current network society caused the shift from hierarchies to a web of horizontal networks and thus to a more negotiating way of acting.

This multidimensional and complex character of urban development is summarised by (de Hoog, 2012) in the following main points as described by the academic literature in the field:

- The ambition of urban development is a physical and/or functional change of an area by focusing on creating and developing places with a mix of functions that are interacting in harmony;
- It involves various actors and disciplines both from the public and private sector, each with different interests and perspectives;
- It is a complex, integrated and long-term process with a huge impact in the society.

To sum up waterfront development as a form of urban development practice given its complex character concerns not only the spatial development of an area but has an influence on a political social and economic level. Hence managing waterfront development projects and processes requires a sophisticated and integrative approach, where several fields of research and actions need to be combined (van 't Verlaat, 2008). In managing waterfront development projects this integration can be translated in the following key characteristics known as the 4Ps:

- **Product:** the physical outcome of an area-based UD project;
- Place: situation of a project, geographically defined;
- **Person:** individuals or organisations involved in UD projects;
- Process: decisions and actions that shape the content of development area-based projects.

3.2. The role of planning in waterfront development

As introduced in the problem statement one of the major factors affecting the urban development practice in Greece, and consequently the creation of waterfront development projects, is its current planning system described in literature as rigid with a plethora of laws and regulations. This affects negatively the development of such projects by adding more to its endogenous complexity (time consuming procedures, bureaucracy, etc.) especially in waterfront areas, which are seen as sites of planning debates and controversies. According to Daamen and Sanchez (2017) there is a plethora of cases that deal with issues regarding planning, governance and property rights in port city waterfront sites since they are trends of political, economic and social conflicts. This opens a new discussion regarding the different planning practices and how these can influence a specific outcome of waterfront development schemes. For that reason it worthy understand the connection between the institutional planning framework and the urban development processes.

As Heurkens (2012) describes, planning systems are institutional systems rooted within different planning cultures worldwide (Sanyal, 2005) and can be considered as grounded set of legal rules for carrying out spatial planning and regulating land use development (Needham, 2006). Therefore planning systems determine how urban development takes place. This emphasizes the hierarchy, which govern the relationship between these two topics. Generally, planning systems and planning policies differ form place to place based mainly on characteristics such as the type of the welfare state (Heurkens, 2012) (Figure 8, Figure 9). There are five different types of welfare systems in Europe that guideline the planning culture and the planning systems.

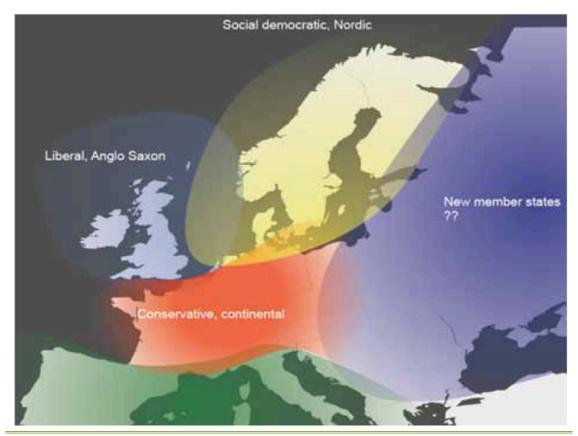


Figure 8: Geography of European welfare systems (Heurkens, 2012, from: Nadin, 2011)

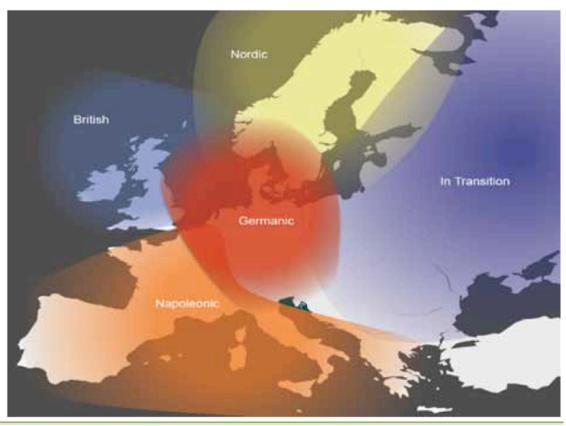


Figure 9: Geography of European legal-administrative systems (Heurkens, 2012, from: Nadin, 2011)

Greece as part of the Southern Mediterranean countries is mainly governed by the Napoleonic planning system. This system uses abstract legal norms and enjoys a greater theoretical debate. The extension of this system in countries like Portugal, Spain and Greece was ensured during the presence of dictatorial regimes. In these cases an even more centralised system was implemented. The degree of centralization in these cases is extremely related to the economic prosperity of the country. In cases of economic recession a more centralised approach is likely.

Although there is this categorization of the countries between the applications of planning systems and the implied governance, there are several trends in national governmental approaches, which deviate from the general lines. For instance, in the Southern European countries, there is a tradition of alternative informal mechanisms and greater flexibility in conforming to the law. This means that in countries such as Italy or Greece, it is very likely to come up against a disparity between the formal laws and regulations and implementation.

More precisely in Greece, this more "flexible" attitude provokes a series of discussion and more bureaucratic inertia since it results to a high fragmentation between laws and implementation and increases more the complexity of creating development plans (Newman & Thornley, 1996). During the last decades, several socialist post-war governments tried to change this planning culture by giving emphasis to a more decentralised and participative approach. This aimed to give more power to local authorities, while the central government had a key role to supervise them. Such trend was interrupted in 1990 by the new neo-conservative government. During this period the system continued to have a very centralised character with the central government to be involved in all levels of planning policy (Newman & Thornley, 1996).

Currently, there is undergoing a review of the entire legal framework of town and regional spatial planning, which consists of a long-term and time-consuming process (Newman & Thornley, 1996). The main issues that are underlined and need to be faced are related to this over-centralised governance, the lack of control over urban growth, problems of enforcement, the lack of planning skills and the continually changing rules and regulations. Such issues lead to the creation of a gap between planning intention and the reality.

3.3. Development (planning) approaches in the current practice

Waterfront (re)development process are extremely influenced by local institutional arrangements, project leadership, planning rationalities, types of urban areas, and existing market conditions (Galland & Hansen, 2012). These parameters characterize specific planning styles in waterfront redevelopment practice, which are influenced in a large scale by the planning system adopted in deferent countries as introduced in the previous section.

As Galland and Hansen (2012) describe, waterfront development practice, as planning tool, has been characterized, through the years, by several schemes and processes aiming to transform brownfield areas of post-industrial cities.

In their review, they categorise, according to literature studies, the evolution of such schemes and processes in mainly four generations of waterfront redevelopment based on several transformation cases around the world.

These are the following ones:

- First generation (1960's-1970's) with pioneering examples of waterfront revitalization the city of Baltimore with its inner harbour renewal plan and other North American cities:
- Second generation (during 1980's) with cities where organizations were set up specifically to plan, manage, and implement redevelopment projects. Examples of this period are the city of Boston and Toronto, which basically adopted and expanded Baltimore's redevelopment measures, and the cities of London and Barcelona with their urban renewal projects undertaken by distinctive market-driven and plan-led planning processes and capacities;
- Third generation (during 1980's) influenced by the practices of the first two generations as the accepted mainstream waterfront redevelopment. Examples of this period are the redevelopments of Vancouver, Sydney and Liverpool waterfront areas.
- Fourth generation (started after 1990's economic recession) which is the most recent presents a less clear character but along with the advancement of new policies, strategies, and practices that combine previous planning styles with innovative ones seems to be key towards the completion of the redevelopment goals of the cities. Examples of this period are the case of Bilbao, where a synergy of spatial planning instruments, pilot projects, political will, and public-private partnerships contributes to transform the entire identity of the city.

The first three generations are considered by the academic literature as very important since they present emblematic examples of waterfront development practice. On the other hand the fourth generation in considered as an emerging one due to the context, which has flourish, the last decades of economic and social recession. In this way is reported a shift from the use of comprehensive master plans, created by planning authorities, towards project-led developments. This sift is considered, nowadays inevitable. The wide-ranging, long-term, and top-down character of planning exercises such as the Toronto plan seems to be out-dated in contrast with the recent project basis waterfront developments created by different sorts of quasi-governmental or public-private agencies (Galland & Hansen, 2012).

Project-led develops are initiatives concentrate in particular sections of any waterfront area after a land-use plan is established. Such approach is commonly seen in countries with planning systems that are open to market forces (e.g. London Docklands). In this approach of waterfront development public and private sector collaborate by adopting different roles in the process.

The planning approach changes from case to case based on the planning processes and the context where a waterfront development takes place. A more top-down approach as appeared in the development before 1960 is relates to a more rational planning system while the more recent examples are driven and influenced by specific projects and initiatives.

In the latter category and in cases such as London, Boston, Barcelona and Copenhagen, are presented different forms of institutional leaderships and stakeholders interactions that impact the way of managing the waterfront developments.

In addition to the distinction between the several waterfront development processes, Galland and Hansen (2012) in their research seek to understand how planning influences the waterfront development practice. By analising the main planning styles the authors try to create an analytical framework to devermine the development practices based on international examples and the academic literature. This framework as elaborated from (Brindley, Rydin, & Stoker, 1996) is illustrated in Figure 10. In their elaboration Galland and Hansen (2012) present the several planning styles and the determinats that govern their application.

	Determinant			
Planning style	Form of governance; project leadership	Planning rationality; political and decision- making forms	Main beneficiaries; market conditions	
Public-investment planning	Quasi-governmental agency (joint committees of public-sector actors)	Plan-led; administrative corporatist	Public interest; depressed markets	
Regulative planning	Local authorities allow or decline private- sector proposals	Plan-led; technical and rational	Local land and property owners (also public interest); strong market demands	
Trend planning	Local authorities facilitate development; private sector implements it	Market-driven; market judgment	Private developers; strong market demands	
Leverage planning	Quasi-governmental agency (public– private)	Market-driven; corporatist	Private interests; potential market interests	

Figure 10: Planning styles and their contextual determinants: an analytical framework to examine waterfront redevelopment practices and the roles of planning (Galland & Hansen, 2012)

As discussed previously, planning process are characterized by multiple factors such as institutional arrangements, planning rationalities, and market conditions. These factors determin according to Galland and Hansen (2012) the adoptation of a specific planning style, which need to conform with the urban setting in discussion. Thus, as waterfront development is considered as context-based, the outcome of a development intervation is influenced by specific characteristiscs, patterns of

governance and planning orientations based on its internal and external environment. Waterfront development practice operated within the boundaries of planning styles that are influenced by the shifting political and socioeconomic. According to this, the next section tends to explore the possibilities of creating development projects given the on going recession in the Greek context. Based on an international experiece it will be discussed how waterfront development could contiue in this age of "crisis".

3.4. Development in the age of "crisis"

During the last decade is witnessed a global economic and financial recession that has influence a lot our society. This globally synchronized collapse in finance markets created a domino-effect collapse of investments and consumption in the economy provoking the fastest and deepest recession in the history of capitalism (Lovering, 2009). This crisis had a huge impact in different domains of everyday life and consequently the construction field was highly affected. Consequently the planning procedures are to be seen differently during this era of austerity and in many cases need to be reconstructed in order to promote the development of the urban environment and thus the development of the society.

This turning point is closely related to social aspects and during this age of "crisis" planning practice must contribute to upgrade and further develop them. For example, one of the most important factors that influence health and happiness at both individual and collective level is the availability of labour positions (Lovering, 2009). Given this, a public policy related to the planning process should steer towards environmental friendly, employment intensive and poverty reducing growth. An important goal is to maximize the local economic welfare by aiming to the competitive landscape. Increasing the employment possibilities and fairly distributing the wealth should be the main target of planning at all spatial scales (Lovering, 2009). The broad scope of such specific requirements is to help transform the physical and social inheritances of neoliberal urban regeneration into resources of real development by creating added value for the society.

Given this particular context, the academic literature presents several researches regarding the development of transformation projects in the age of crisis or austerity as also known. Tallon (2013) in his book describes this phenomenon by analysing the regeneration practice in the UK during the period of the Coalition government (from 2010). Starting by citing the several urban policies that governed the development projects after the Second World War, Tallon (2013) underlings that the elections of 2010 in the UK led to a braking point in the periodization of urban policy for the country. Main goals of this new government on the demand side were to reduce the structural deficit, by reducing the spending and increasing the tax rates. On the other hand on the supply side main objective was to invest in development projects such as infrastructure, energy, etc. (Tallon, 2013).

This policy known as "regeneration and economic growth" is targeting the economic development and the community-led regeneration projects. Community driven projects supports and encourages local authorities and residents to drive local regeneration through a wide range of new powers and incentives within the decentralisation, localism and "big society" agendas (Tallon, 2013). To sum up, economic growth and localism objectives were the main ambition of the Coalition government since 2010 aiming in achieving competitiveness.

In their research Pugalis and McGuinness (2013) are also treating the topic of urban regeneration in an age of austerity by focussing on the transformation of the previously described framework in a toolkit. They stated that the age of austerity presents considerable challenges for the planning practice. Main aspect of this new era is as stated the recalibrated urban policy measures and the shift from the dense national regeneration framework based on a plethora of area-based initiatives towards a more minimalistic "regeneration" practice to enable growth (Pugalis & McGuinness, 2013). This new way of acting seeks to mitigate some of the social, economic and environmental injustices produced by the capitalistic models of production and state-led developments. The proposal of the "coalition toolkit" refers to the community-led approach of development practice by pointing out the importance of aiming for the benefit of the society. Pugalis and McGuinness (2013) conclude that such approach seeks to understand the economic development as part of regeneration. The economic development is one of several components collectively required to regenerate social spaces.

4. Research design & methodology

In this chapter is presented the complete methodological structure of the research..The answer to the main research question is based on a qualitative research approach were several methods and techniques have been used. The design of the research as well as the deployed methods will be illustrated in the following paragraphs

4.1. Research process

The research process is following the basic structure of the research divided in four parts (Research proposal, Theory & Concepts, Empirical research/Practice and Synthesis). Although the several steps are clearly defined there is always a connection between the topics and this is strengthen by using a more iterative approach. In several moments of the research there is a point of reflection where the study is going back and forth in order to have more tangible and reliable results. The following figure (Figure 11) is presenting the structure of the research and the relation between the parts as resulted by the iterative process.

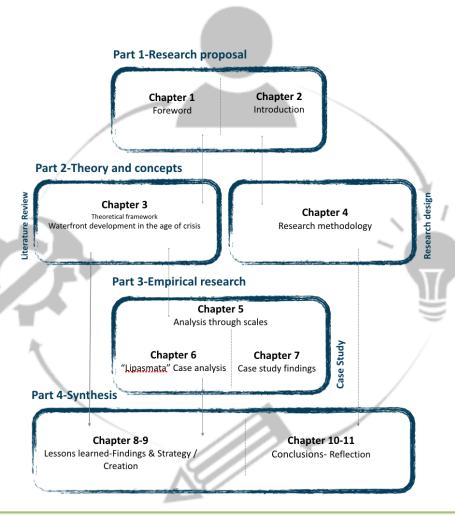


Figure 11: Research Design Strategy

This division of the research permits to define several sub-part of the research as well as to create the of the several sub-research questions, essential to answer the main research question. A brief description of the main four parts is following.

4.1.1. Part 1- Research proposal

This first part of the research seeks to set the main grounds of the research. By focusing on the motives of choosing the specific topic, during the research proposal is aimed to review, for the first time, the academic literature as to have an in-depth understanding of the focus. Starting with a general perspective on the main theme of the research, this part aims to define the research problem, the main objectives as well the research boundaries and limitations

4.1.2. Part 2 - Theory and concepts

After setting up the broader scope, the main focus and the motives of the research, this part interests the exploration of the theoretical framework. This framework is used during the whole research as the background information of the posed problem and research theme discussed through this thesis. Main source of information is the academic literature as well as previous researches executed in the specific field of study, the waterfront development management. Fundamental topics of this theoretical chapter, as already introduced, are based on the waterfront development practice in Greece and the relation of the practice with the planning policies. In addition, an overview of the international experience will be explored in order to create the ground for the solution of the problem.

An essential aspect of this part is the definition of the methodology to follow in order to execute and structure the research. A clear methodological framework is set in order to define the process of the research. This step is extremely important as it helps to assemble in an effective way the several parts of the research as well as the collected information.

4.1.3. Part 3 - Empirical research/Practice

The aim of empirical part of the research is to collect further information from the practice. Therefore, during this part is developed the case study of research in order to create a better understanding of the current development practice in Greece. The focused is based on a specific waterfront area, "Lipasmata", in the port of Piraeus that is for a long period of time in the centre of discussions in order to be (re)developed. Therefore, this part aspires to collect specific for the case knowledge, as complementary information, to answer of the main research questions.

4.1.4. Part 4 - Synthesis

The last part, the focus is on assembling together the several collected information as to create the bigger image of the problem. Hence, the focus is given on drawing the main lessons from the academic literature and the current practice and build arguments that will help answer the main research questions.

Given the aspiration of the research to create general guidelines for the solution of the problem, this part has an additional goal. Except from illustrating the lessons learned, answering the main research questions and drawing the conclusions, the Synthesis has also a more design-orientated

character. This character is underlined, mainly, from the second main research question, where the creation of a step-by-step plan is presented. Such plan aims to give an alternative solution to the current development practice in Greece by proposing actions towards the more effective (re)development of brownfield areas in Greece, especially during the current socio-economic crisis. These actions for the particular case of "Lipasmata" are searched within the communityorientated development approach, which has flourished in difficult socio-economic conditions.

Finally, the reflection of the whole thesis process is provided as a way to evaluate the work of an entire academic year and assess the validation of the results.

4.2. Research questions

As mentioned, briefly in the introduction the aim of the research is two-fold. On one hand, it aspires to explore the current urban development process in Greece. This is achieved by focusing on the practice's drawbacks and motives. On the other hand, the research seeks to create the conditions towards the formulation of the strategy for the future and the governance of the development practice. The explored strategy concerns, mainly, steps to follow in order to give a potential solution to the current practice. Such steps are explored based on alternative development approaches as presented in the international development practice and concerns mainly the community-led development approach. The exploration and strategy creation is based on the specific type of area, the waterfront area of Drapetsona, while it is attempted to draw some generalised recommendations for other similar cases.

This results in the following research questions, as previously introduced. These main questions will structure the whole research. In addition to the main research questions, have been formulated additional sub-questions to better address the several topics to be researched. Thus, the research questions are established as follows:

A. What are the main drivers and barriers of managing waterfront redevelopment projects in Greece?

B. How can a community-led waterfront development strategy for "Lipasmata" area be implemented in order to create new transformation opportunities?

The questions themselves inherit the problematic situation in the development practice in Greece and illustrate the need of alternative strategies for the future. This argument guides the creation of sub-research questions that will explore all the different aspects need to be taken into consideration during the research.

Posing the right sub-research questions will contribute to finalize the scope of the research by giving inputs to answer the main research questions. The sub-questions are divided based on the several research parts and will be answered through the several chapters.

Therefore, the several sub-research questions are defined and categorized as follows (Table 1):

Table 1: Sub-research questions definition

Research part:	Corresponding sub-research question:	
	I.What are the main barriers of waterfront development in Greece?	
2 The amount and accounts	2. What are the motives, for city administrations for implementing waterfront development projects?	
2. Theory and concepts	3. What planning systems influence the urban development practice in Greece?	
	4. Which international development approaches could be considered within the current system in Greece?	
	5. What conditions that shaping the current development environment in the greater area of "Lipasmata"?	
3. Empirical research	6.To what extent is the current strategy of "Lipasmata" aligned with the planning culture of the community-led development approach?	
4 C	7. What are the main steps to consider for implementing a community-led approach for the "Lipasmata" area?	
4. Synthesis	8. What can the insights of "Lipasmata" mean for other undeveloped areas in Greece?	

4.3. Research strategy & methodology

In this paragraph will be addressed the research strategy as a driver of the thesis research approach as well as the decision regarding the research design and methods to be followed in order to achieve the main research goals.

4.3.1. Research strategy

Considering the research's aim and the leading research questions introduced before, different kinds of data analysis need to be explored in order to obtain a satisfactory final result. For that reason, a qualitative research strategy is used, as a way to ensure the effectiveness of the main research's outcomes. This type of research strategy interests a inductive approach, where the relationship between theory and research is emphasized (Bryman, 2012).

4.3.2. Research design

The research design provides a framework for the collection and analysis of the data. To get an in-depth understanding of the Greek context regarding the waterfront (re)development practice the case study design has been selected. This approach entails the detailed and intensive analysis of a single case (Bryman, 2012).

Case study analysis

Conducting a case study analysis, a form of qualitative research, will enable the research focus on exploring and understanding the actions and process of a specific context by collecting, analysing and comparing empirical data. Case study design is an empirical inquiry that investigates a contemporary phenomenon within its real life context (Yin, 2009). Therefore it permits to conduct a detailed contextual analysis of a number of conditions and their relationships.

This research aims to analyse the management of waterfront (re)development projects in Greece.Thus the study analysed focus on a specific brownfield area in the waterfront area of the port of Piraeus, called "Lipasmata", as a single-case study. The decision of exploring this particular case has been based on the willing to analyse an area that can exemplify a broader category of cases. This type of case is determined by Yin (2009) as representative, typical or exemplifying case, and will help the research goal to analyse and address a wider range of areas in the Mediterranean region towards the creation of more effective waterfront (re)development strategies. Thus the research goal given this analysis is to generate a theory out of the main findings (Bryman, 2012). This view of generalisation is called by several authors as "analytic generalization" (Yin, 2009) or "theoretical generalization" (Mitchell, 1999).

In social science, there is a tendency on criticising the case study method as a way to establish and validate the research findings. The critics are based on the assumption that the study of few cases is limiting the validity of the results (Bryman, 2012). For that reason, as stated in the academic literature, the triangulation of data is used as a way to validate in the most appropriate way the case study analysis. Triangulation, involves the use of more that one research methodstechniques or source of data in the study of social phenomena (Bryman, 2012). According to Bryman (2012) the term was deployed by Denzin (1970) to refer an approach that makes use of "multiple observes, theoretical perspectives, sources of data and methodologies. The triangulation operates within and across research strategies in order to increase the validity of the findings by cross-checking their reliability (Bryman, 2012).

Therefore, several different methods are applied in this research including literature and document review, semi-structured interviews etc. As Yin (2009) states a single-case study (as the one executed in this research) can have an embedded design. Thus a researcher may collect data about an embedded unit of analysis by using multiple research methods (e.g. interviews, surveys, archival data etc.). In the case of this research the several research methods used will be discussed in the following paragraph (4.3.3. Research methods).

The main data used to conduct the case study analysis have been collected and reviewed by means of desk research and fieldwork. The desk research was used to gather and analyse information, available in print or published online in order to support the research. On the other hand the fieldwork permit to have an in-depth overview of the case study by visiting the location and have informal interviews, discussions and observations with locals.

Synthesis-Lessons drawing

Main scope of this research, as stated previously, is to understand and analyse the motives of creating waterfront development projects and evaluating alternative management approaches for applying them to the Greek practice. The character of the research questions enhance the need of drawing lessons for the literature review and the empirical research as input for the design part of the research. The use of the triangulation to validate the outcome reduces the limitations of focusing on a single case study and will create more solid results.

4.3.3. Research methods

As previously introduced, several research methods have been used in order to complete the research. Such methods are related to techniques in order to collect important data for the execution and completion of the research.

The several research methods used during this thesis research are chosen to provide insights as to answer the leading research questions and structure the whole research. The different methods were used in several parts of the research. As stated previously a desk research and a field research have been executed. The desk research consists of a literature review, both during the problem definition and during the creation of the theoretical framework. The field research was conducted in Greece, in March 2017, and consists of data collection and a series of semi-structured interviews with various experts in the field as part of the empirical part of the research. Data collection represents the key point of any research since is facilitating its process (Bryman, 2012). The main methods used are: literature review, document review and analysis, site observation, semi-structured interviews and SWOT analysis.

More in detail the methods are used as follows:

Literature Study

The literature review as one of the essential methods to validate the academic credibility of outcome includes several stages of the research. In other words, these stages include the problem exploration and definition, the problem statement and the theoretical framework, while the theoretical information will be also used as to support the findings of the empirical research.

As to prepare the ground for the empirical research exploring the academic literature is crucial to define the main research boundaries. The literature study is executed by reviewing academic articles and journals, books etc. These resources are accessed physically, by visiting libraries in Greece and the TU Delft and also digitally by using online databases such as Scopus, Google Scholar, Research Gate and others. An important part of the literature study is based on the waterfront development as a form of urban and socio-economic regeneration. Additionally, topics such as Urban Development Management, Urban and Regional Planning, Real Estate Development, Urban Geography were also analysed in order to make the most appropriate connections of the field of research with the main topic of this thesis.

Although the big amount of international literature in the field of waterfront development, the Greek literature was extremely limited. The few studies on the topic are dated back in the decay 2000-2010. This limited amount of resources is due to the lack of knowledge and experience in the field and initially was a drawback for creating the grounds of the research. This problem was overcome by making use of the international knowledge as well as by collecting additional data from other resources.

Data and Document Review

The study's data collection is also associated with the triangulation method. In order to gain more insights and knowledge the method is used to collect and examine any additional relevant information related to the research topic and the case study that was not part of the literature study. The research makes use of multiple sources of data and collection methods including: observation, documentation and unstructured discussions (Yin, 2009). The collected data are retrieved by online sources such as newspaper articles, business reports or by other means during the field trip of March 2017. During the field trip the main data and documents were retrieved by contacting architectural or planning studios with experience on the specific case study or other institutions/organisations with interest and expertise on the development practice in Greece. In addition to these resources other empirical sources were also reviewed. Such review consists of the analysis and study of legal documents, plan, policies, strategic vision and decision-making reports (formal or informal documentation). Such material is used to support further the case study analysis when academic literature was missing.

Semi-Structured Interviews

As an additional method related to the empirical research and the triangulation is used the semistructured interviews technique. The reason why this method is used is related to the qualitative character of the research. The semi-structured interviews are referred as "in-depth" interviews with little structure to specific interviewees that aim to give an insight on the research topic and precisely to the case study. In this particular research the interviewees are professionals/ experts and expertise from the private and public sector with previous experience in the case of "Lipasmata" and the waterfront development topic in general. The scope of using this method is to gather qualitative knowledge about the topic with the intention to investigate further the case study as well as to draw conclusions to support the case analysis. Subsequently the results of these interviews are combined with the case study findings.

The interviews were based on a questionnaire with a limited amount of questions in order to promote and facilitate the discussion with the interviewees. The questions based on the case study broadly cover the topic of the research with main focus on the following themes:

- The reasons of not implementing development projects in "Lipasmata";
- Importance of such project in the age of crisis;
- Conditions for the future:

Although the discussions followed a general questionnaire, in most of the interviews the dialogues with the interviewees exceeded the questionnaire's boundaries and new input arose. The full protocol of the semi-structured interviews can be accessed in Appendix I.

The interviews of the research as stated have an informative character in order to grasp concepts and opinion, focused on the theme of waterfront development in Greece and the specific case of "Lipasmata". This helped to create correlations between the research topics and the case study by giving added value to the research.

The main concern was to contact experts that were familiar with the case and some of the main stakeholders (especially from the public domain). The interviewees were initially approached via mail or telephone, during the preparation phase, in order to inform them for the research topic and ask their availability. In total 8 experts were approached with only 6 willing to contribute to the research. The main public stakeholders were extremely difficult to be contacted and given the limited amount of time to conclude the research their opinion is not considered as part of the interviews. This deviation could have lead to some extent to different findings, however this was not very critical to finalise the work and draw the final conclusions. A complete list of the interviews schedule and the respective interviewees is presented in Appendix II.

SWOT Analysis

Due to large amount of qualitative data available to analyse it is deployed during the empirical research the use of a management tool know as SWOT analysis. SWOT is used in business management as a strategic analytical tool for assessing strengths and weaknesses of a business, analysing opportunities available to the business, as well as, threats faced by the business. In this research SWOT is used as a planning tool to map and understand the strengths, weakness, opportunities and threats of the development practice in Greece based on the "Lipasmata" case study.

The SWOT analysis will help collect and structure the important information regarding the internal and external environment of the case study while defining the main problems, challenges and potentials towards the definition of the (re)development strategy. This analysis is executed by using the information gained through the whole empirical research and is based on the document and data review as well as the results of the semi-structured interviews.

Based on the main research question related to the drivers and barriers of managing waterfront development projects in Greece the SWOT analysis can be seen as conclusion to the empirical part of the research. By collecting all the important information the process of answering the question is facilitated by considering the main factors to address in the final part of the research, the Synthesis. The strengths and opportunities can be considered as the drivers of managing (re) development schemes in Greece, while the weaknesses and threats compose the drivers of such operation.

Deployed Research methods

In order to facilitate the way of conducting the research the several research methods have been attributed to the different parts of the research based on the sub-research questions. An overview of the methods used per part is presented in Table 2.

Table 2: Overview of the methods used for the several research parts

Research part:	Research method:	Corresponding sub-research question:	
2. Theory and concepts (Theoretical background)	- Literature review - Document review	I.What are the main barriers of waterfront development in Greece?	
		2. What are the motives, for city administrations for implementing waterfront development projects?	
		3. What planning systems influence the urban development practice in Greece?	
		4. Which international development approaches could be considered within the current system in Greece?	
3. Empirical research (Case study analysis)	Site observation;Empirical sources review;Semi-structured interviews;SWOT analysis;	5. What conditions that shaping the current development environment in the greater area of "Lipasmata"?	
		6.To what extent is the current strategy of "Lipasmata" aligned with the planning culture of the community-led development approach?	
4. Synthesis (Conclusions and Design)	 - Literature results; - Case study results; - Semi-structured interviews results; - Design outcome; 	7. What are the main steps to consider for implementing a community-led approach for the "Lipasmata" area?	
		8.What can the insights of "Lipasmata" mean for other undeveloped areas in Greece?	

Starting with the literature review for defining the research framework the research proceeds to the review of additional data and documents in order to set the basis for the empirical part. During the empirical part of the research several methods were used as complementary techniques to validate the case study outcomes. The results of the triangulation during the case study together with the SWOT analysis are the main input to structure the Synthesis part.

Based on the outcome of the literature review and the empirical part of the research in the last part of the research is possible to assess the possibilities of creating and give insights on how to implement policy strategies for managing waterfront (re)development projects in Greece and consequently draw lessons and recommendations for a wider range of similar areas. In this final stage of the research second research question will be addressed in order to design a step by step plan towards a proposal for a future solution.



PART 3 EMPIRICAL RESEARCH-PRACTICE

This part of the study is dedicated in the in-depth analysis of the chosen case study and will cover the empirical part of the research. It provides insight in the characteristics of development projects in Greece based on waterfront areas and the connection of planning system and approach with the development practice. An essential point of the discussion is the way of managing such projects during the particular socio-economic context in the country.

The research is focusing on understanding the practice based on theoretical concepts and aims to investigate and analyse the motives and the drawbacks of the current development as to create the grounds for a better future management of such process. The initial thoughts of conducting a comparative study were quickly abolished given the challenging context of the Greek practice. Thus, the case study analysis focuses on a single case analysis, supported by semi-structured interviews, in order to have an in depth exploration of a specific situation (Bryman, 2012).

The analysis will start by a brief introduction of the case study and the drivers of choosing the particular case to focus. Following this introduction it will be discussed the external environment of the selected case project and the importance of creating waterfront developments given the particular context.

The second part of the analysis will concentrate, mainly, to the specific project in order to understand the reasons why such ambitious development is under discussions for many years. Through a stakeholder analysis combined with a plan analysis it will be possible to map the drawbacks of the current practice. The several parts of the analysis will be supported by the interviews in order to give better arguments to the study. Finally, a first conclusion related to the case analysis will explain the main findings in order to further analyse them in the last part of the thesis related to the Synthesis of the research. This brief recap of the key findings will be elaborated based on a SWOT analysis, a useful analytical tool that will help summarize the case study's internal and external characteristics.

Waterfront development: a strategic approach for Greece

The "Lipasmata" of Piraeus: a brief introduction

In this paragraph will be briefly introduced the case study of "Lipasmata", in order to have more input to structure the rest of the chapter. The main results of this analysis will be presented as to give insight to the possible solutions to the posed problem. This analysis is a result of an iterative approach of this research. The main reason of such approach is to work back and forth on the case and the literature review in a way to create a more effective research. A more extensive version of the analysis regarding the "Lipasmata" case is presented later on in the following chapter (Chapter 6). The information needed for this introduction of the case is based on the research done by ASPA Design S.A. in 2015 in order to create a design proposal as commissioned by the area's private owners.

As previously introduced in the research proposal, this thesis research takes into consideration the former industrial site situated in the waterfront area of the municipality of Drapetsona-Keratsini, called "Lipasmata". The area is situated in the extended area of Piraeus and is considered as part of the country's biggest commercial port. Lipasmata is an area with a lot of history (founded in 1909), since for many years was one of the main industrial establishments for the extended area of Piraeus and essential part of its economic development.

The municipality of Drapetsona-Keratsini (previously two separated municipalities) consisted for a long period of time an important junction for Piraeus. Until the 19th century, with some exceptions dated back in the ancient Greece, Drapetsona-Keratsini constituted an unstructured area without any particular value. With the development of its waterfront area, as an extension to the port of Piraeus, the municipality became one of the most important landmarks in the wider industrial area of Piraeus. For many years, numerous investments flowed into the area, resulting, among other things, the colocation of large industrial and port facilities on the coast, starting in 1898. Drapetsona-Keratsini (which until 1950 belonged administratively to the Municipality of Piraeus) was, since then, a place of residence for the industrial workforce and especially for the workers in the port and adjacent industrial units. After a long period of ups and downs the industrial activities of "Lipasmata" stopped operating in 1999. After the closure of its activities, today the site is totally abandoned, consisting a brownfield area that aims, for many years, to be under transformation (Banakos, 2014).

The National Bank of Greece SA (NBG) and the SA GENERAL Cement Company ("Heracles")/ LAFRAGE are, currently, the main owners of the area, while other private and public parties are also involved as key stakeholders in the process and describe the complicated ownership status of the case. Due to its location, close to the sea and in between different municipalities, the area is seeking for regeneration opportunities in order become a recreational space for residents (and visitors), who previously suffered from the industrial activities.

The waterfront area of Drapetsona-Keratsini is characterized as of metropolitan significance. This character arises both because it is part of the main country's port (Piraeus port) and because of the direct contact with the metropolitan centre of Piraeus.

Over time, the wider area of study brings together a series of features that give it a special identity and a differentiated role. More specifically, this area is:

- Associated with the first industrial development in Attica, with similar buildings and equipment,
- · Possessing strong elements of the coastal natural landscape of western Athens,
- Which the main uses of its urban fabric are residential, manufacturing, crafts industry, retail and services.

According to the regulatory plan of Athens-Attica (R.S.A.) (N.4277/2014) the entire metropolitan area of Piraeus constitutes a major development axis for Attica of national and international importance. The main vision of the Attica region is to reinforce the entire port of Piraeus as a major shipping centre, hub of intermodal transportation and logistics services, coastal shipping and cruise services, tourism and culture. By taking into consideration the need of Piraeus and its port to establish a new international and more competitive identity, a regeneration project for the waterfront area of "Lipasmata" must focus on creating:

- High-quality environment and economic viability of Piraeus and surrounding municipalities;
- Unique "urban regeneration" capability by enriching the image of the city with the presence of cultural and recreational activities;
- Functional enrichment of the sea front with introduction of new uses;
- Functional integration of the area with both urban fabric and port activities;

This challenging metropolitan character, as described, consists among others the main motive of choosing "Lipasmata" as a case study of this research.

To conclude this brief introduction, understanding the broader area of influence within the study area is crucial to figure out the complexity of study the particular waterfront area and its development guidelines. It is, therefore, crucial to approach the study area in its complex spatial context, i.e. within its wider area it belongs to and in relation to it, and specifically within the broader area of the port and the city of Piraeus. Hence, next paragraph will elaborate on the need of creating a development project for "Lipasmata" based on its position in the region of Attica and the city of Piraeus.

5.2. Analysing the broader context through the different scales

This paragraph is dedicated in the analysis of the external environment of the Lipasmata area in order to explore the general attitude in relation to development projects and understand the main features that govern such important interventions.

As already introduced the area in exam is situated in the port of Piraeus. Piraeus, after Athens is the second largest city in the Region of Attica and the country's largest port city. The Region of Attica consists of an administrative region that encompasses the entire metropolitan area of Athens, the capital of Greece. Therefore the analysis will start by introducing some key facts and issues that affect currently the country and then will focus on the different levels of in order to explore the main drivers of operating in the built environment as a way to growth.

5.2.1. Facts and issues of the Greek context during the crisis

The recent global economic crisis has had a negative impact on all the sectors of the economic activity. This crisis has naturally affected also the Greek society. The rapid rhythms of the growth, during the previous years, together with several structural weaknesses in the Greek economy paradoxically worked as temporary streams and slowed down the full spread of the symptoms of the crisis (Papadopoulos, 2014).

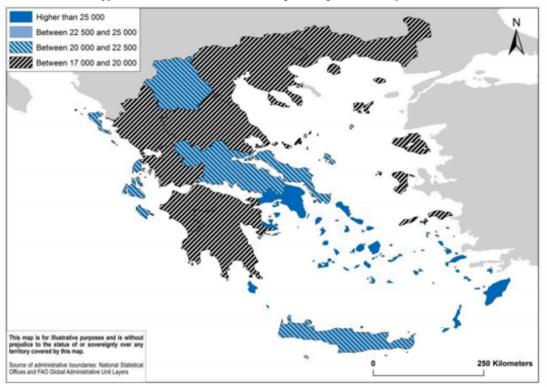
This crisis, which is not only an economic one but also a crisis of values, has highlighted the many crosscutting problems of the Greek development model. Such problems refer to several fields and are mainly summarized in the following aspects (IOBE, 2014):

- · Low competitiveness and market competition;
- Ineffective functioning of the public sector;
- Inefficient education system;
- · And labour market isolation.

In addition it is essential to mention the impact of the above-described issues on the high public debt, the low employment rates and the lack of investments for the country's economic and social development. The main issues that the Greek government is facing to reduce the impact of the economic crisis to a minimum include among others the following points: the unemployment rates, the investments and the international trade (IOBE, 2017). These main points have been mainly discussed since their influence is manifested in many economic indicators of some international organizations. For instance specific interest focuses on the competitiveness of the Greek economy: between 2003 and 2008 it lost thirty-two positions according to the World Economic Forum (WEF) (IOBE, 2014).

Greece is a unitary country and the most centralised in the OECD (Organisation for Economic Cooperation and Development) in relation to public expenditures. With a population approximately 10.9 million, around 46% lives in predominantly urban regions (OECD, 2016). The Attica region, which includes Athens and Piraeus, contributed 40% of the country's GDP growth between 2000 and 2013 (Figure 12). The recent financial crisis has affected a lot the country in several sectors while creating social disparities within the society. For instance during the last decade in Greece the unemployment rates have been skyrocketed (Figure 13). The country has the highest rate in Europe and the OECD (OECD, 2016). It is crucial to mention that Greece has the 2nd highest and widest inter-regional gaps in youth unemployment.

Regional differences in GDP per capita levels, 2013



Note: GDP per capita in constant prices and constant USD PPP (base year 2010).

Figure 12: Regional differences in GDP per capita levels in 2013. (OECD, 2016)

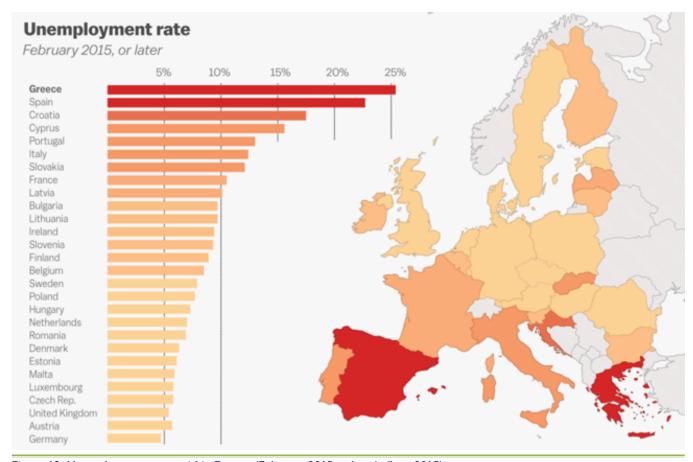


Figure 13: Unemployment rates within Europe (February 2015 or later). (Lee, 2015)

It is evident that the Greek economy necessarily demands a new development model, characterized by a more outlined guideline. On the supply side, it needs to be more reliant on product exports and competitive services; In terms of demand, however, consumption must decrease. Greece needs, therefore, in the upcoming years to provide the renewal of the productive forces, to put in place, in order to achieve a greater internal added value and ensure the employment growth, the quality of life and the advancement of its competitiveness on an international level.

A significant and important role for this economic recovery plays the restructuring and reorganization of some infrastructures that affect several productive forces such as education, the increase of skills and flexibility of workers, the sustainable and green development, the competitive dimensions, the networks, the geographic distribution of the population, and so on (Γιαννακούρου & Καυκαλάς, 2014).

As Γιαννακούρου and Καυκαλάς (2014) mention in their research the recent global economic crisis brings new challenges in the society. Consequently, they acknowledge that the field of planning is confronted with new and critical issues related to the need of addressing the negative consequences of the crisis in cities and regions as well as with the spatial flexibility that is needed for the strengthening of the country's competitiveness and entrepreneurship towards the recovery.

Given the above information it is underlined the need of changing attitude by working on multiple scale levels in order to obtain more efficiently the desired results. In this way the several levels of governance are analysed in order to understand the main focusing points.

5.2.2. National level: Approaches towards the country's development

As a way towards the recovery of the Greek economy and society, the last years, under the directions of the European Union, the country is invited to apply several structural changes, based on the Memorandum of Understanding on Specific Economic Policy Conditionality, which of course influence a lot the country's spatial and urban development policies (Γιαννακούρου & Καυκαλάς, 2014). In this Memorandum, and in particular under its subchapter 4.2 "Improvement of the Business Environment and Strengthening Competition in Open Markets" is included an action plan under the title "Planning Reform", according to which the Greek Government undertook to review and revise the general legislation related to the spatial and urban planning as to ensure greater flexibility in the development of private property investments and to simplify and speed up the land-use plans (Γιαννακούρου & Καυκαλάς, 2014). Given this new perspective the country is force to change its attitude and face important issues of the previous obsolete development strategies in order to grow. The extension of this new attitude to the built environment, concerns initiatives that take into consideration the following topics (Γιαννακούρου & Καυκαλάς, 2014):

- · The urban regeneration of city centres and historic neighbourhoods in major urban
- The removal of old, abandoned or inappropriate uses, buildings and installations;
- The renewal of urban equipment and the maintenance and reuse of infrastructure;

 And the solution of accumulated environmental and operational problems from previous unregulated/abusive developments (particularly in coastal zones and island regions).

The recent years Greece has adapted and aligned its regional policy by using the EU regional policy funds programs (Partnership Agreement (PA) 2014-2020). The main focus is to concentrate on structural weaknesses in the economy that have been worsening during the years by the crisis. A special attention is given to the Urban policy focused on the spatial planning and the sustainable development (OECD, 2016).

The PA 2014-2020 constitutes the main strategic plan for growth in Greece with the contribution of significant resources originating from the European Structural and Investment Funds (ESIF) of the European Union based on the strategic plan of Europe 2020. The broader scope of this plan is to promote the economy's development based on the following main concepts:

- Smart, with more efficient investments in education, research and innovation;
- · Sustainable, because of the decisive shift to a low carbon economy, and
- Inclusive, focusing especially on job creation and poverty reduction.

These recent reformations have influenced the way that the regions and cities are facing their problems. Based on the guide lines of the European policy as expressed by the Memorandum and its sub-paragraphs and the strategic Vision Europe 2020 regions and cities have created their strategies towards the recovery of Greece and a future proof society.

Particularly, in the following paragraphs will be explored the metropolitan and city-scale strategies of the external environment of the case study. These are respectively the Structural Vision 2021 of Attica region and the Strategic Development Plan of Piraeus 2015-2020.

5.2.3. Metropolitan scale: Attica region and Strategic Plan 2021

The Strategic Plan for Athens and Attica Region 2021 (SPA 2021) comes as a Strategic Development Plan for the spatial organization of the entire Attica Region. This SPA 2021 contains strategic goals for the next future of the Region (10-years term) and operating tools for the achievement of these goals.

SPA 2021 consists of nine thematic chapters containing strategic directions and policies. Among the several themes, it is worthy to mention those related to the Spatial organization, Environmental protection and Urban arrangement and restructuring (renewal). SPA 2021, in these themes, introduces the set up of the new Regulatory Plan of Attica Region. The strategic objectives of the new Regulatory Plan of Attica Region (R.S.A.) [P. Σ .A - N. 4277/2014 (Φ EK 156/A/2014)] for the period 2013-2021 are identified in three sections of complementary strategic objectives, namely (ASPA Design S.A., 2015):

- a) Balanced economic growth and strengthening the international role of Athens-Attica, improving competitiveness, increasing production and employment in all sectors of activity;
- b) Sustainable spatial development, resource saving, effective protection of the environment and cultural heritage and adaptation to climate change;
- c) Improving the quality of life of residents, balancing the distribution of resources and the benefits from development.

In addition to these objectives key elements of the overall policies and strategies are the following (R.S.A., 2011):

- Production: as a key lever and prerequisite of economic and social sustainability;
- Environment: as a major resource for the future of the entire society, pivotal for sustainable development;
- Culture: as a concept that permeates and incorporates all individual expressions and components of society;
- Social cohesion: as the prime challenge in times of transitions (e.g. crisis);
- Urban revitalisation: with comprehensive interventions and urban renewal.

In order to better govern the whole metropolitan region of Attica SPA 2021 defines several development poles based on specific characteristics. Athens and Piraeus together with the Marine Front Pole, also known as the "Athenian Riviera", consist the first development pole determined as of International and National importance (ASPA Design S.A., 2015) (Figure 14). In this pole of particular interest, for this analysis, are the objectives related to the urban regeneration. The main concept is to recycle the city stock in land and buildings. Therefore it is promoted the development of a multifaceted framework of metropolitan scale interventions and local scale renovations for the reconstructions of the existing urban fabric and the public space (R.S.A., 2011). The priority is given to interventions related to residential and mixed use areas with highly localized degradation problems, lack of social infrastructure, ageing population, characterized by their strategic position in the urban structure with aim to upgrade broader parts of the city. Main goal of such operation is to obtain urban revitalization and upgrade the everyday life in the city, as preconditions for the enhancement of the multiple identities and of the role of Athens/Piraeus as both places of residence and destination to reinforce the social cohesion and tourism.

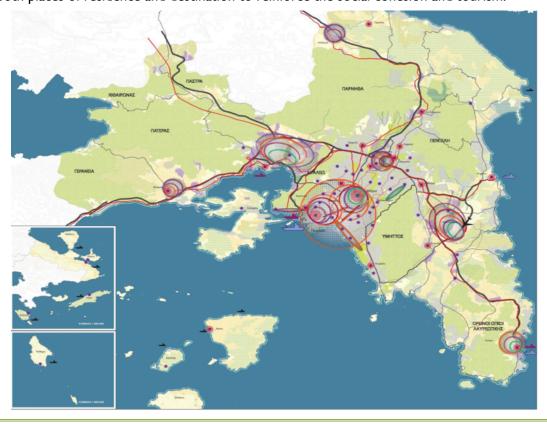


Figure 14: Spatial planning, development poles and axes of New R.S.A. /SPA 2021. (R.S.A., 2011)

The new SPA 2021 by promoting the touristic and cultural identity of the Region develops some objectives based on the concept "Athens-Mediterranean Capital" (R.S.A., 2011). One of those objectives interests the enhancement of the Marine Front as a constituent element of cultural/economic profile of Athens as seen as a Mediterranean Capital. Towards this direction, SPA 2021 defines the redevelopment of specific areas as "Metropolitan Interventions" (R.S.A., 2011). Such interventions interest the restructuring of the city centres of Athens and Piraeus, the creation of Metropolitan Parks and the integrated planning and management of the entire Costal Area of Attica (AΠΟΣΤΟΛΟΥ, 2014).

More in detail, these Metropolitan Interventions are considered as strategic in order to enhance the new identity for the Region and create new opportunities of economic and social growth. For such developments are need multi-sector and pilot schemes of metropolitan range, the shape of which presupposes the cooperation of the State entities and local government as well as the participation of local communities (R.S.A., 2011).

Focusing on the development, planning and management of the waterfront areas it is essential to mention the reasons why the costal zone of Attica is of strategic importance for the Region. According to the new SPA 2021, the Marine Front is considered as a constituent element of the geomorphology of Athens/Attica-Mediterranean Capital and an irreplaceable environmental resource under threat. Additionally, the waterfront zone of Attica is considered as a privileged/ strategic place for several activities of everyday life. This leads to the creation of a vision towards the promotion of already existing policies and development of new ones for the protection, opening up, upgrade and elevation of particular areas and landscapes of the Marine Front. Therefore, the main priority axis, as stated by SPA 2021, towards this vision is concentrated in the following main points:

- · Opening of the city towards the sea and assurance of the coasts' public nature;
- · Single and integrated planning and management for the entire coastal zone;
- Removal of incompatible activities with the coast and its public nature;
- Regeneration schemes of bioclimatic nature for the upgrade of both the artificial and natural coastal Landscape.

This vision of crating a vibrant waterfront area in the costal zone of Attica is summarized in the general strategic plan of the region (Figure 15).

Finally, in relation to the Vision of targeting towards the development of the coastal zones, the following figure (Figure 16) presents several strategic areas, through the whole costal zone, in search for a development strategy. The Region of Attica as well as the Greek government considers such areas as an essential step in order to restructure the Greek economy. Some of the areas, given the several austerity measures that the government is taking the recent years, are in a process of privatization, under restrictions, in order to be developed.

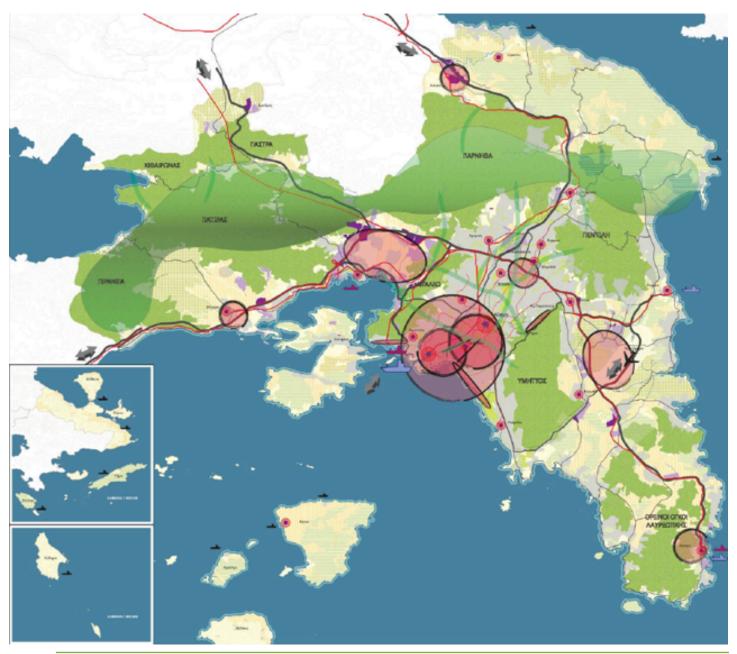


Figure 15: Strategic Planning of the New R.S.A. /SPA 2021. (R.S.A., 2011)

The strategic importance of such areas is highlighted by the affirmation of the former Vice Minister for Economic Development and Competitiveness N. Mitarakis in 2015. "On the one hand, we want to attract new investments that will create new job positions. Investments to be carried out in the context of stable rules, stringent standards and first guided by the absolute safeguard of the interests of the Greek people. On the other hand, such development projects will be promoted to improve the quality of life throughout the basin of Attica and increase citizens' accessibility to the sea."

Among this plethora of underdeveloped areas only one (2) has been developed the recent years. This development project known as "Stavros Niarchos Cultural Centre" in Faliron is the only example of urban development in Greece during the recent economic crisis. Precisely, in the case of Faliron waterfront area (city close to the port of Piraeus), after the completion of the Olympic Games 2004, a private party, called "Stavros Niarchos Foundation", invested money in order to create a project to further develop the area. The project completed in June 2016, aims to transform a dismissed port area into a recreational and cultural hub able to interpret and enhance its historical vocation (Zazzara et al., 2012). Designed by the Italian architect Renzo Piano, its goal is to recreate the visual and physical connection with the water, which before was missing, by inserting public functions related to the culture (National Opera and Library). This list contains also the case study of this research, Lipasmata area (1), as it is considered of crucial for the further development of Piraeus port activities.

5.2.4. City scale: Structural Vision for Piraeus 2040

From the spatial point of view, the Municipality of Keratsini-Drapetsona is included in the Greater Spatial Unity of Athens - Piraeus and more specifically in the Piraeus Spatial Sub-unity. The Metropolitan Area of Piraeus constitutes the Southern gateway of the Attica region, with activities of international importance and importance for the economy of the country, related to shipping and transit. The general guidelines of SPA 2021 for Piraeus concerns the strengthening of its role as a transit centre in the Mediterranean basin, while at the same time upgrading the harbour facilities at a combined transport hub. Main goal is the improvement of the urban environment of the Municipality by ensuring better functional interconnection between the city, the port and the sea (R.S.A., 2011).

In addition to these general guidelines the Municipality, with its Strategic planning for 2015-2020, seeks to reconstruct the productive fabric of the city as a way to revitalize the society and the economy. Key element of this goal is the use of the port character of the city by reactivating the dynamics of the coastal zone and the shipbuilding sector (Piraeus Municipality, 2014).

Piraeus, as part of the Region's general strategy to create the identity of "Mediterranean Capital", aims with its planning for the upcoming years to improve the city's attractiveness and competitiveness by exploiting its competitive advantages and by creating new flagship innovative business poles. A main emphasis is given to the strengthening of the city's touristic character, by exploiting the fact that its port is one of the main commercial and touristic ports in Europe. The main goal is for Piraeus to create the identity of an internationally recognizable tourist and cultural destination sector (Piraeus Municipality, 2014).

In order to achieve these important goals and contribute to the Region's regeneration, the municipal authorities of Piraeus are targeting on several domains of governance. In relation to the city's built environment the Strategic Plan for 2020 has a separate section, which takes directives from the PA 2014-2020 (European Strategic Plan), know as O.X.E./ Complete Approach for the Strategic Spatial Development (Piraeus Municipality, 2016).



Figure 16: Planning and protection of the coastal zones and river areas and indication of the strategic brownfield areas to be developed. (R.S.A., 2011)

Therefore the main ambitions regarding the built environment as presented by the municipal authorities for the metropolitan canter of Piraeus are summarized in the following main points:

- Upgrading it as a central port and intermodal transport link, with effective interconnection in a Mediterranean, trans-European and international level.
- Environmental upgrading of the Port of Piraeus with the creation of modern infrastructures based on the standards of the Greek and European legislation on the management of ship's liquid wastes.
- Strengthening of the metropolitan area as a multifunctional centre, while maintaining the residence and highlighting its cultural heritage.
- Strengthening and reconstruction of the productive and economic base in the direction of modern business activities.
- · Operational interconnection of port activities with urban fabric.
- Improving the urban fabric and infrastructures while preserving the shared nature of the Maritime Front.

These last two points are essential for this research since it relates the necessity of developing and connecting the waterfront area with the rest of the city and the port. A further elaboration and direction related to the waterfront areas of the city interests (Piraeus Municipality, 2016):

- The operational redevelopment and specialization of land uses in the central part of the port and in its proximities, with a focus on services, recreation and culture (cultural coast), protection of the traditional market, revitalization of residential areas and overall upgrading of the coastal area, combined with integrated parking policy.
- Redevelopment of the coastal and archaeological zone and promotion of two major interventions in areas of the broader canter of Piraeus: a) the so-called "South Gate" of the city, and b) the former industrial area of Keratsini-Drapetsona, "Lipasmata".

The analysis of the several scales aims to answer questions related to the importance of developing waterfront development areas in the current challenging environment. Revitalizing the urban structure of a city is considered as a crucial step towards the development of the country. The several rules and regulations and measures, proposed by the European Union, creates new conditions for Greece to develop and strengthen its economic and societal position. Targeting in such project, as the one for the (re)development of "Lipasmata", is a way to create new vibrant and innovative poles of national and international interest by creating new opportunities for the residents as well as for cities to strengthen their competitive attitude.

5.3. Towards a new future for "Lipasmata"

Piraeus has always been part of the metropolitan region of Athens and it is not seen as a separate city. This statement is also supported by the several official visions and strategies for the two cities (Athens, Piraeus) and the whole Region (Piraeus Municipality, 2014; R.S.A., 2011). Therefore, historically any strategy for the regeneration of Athens affects a lot the city also because it is considered the main city's getaway to the sea. The massive transformation of Athens during the Olympic Games of 2004 influenced a lot the city and its society and gave a lot of opportunities for changing its identity (Karachalis, Kyriazopoulos, & Lourantos, 2004).

The public works effectuated in Piraeus due to the Olympic Games were limited to infrastructure constructions as to improve the public transportation and the accessibility to and from the port and the cruise terminals (Karachalis et al., 2004). Such operation except from facilitating the flows of tourism during the Olympic Games aimed to improve the touristic character of the city for the future.

Although the city intended for many years, according to official statements, to become a global maritime centre, the creation of this new city-identity exhibits an orientation crises. One of the main issues affecting the contemporary port-city is the lack of regeneration programmes for the development of its costal area. This leads to several aspects influencing the creation of the new identity. Accordingly, the main aspects are related to (Karachalis et al., 2004):

- The lack of a place promotion strategy in relation to an image that Piraeus aims to adopt;
- The lack of an a actor that will hold the coordination of a city marketing strategy;

 The residents and the maritime community of Piraeus cannot commit themselves to a certain image of the city.

Piraeus during the last years seems to have objectives for the future, however, the lack of a comprehensive program (Vavaletskos, 2017) creates limitations and uncertainties for the development of the city and the society. The incapacity of creating the new conditions for the future the city-port is not only a problem for Piraeus but interest a lot most of the major Greek cities that struggling for years to develop a strong local identity. This incapacity as is due to (Karachalis et al., 2004):

- · The lack of direct support and collaboration by the municipal, the port authorities and other local actors;
- The absence of a general urban plan for the city;
- Uncertain operational context of the city waterfront;
- Unwillingness to promote and re-use industrial heritage sites as part of the modern city.

The lack of a general vision for the city's future supported for years the issues described previously, while the socio-economic conditions of the past years did not allow the city to developed as the crisis was seen as a huge barrier and not as a game changer. The lack of economic resources together with the incapacity of local, regional and national authorities to attract national or international investments affected even more the situation.

The current economic situation in Greece, as stated, has unfavourable consequences in several domains in Greek society. This leads to the need to adopt a series of good practices of strategic importance for Greek cities, towards the sustainable development by focusing a lot on the local level. The crisis needs to be seen as a game changer and not anymore as a threat otherwise the conditions will continue worsening.

For many years in the international practice, harbour and seafront areas are key priorities for cities and thus, policies and practices are targeting to the direction of regeneration and rehabilitation of such areas to (Karachalis et al., 2004). Although the international experience presents a plethora of waterfront (re)development examples, in Greece the are only few initiatives of urban transformations especially in areas in proximity of the sea. Only in recent years, developing the built environment is seen as a strategic approach to create growth opportunities for Greece. This statement is especially embraced from the European Union that under the new austerity measures for the country drives Greek cities towards this direction.

Through the previous analysis of the three levels of scales, it is underlined the need of targeting to the built environment as a way to promote the socio-economic development, especially given the current complex conditions. Thus, the new strategic visions, targeting in 2021 or in a longer period of time, seems to create new opportunities by establishing some general guidelines towards the creation of a new identity (R.S.A., 2011). The several official statements declares the importance of the Region of Attica as a main pole of (re)development, while underlines strategic meaning of its waterfront areas on an international level.

As stated in Strategic Plan for Athens and Attica Region 2021 (SPA 2021), operating in brownfield areas close to the sea will create new conditions to connect the city back again to its natural environment and to opt for a better quality of life for citizens and also potential tourists. In this direction, the new identity of Attica as a "Mediterranean Capital" enhance even more the potentials of such areas and their possibilities by as characterised them as of strategic importance even in the current socioeconomic conditions. This strategic character will be analysed further on in the empirical research by illustrating the point of view of the several interviewees. Most of the experts confirm the importance of developing urban projects during the financial crises by judging their positive impact to the society. This impact is both related to the aesthetical and environmental improvement of the cities as well as to the creation of conditions for new economic activities.

Towards this direction is targeting also Piraeus as one of the major cities in Attica Region and the main port in Greece. Therefore areas such as "Lipasmata" are essential parts of this new policy. In addition, currently Piraeus is competing as a candidate for being the European Capital of Culture for 2021. This candidacy gives to the city new drivers to operate as a way to promote further the city. With a new concept for this event "Piraeus 2021: A floating city", the municipal authorities are confirming the importance of the sea to the city and their historical connection (Piraeus Municipality, 2017). The mayor of Piraeus (Yiannis Moralis) with a note to city's candidacy report underlines the spatial dimension of this event and its importance for the city (Piraeus Municipality, 2017):

"Our planning for the European Cultural Capital 2021 includes all those features that make up the culture of Piraeus. We anticipate that all of these will create a superb blend of experiences and activities that will become part of the European Culture, but above all, will open new pathways for the city and its citizens. At the same time, we attach special importance to programs aiming at active social participation to improve daily life and upgrade the urban fabric through joint efforts and long-term collaborations between organizations, collective bodies and individuals."

With this declaration it is obvious the willingness of the local authorities to collaborate and as to achieve better conditions for the city's urban structure. Although "Lipasmata" is not administratively part of Piraeus, but of the neighbouring municipality of Keratsini-Drapetsona, the city's strategy will influence a lot the area and will enable the conditions for its future development. Developing the "Lipasmata", as already stated, is seen by the Region of Attica and the city of Piraeus as a crucial step to develop further the port and touristic activities and activate the place for its citizens.

Having describe the motives of seeing regeneration approaches as a strategic step to society's (re) development, it is time to focus more in the specific case in order to grasp insights of the current conditions. By analyzing the internal environment and taking into consideration the external environment as described, in part, previously will be possible to understand the limitations of the current practice.

6. Exploring the mosaic for the waterfront development of "Lipasmata"

This part of the empirical research is concentrated mainly on the case study of Lipasmata itself. Starting with a historical review in order to understand the key characteristics of Lipasmata it continues by analysing the challenging character of the site in order illustrate the several obstacles affecting the redevelopment of the area. First a stakeholder analysis is executed, followed by a plan analysis. Following the previous analysis, to support the empirical research and create more evidence to the case study, this chapter provides a discussion of the main themes based on the qualitative interviews and the first findings of the case. To conclude this part of the research and create the conditions for the Synthesis part and the completion of the research, as a final step to the empirical part is presented the SWOT analysis. As already introduced in the methodology, this analytical tool is helping to map the several input and information and discuss the several findings.

6.1. Historical background and future developments

This study takes into consideration the area situated in the waterfront area of the municipalities Drapetsona-Keratsini, called "Lipasmata". The area of study, after the demission of the industrial facilities and a long history related to its ownership status, is owned by The National Bank of Greece SA (NBG) and the SA General Cement Company ("Heracles"), while other private and public parties have also stakes.

The area of study is characterized as of metropolitan significance. This character arises both because it is part of the main port of the country (Piraeus port) and because of the direct contact with the metropolitan centre of Piraeus. According to the regulatory plan of Athens-Attica (R.S.A.) (N.4277 / 2014), as presented in the previous chapter, the entire metropolitan area of Piraeus constitutes a major development axis for Attica of national and international importance. Along this "axis" is foresee the development of strategic functions with national and international reputation, targeting on tertiary business, particularly offices and companies' headquarters, tourist services, cultural functions, health services and sports activities.

The main vision of Attica Region (R.S.A., 2011) is to reinforce the entire port of Piraeus as a major shipping centre, hub of intermodal transportation and logistics services, coastal shipping and cruise services, tourism and culture. Thus, it will be created a pole of hyper local range capable to upgrade the West part of the city of Piraeus and implemented it with new and innovative industrial uses, services, cultural, educational, recreational, and touristic activities along with housing.

Piraeus, International Hub

Piraeus port offers unique advantages because of its strategic position and infrastructure. Situated at the outskirts of Athens and only 10 km away from the city canter, it acts as the main gate for Hellenic imports and exports (major Greek port activities).

Piraeus is a historical city, located in the Attica Region near Athens - only few kilometres to the southwest of the centre of Athens and the capital of the Piraeus Prefecture. It is one of the most populous municipalities in Greece (approx. 200.000) and the largest port of the country. During the last decades, Piraeus is in a process of transition as to create a competitive advantage on an international level (Piraeus Municipality, 2016).

Piraeus and its greater area use to host several industrial sites mainly due to the port activities present in the city. During the last decades most of the industries have been relocated and as a result there are several abandoned sites in demand for transformation opportunities. One of such former industrial areas is the area called "Lipasmata" adjacent the actual commercial port of Piraeus. This area consist the main case of this research.

Piraeus and its greater area use to host several industrial sites mainly due to the port activities present in the city. During the last decades most of the industries have been relocated and as a result there are several abandoned sites in demand for transformation opportunities. On e of such former industrial areas is the area called "Lipasmata" adjacent the actual commercial port of Piraeus. This area consist the main case of this research.

Lipasmata-From industrial hub to brownfield area

"Lipasmata" (fertilisers) area for many years, started from its establishment in 1910, used to host industrial activities related to the production of fertilizers and other chemical products. The industrial site was built in the coastal area, between a breakwater ("Krakari") and the bay of "Slaughterhouses", in the industrial zone of Drapetsona-Keratsini, Piraeus. In the area were presented also other industrial facilities such as small factories, dominated the economic life of Piraeus (Banakos, 2014).

The "Lipasmata" factory suffered great losses during the period of the Second World War, but remained in operation followed by a new boom in early '60s. In 1993 the company became property of the National Bank of Greece and in 1999 has definitively ceased to operate. Today the area is totally abandoned that aims for many years to be under transformation (Banakos, 2014). Due to its location, close to the sea and in between five different municipalities, the area is seeking for regeneration opportunities in order become a recreational space for residents, who previously suffered from the industrial activity. Such transformation can play an important role in the future development practice in Greece since it can stimulate new investment opportunities and create growth opportunities for the country. By opting for an innovative regeneration of the area "Lipasmata" can become an essential example for a series of brownfield areas in Attica and the rest of the country.

Today, the municipality of Piraeus with its Strategic Vision for 2020 considers, as already mention, the area of "Lipasmata" as a strategic way to revitalize its port as well as the urban structure of the entire city (Piraeus Municipality, 2016). In accordance with the guidelines of SPA 2021 and by exploiting the advantages of its unique location in proximity of Piraeus Port, the Strategic Vision for 2020 considers for "Lipasmata" the following guidelines for the future intervention of urban redevelopment (Piraeus Municipality, 2016; R.S.A., 2011):

• Creation of a supra-regional pole to upgrade the West of Piraeus, with uses of light industry, crafts, services, culture, education, recreation, tourism and housing. An emphasis

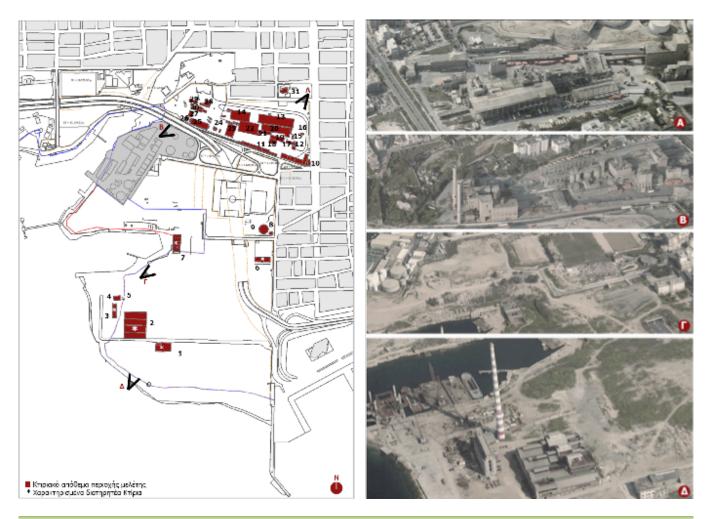


Figure 17: Photographic reporting of "Lipasmata"

is given in creating land uses directly related and complementary to the port activities.

- Ensuring of significant underdeveloped spaces in proximity of the area in order to restore the continuity between the inner city and the waterfront areas by creating a network of communal areas and an extensive communal green park that will result from the use of land-based tools (article 15 of Law 2508/97);
- Protection and promotion of industrial archaeology monuments with their re-use with compatible activities;
- Organized urban development of limited density and low average density, incorporating bioclimatic design applications in buildings and public spaces, which will guarantee the upgrading of the natural and urban environment.

After many years and the cessation of the industrial activities, the revitalization and development of "Lipasmata" are one of the most important challenges and opportunities with essential economic social and environmental extensions not only for the grater area of Piraeus and Attica but for the whole country ($P\dot{\eta}\gamma\alpha\zeta$, 2016). This importance is underlined by the Regional authorities that currently are seeking for a regeneration project through the form of architectural competition. The competition initiated in 2016 by the authorities of Attica Region and entitled: "Architectural

competition of ideas for the redevelopment study 640 acres of the former industrial-port area "Lipasmata"", is seeking for architectural proposals for the redevelopment of the area. As stated in the competition notice as new uses, to take into consideration for the proposals, are proposed recreational activities as well as urban green areas enriched with community facilities, which will mainly serve both for the needs of the port and Western Piraeus ($P\dot{\eta}\gamma\alpha\zeta$, 2016).

During the last 18 years after the final closure of the industrial activities there have been several moments of discussions regarding the future of the areas. Nevertheless, such discussions have not flourished for different reasons. These reasons are going to be discussed during the following paragraphs. Given the new conditions for the area based on the new architectural competition it is important to analyse the main issues that have influenced the redevelopment of this areas for so many years.

6.2. "Lipasmata" Stakeholder analysis

The fundamental first step in an approach for the analysis of public policies for the study of decision-making is to further define the methods that are used to govern the concept of urban regeneration through sustainable planning. More in detail, using several tools that promote the creation of strategies occurs this operation. In this particular stage, it is appropriate to understand who are the stakeholders involved in the process in order to define the possible correlations within the project, which can lead to a smoother process. Particularly, in this phase of the research it is important to operate a stakeholder analysis (Dente, 2014) that aims to identify the main actors involved in the development of the waterfront area, as well as their values and objectives. Performing such analysis will give important information and knowledge regarding the status of the specific project-area and it will give insight in searching for the best possible way to manage this complex development process (Berta, Bottero, & Ferretti, 2016).

6.2.1. The methodology behind the analysis

As a first step to this analysis, it is essential to understand what is a stakeholder and define the difference between the terms actors and stakeholders, as commonly used, in order to identify in the best way the groups of interests involved. According to Dente (2014: 29) "... by stating the actors are the ones who act is less tautological than it might appear... not everyone who has an interest in acting nor whoever should act is necessarily an actor. The actors are only those who actually act.". On the other hand, stakeholders are any group of people or individual that can be a threat or a benefit (Gibson, 2000), can critically endanger or support the project (Olander & Landin, 2005). Those are directly interested in the decision-making process and which can affect its outcome by expressing their opposition to the final decision (Dente, 2014).

Therefore, both groups have to be considered and analysed based on their interests and objectives in order to design a public policy process. As Gill et al. (2013) stated the procedure of analysing and mapping the stakeholders plays a crucial role in strategic planning and sustainability assessment procedures, since it allows identifying possible conflicting interests in the process and find solutions on how to mitigate them. Stakeholder mapping (planning, identification, analysis),

allows for a deep comprehension of stakeholder relations (Olander & Landin, 2005). Executing a stakeholders' analysis is a multi-stage procedure with several steps towards their engagement. As introduce in the literature such stages interest the initial planning, identification, analysis, communication, action, and follow-up (Karlsen, 2002). Some of these steps will be followed in the current chapter while others will be cited in the research Synthesis part as part of the proposed strategy.

The main goal of applying the stakeholders' analysis is to establish a strategy of the institutional and human landscape, the relationship between the several individuals and groups and the affairs in which they are interested the most (Berta et al., 2016). Consequently, such analysis based on identifying and classifying the main stakeholders to be involved in the process, aims to understand their priority to the process (power-interest), mobilize their type of resources (e.g. political, legal, economic and cognitive), group them (e.g. political or bureaucratic actors, special interests, general interests and experts) and finally, understand the possible relationships that can be created among them (Dente, 2014).

Therefore, there is a difference between these two groups of stakeholders. This difference will be also presented in the following paragraphs as to present firstly the ownership status of the area, thus the internal actors and secondly the rest of the external stakeholders.

6.2.2. Waterfront area Ownership status

The studied case of "Lipasmata" is extended in an area with total surface of approximately 640 acres (ha). The ownership status of the area is quite complex (Figure 18) since a significant part of the land ownership, belongs mainly in the Greek State, the municipalities (Drapetsona and Keratsini) or other bodies of the public sector ($P\dot{\eta}\gamma\alpha\zeta$, 2016). Additionally to the public owners, the private sector has also stakes in the aera. The main private stakeholder is the National Bank of Greece-NBG (Protypos Ktimatiki Touristiki S.A.), which owns the industrial site of "Lipasmata" since 1992 (Καρολεμέας, 2012).

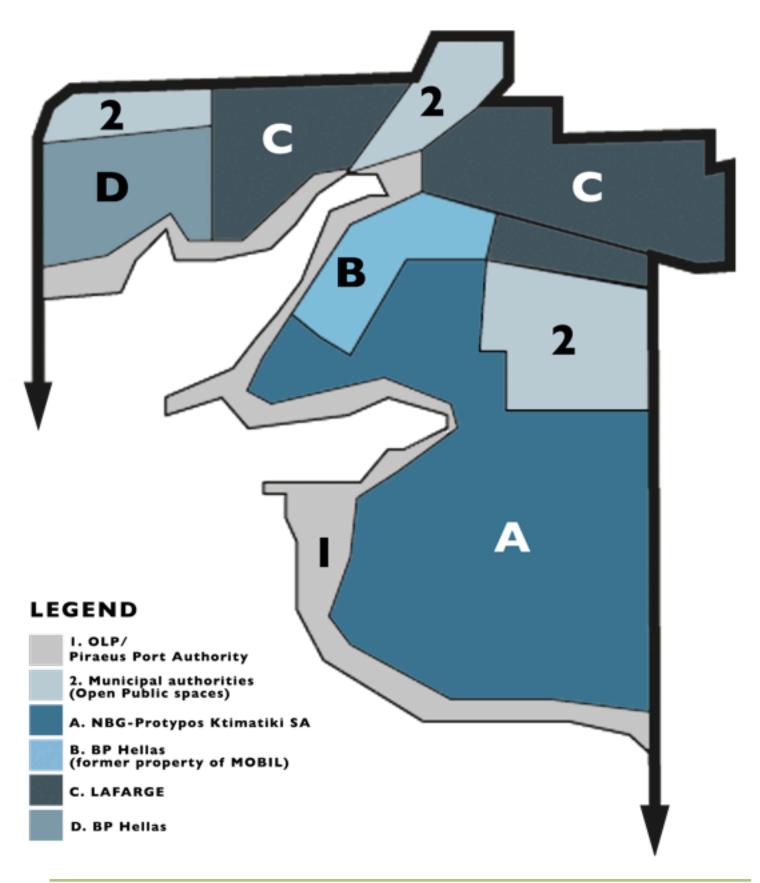


Figure 18: Scheme of ownership status in the area.

It is essential to mention that the real estate property of the area, is part of an approved waterfront-industrial zone that since the beginning of the century was home of port and heavy industrial activities. Today the industrial zone of the area occupies a total area of about 344.300 m2, which is allocated between the private stakeholders as follows (ASPA Design S.A., 2015; $K\alpha\rhoo\lambda\epsilon\mu\epsilon\alpha\varsigma$, 2012):

A) Property of NBG (Protypos Ktimatiki-Touristiki SA)

The property of NBG occupies a flat area without green spaces, of a total surface of approximately 246.096 m2. The major part of this area remains without any contraction, after the demolition of most of the industrial buildings in 2003. From the original property about of 27.810 m2 have been granted in the Municipality of Drapetsona-Keratsini in order to create sports facilities and make use the area for the residents of the zone.

B) Property of Aegean (former BP Hellas and MOBIL)

The property of Aegean is divided in two parts based on the former ownership status (BP Hellas and MOBIL) and occupies a total area of approximately 80.000 m2. The area of the former BP Hellas (46.000 m2) presents a sharp inclination without any green space and almost saturated by buildings and other industrial activities. On the other hand the area of the former MOBIL (34.000 m2) lies on a flat area with no green spaces close to the sea.

C) Property of Lafarge (former AGET Heracles SA)

The property of Lafarge in the area consists the second largest property in the area, occupying a total amount of approximately 110.00 m2. Main characteristic of Lafarge's property is its spatial distribution in different plots of the area. Essentially, the total area consists of 6 plots. The largest plot occupies an area of 60.000 m2 and hosts the inactive facilities (buildings) of the former industry.

Therefore, the ownership status is divided as follows (actors directly involved, Figure 19/Table 3):

Table 3: Ownership status of the "Lipasmata" area

Sector	Actors	Area (ha)
Public (68% of the area)	NBG (Protypos Ktimatiki SA) *	246
	Lafarge (former AGET Herakles)	110
	BP Hellas (former Mobil)	80
	Total area Private sector	436
Private (32% of the area)	OLP - Piraeus Port Authority	94
	Municipal authorities (Municipality of Drapetsona- Keratsini) /Governmental authorities	112
	Total area Public sector	206
	Total area	642

^{*} Part of this area (32 ha) is characterized as Port Zone.

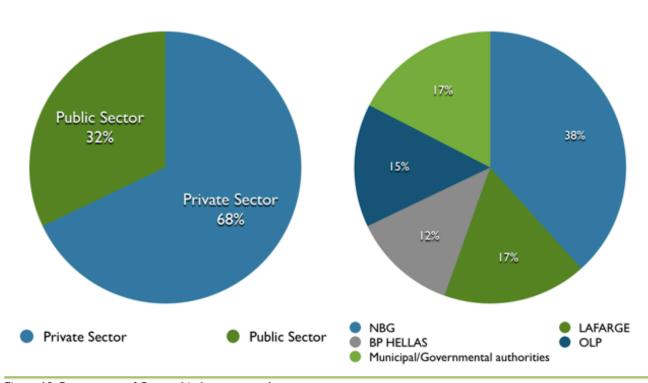


Figure 19: Percentages of Ownership by sector and actors.

Discussion upon the Ownership Status

From the identification of the owners it is considered that most stakes in the area have the private parties with a total amount of 68%, while the public parties owns the 32% of the total area. A first consideration could be that the private owners have a larger interest on the area and their position gives them the power to create new conditions for the area based on their corporate interests and by targeting to their social reputation. Talking about an area of strategic importance for the Region and the country gives a lot of power to the public parties, even if their stakes in the areas are less than the private sector. The interest of the public parties is mainly related to the creation of added value for the society.

Among the several owners, based also to their corporate activities, there is a controversy of interests and visions for the future of the area. The different parties interested in the waterfront's regeneration have their own ideas, approaches and methodologies for the development, which differs in scale, use, target groups etc. (Grozopoulos, 2017). Two of the private parties (BP Hellas and LAFRAGE) are companies that make use of their sites developing industrial activities in contrast to the rest of the proposed uses for the waterfront. In addition, the public parties have recently acquired part of the waterfront area but unfortunately do not have an overall master plan for the site. All these characteristics create complexity and a lot of uncertainties to the current status of the project. Public leadership includes, which some of the stakeholders acting in their proper benefit and promote different agendas, private owners/investors aim at the maximisation of their profits, while some local associations and residents are opposed to the proposed mission.

Additional structural complexity, and more importantly, socio-political complexity, is also caused from the multiplicity of stakeholders. The resources of each actor are in many cases conflicted. For instance, the Municipality of Drapetsona-Keratsini is for a long period of time governed by left political parties that are counter to any private initiative (Tolis, 2017). This fact is not creating only conflicts between the private and the public actors but in many cases also between the public local authorities and the central government. This attitude is creating significant complexities of interaction that are magnified due to the power/interest relationships between stakeholders (Habermas, 1984).

In this complex ownership status, as already presented, there are other external actors that have a direct or indirect impact on the project. These will be discussed in the following paragraph as to have an overview of the situation. This analysis will conclude by mapping all the stakeholders as to understand those who are more important to firstly engage in a possible future strategy for the (re)development of the area.

6.2.3. Mapping the Stakeholders

As stated previously, except from an actor analysis which interests the main individuals or group of individuals that are actively take part on the decision-making process by having a stake on the development area, it is important to understand which other stakeholders can influence the process and how. Therefore an additional analysis based on the external stakeholders this time, will follow and conclude this part of the research.

The several stakeholders will be categorised based on key characteristics introduced previously, according to the theory developed by Dente (2014). Hence, the several internal and external stakeholders will be divided based on their institutional sector, the level and the type of operation, their resources and their power/interest level (Table 4). These analytical categories are needed to simplify the analysis, as they supply useful guidelines and information to interpret (and forecast) stakeholders' behaviours (Ferretti, 2016). Finally, the aim of this analysis is to develop a strategic view of the human and institutional landscape, the relationships between the different stakeholders and the issues they care about most.

The development of "Lipasmata" area involves different stakeholders with conflicting objectives and interests. In order to analyse and map them a survey of the relevant stakeholders has been conducted based on the document review, the semi-structured-interviews and other academic resources. The stakeholders in the specific case are mainly entities or institutions/organizations related to the area.

More in detail, in the area of "Lipasmata" except from the internal stakeholders (land owners) are identified the following more relevant groups of actors:

- a) Public stakeholders of political/bureaucratic type. This category interests stakeholders elected as public authorities from the citizens of the country. These are the Greek Government, the Region of Attica and the Municipality of Piraeus. These stakeholders present a high interest for the project since they are directly influence by the possible outcome. The Government and the Regional authorities have an extremely power to kill or promote the project, while Piraeus municipal authorities have medium power.
- b) Public stakeholders with general interest or experts. In this category are grouped actors that can contribute directly or indirectly in the creation of a (re)development project. Respectively those are the Municipal Offices such as Technical, Environmental, Economic bureaux that can apply general guidelines, restriction etc. in form of laws and regulations and the Technical University of Athens that can contribute to the project with its researches and/or student resources. The municipal offices have high power and interest to the project, while the University as an institution has low power and medium interest.
- c) Private stakeholders with special interest. Those are mainly developers and investors that can contribute to the project, while creating profit for their interest. Both actors have a high interest on the project while their power is medium for the developers and high for the investors. The investors have a higher power during the current socio-economic conditions since the economic resources of the public domain are limited. Thus, with public-private partnerships can influence a lot the development of the project.

d) Civic stakeholders with special interests. This category in Greece has a limited power since, until recently there is limited possibility of expression of their interest. Those groups interests citizens, residents, visitors and NGO groups that have a direct impact of the project outcome. In general, lines their interest is only expressed by the elected authorities. Thus, they have an extremely high interest but no power of influence.

All the stakeholders as presented, previously are elaborated and illustrated in the following table (Table 4).

Table 4: Stakeholder analysis based on Dente (2014)

#	Stakeholders	Sector	Internal/External	Level	Туре	Resources	Power	Interest
1	Greek Government	Public	Internal	National	Political/ Bureaucratic	Political/Legal	High	High
2	Region of Attica	Public	External	National	Political/ Bureaucratic	Political/Legal	High	High
3	Municipality of Drapetsona-Keratsini	Public	Internal	Local	Political/ Bureaucratic	Political/Legal	Medium	High
4	Municipality of Piraeus	Public	External	Local	Political	Political	Medium	High
5	Piraeus Port Authority (OLP)	Public	Internal	Local	Political/ Bureaucratic	Political/legal	High	High
6	Municipal Offices (Technical, Environmental, Economic bureaux)	Public	External	Local	General interest	Cognitive/ economic	High	High
7	Technical University of Athens	Public	External	International	Experts	Cognitive	Low	Medium
8	Urban - City planners/Architects etc.	Private	External	International	Experts	Cognitive	Low	High
9	NBG - Protypos Ktimatiki	Private	Internal	National	Special interest	Economic	High	High
10	BP Hellas	Private	Internal	National	Special interest	Economic	High	High
11	LAFARGE	Private	Internal	National	Special interest	Economic	High	High
12	Residents/Locals	Civic	External	Local	Special interest	Cognitive/ economic	Low	High
13	NGO (Environmental groups etc.)	Civic	External	Local	General interest	Cognitive	Low	High
14	Developers	Private	External	International	Special interest	Economic	Medium	High
15	Investors	Private	External	International	Special interest	Economic	High	High
16	Tourist/visitors	Civic	External	Local	Special interest	Cognitive/ economic	Low	Medium

A crucial step in this analysis is to move forward from a simple static exploration to a more effective tool. This tool will help to understand the power and interest of each stakeholder and its proximity to the redevelopment project. In this way it is be possible prioritise the stakeholders while trying to create correlations among them. This tool is based on the previous results as presented in Table 4 and focuses on visualizing the stakeholders involved based on their main characteristics. The tool is know as the "Stakeholder Circle Map" and based on the methodology developed by Bourne and Walker (2008). In order to create the map is used the online software that is based on the methodology elaborated by Bourne and Bourne and Walker (2008) (Stakeholder Management, 2017).

The "Stakeholder Circle Map" consists of a diagram composed by concentric circle lines that indicate the distance of stakeholders from the project. The project is positioned in the centre of the circle diagram that presents the key characteristics of each group of stakeholder (Walker, Bourne, & Shelley, 2008). Each stakeholder is represented in the circle diagram as a coloured or patterned block. The colour/pattern of each stakeholder presents its homogeneity in terms of entity or group of more individuals. The size of each block and its related area, illustrates the scale and scope of influence, the importance of the stakeholder. Finally the radial depth of each specific block indicates the power (degree of impact) of each stakeholder. The visualisation of the Lipasmata's Stakeholders in illustrated in the following figure (Figure 20).

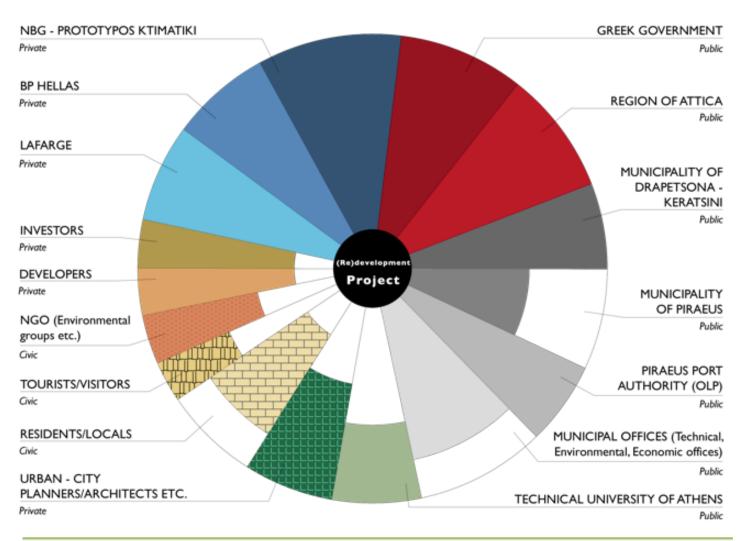


Figure 20: Stakeholder Circle Diagram based on (Walker et al., 2008)

Stakeholders Analysis Considerations

As stated previously, the Stakeholder management includes several stages. One of these stages is the mapping that occurs according to power, legitimacy and urgency of the stakeholders. The interests can still be aligned to project objectives. Based on the previous analysis, it can be concluded that mainly the owners have a lot of power in the project while the public stakeholders as voices of the civic sector have a lot of interest in order to promote social inclusion. As introduced in the previous chapters, the centralized planning system in Greece places the State with its governmental offices in a high position of the stakeholders' hierarchy and can impact the outcome of the project. Finally, experts have an extremely low power in the discussions for the project, while the civic sector seems to not participate at all in the process.

To conclude, from the previous considerations it is witnessed that in the project is mainly engaged the private and public sector, while the third sector (civic) has a limited importance. In such a multi-actor conditions the three sectors as introduced by (Pestoff, 1992) need to be equally involved and engaged in the project in an early stage in order to create a smoother decision-making process (Acevedo, 2016). The socio-political and economic complexity of the last decades, in Greece, influences a lot the relation between the stakeholders and creates new conditions for the future. Shifting the power relations and trying to empower all the stakeholders is considered as a solution to create the development conditions of the future. This part will be elaborated latter on in the Synthesis as it consists an essential condition for the creation of a development strategy for "Lipasmata".

6.3. "Lipasmata" Plan analysis

As stated in the introduction of the case the area has been object of a long-term process in order to be (re)developed. During the last decades several proposals for the regeneration of the area have been conducted and presented without any future in order to create a final implementation scenario. The several proposals are characterized as formal plans conducted by the city or the private owners of the area or as informal scenarios conducted by private urban planners/ designers or architects as a response to architectural competitions of ideas for the future of the area or as away to awake the public opinion.

Therefore in this paragraph it will be addressed a brief analysis based on the history of the several urban planning/design studies. This analysis will contribute to understand, which are the main drivers of such a transformation project and which are the main reasons why those proposals had no future in being implemented. The input in order to obtain this analysis is based on an internet-based research in combination with the analysis of collected data and document review regarding the (re)development process of the area "Lipasmata" (ASPA Design S.A., 2015; Κλουτσινιώτη & Μεσαρέ, 2006; Ρήγας, 2016; Τσάδαρη, 2016).

6.3.1. Evolution of the plans through the years

The strategic nature of the studied area it is also understood by the fact of being main object of a series of project (plan) proposals formulated for the redevelopment and the exploitation of the waterfront area. Overall, they have been published more than four official proposals to redevelop the area of "Lipasmata", in the municipality of Drapetsona-Keratsini, dated back from the 1980's until today. In addition, other informal proposal have been also developed during these years but there is not an official evidence witnessing their character in order to take them in consideration during this analysis.

More in detail, during the 1980's it is first proposed the conversion of "Lipasmata" area in "Industrial Park". In 1991-1992, the Development Association of the Piraeus Municipalities (AN.DI.P. SA), compiled a study for the Economic Reconstruction of the area, which proposed the creation of "Commercial/Shipping Centre". During the creation of the study, AN.DI.P. S.A. investigated the possibilities of attracting relevant actors, such as shipping companies, the Ministry of Mercantile Marine. This proposal was criticised by ORSA (Organization for Planning and Environmental Protection of Athens) that disagreed with the methodology used for the creation of the plan. ORSA during that period proposed a more comprehensive approach methodology based on studies conducted by the University of Piraeus, which considered necessary the creation of a plan that could provide job opportunities in the secondary sector. In addition to the above-mentioned criticisms main stakeholders such as the Ministry of Development have posed main objections.

The period between 1992 and 1995 was not very effective compared with those who followed, since any efforts made for the (re)development of the "Lipasmata" area, they always had as obstacle the operation of the industry. Specifically, in 1993 the National Bank of Greece (NBG) founded the real estate organization "Protypos Ktimatiki Touristiki" with goal the temporary operation of the industry. Another main objective, in a long-term horizon, of the organization was the (re)development of the area and the creation of the "Maritime Centre".

Around 1995, the Public Corporation for Urban Development and Housing (DEPOS) drew one of the first studies for the area, without being materialized. With the recommendation of its Executive Committee, ORSA took two important decisions in 1997. The first regards the review of the General Urban Plan of the municipality of Drapetsona-Keratsini. During this review, its was institutionalized an "Urban Centre" in the waterfront area of "Lipasmata", which implies new land uses and fixed building construction factors with 40% contribution in land for new properties to be included in the plan. The remaining 60% will revert to the ownership of the municipality, who must create the infrastructure so that the private owners can exploit the remaining 40%, which interests the open spaces of the private-owned plots. This decision was based on the N.1337/84 law, which concerned the semi-open spaces.

The second decision characterized the area as "Operational Urban Planning zone-ZEP" to facilitate the regeneration processes. - "Operationa Urban Planning" is a tool of urban development or urban rehabilitation, which has been established in Greece from 1979.- The determination of the former industrial zone as an under redevelopment area, compatible with Shipping Centre (Harbor

activities), -without this constituting a unique and own choice-, launched the modification of the General Urban Plan, a requisite for making land use changes.

In 1999 the area of "Lipasmata" stopped its industrial activity. The following year (2000), the National Technical University (Scientific Panel: John Polyzos, Helen Maistrou, Nikos Belavilas, George Macheras and Dimitra Mavrokordatou), carried out a study on the exploitation of 250 acres of the industrial complex, which included spaces for education, research, recreation, tourism and culture.

Few years later, in 2001, ORSA launched a project called "Terra Posidonia" (European Program of the development of waterfront areas). The result of this program was a study on "Port-industrial Zone of Keratsini-Drapetsona" (researchers: Ourania Kloutsinioti, Antonis Tortopidis), seeking through this obtains the change of the General Master plan of the area, while making significant changes in its decisions of 1997. Unfortunately, this project was never realized.

In the upcoming years and, precisely in 2003, the Piraeus Port Authority (OLP) commissioned the office A. Rogan & Associates SA and Economics Research Associates, to conduct a new study, which was unlikely, not submitted for approval.

The same period of time (2003), after the characterization, by the Central Archaeological Council (KAS), of several buildings presented in the area as industrial heritage, thus, in need of preservation, almost all buildings, workshops, warehouses, etc., were demolished with the exception of 24 acres that were occupied by the industrial heritage buildings. The remaining 230 acres of the industrial site became clear plot.

Two years latter, in 2005, the new administration of the National Bank of Greece (NBG), instructed Savills Hellas Ltd. to conduct a "Development Study" of the area with criteria based on the analysis of the real estate market (unfortunately the data of Savills' research were not possible to be consulted). In parallel, the firm "Thimios Papagiannis Associates Inc." was commissioned by the same actor to conduct the urban planning study. This study concerns only the NBG'S owned plots (246 ha) of the "Lipasmata" area, adjacent to the main port of Piraeus aiming the creation of complex shipping centre (offices, residential, entertainment and cultural centres, shops) as illustrated in Figure 21.

The researchers of this proposal considered as important data in relation to the citizens a) the legacy of the refugee culture, b) their relationship with the industry and c) the proximity of their area to the Sea ($K\alpha\rhoo\lambda\epsilon\mu\epsilon\alpha\varsigma$, 2012). For the landowners, the Real Estate group of NGB, the main objective of this proposal was, in a local level, to strengthen Piraeus' economic dynamism as an international maritime centre, increase the employment opportunities and create the conditions for the city to connect again with its waterfront. To strengthen even more the proposal and highlight the potential of the maritime front, the plan provided a series of leisure activities and cultural and public services (ASPA Design S.A., 2015).





Figure 21: Land Use plan and design of the Papagiannis' proposal, commissioned by NBG. (Τσάδαρη, 2016)

The proposal of Papagiannis was characterized as an "impressive" design that follows the international trend for the regeneration of former industrial areas. For this reason the plan was criticized, mainly by the local authorities (Municipality of Drapetsona-Keratsini), and characterized by the mayor of Drapetsona-Keratisni George Arviadis, at that time, as "the struggle of the cities to attract capital and investments as a key indicator of economic growth" - typical example of top-down approach ($K\alpha\rhoo\lambda\epsilon\mu\epsilon\alpha\zeta$, 2012). As stated such modern "designer's" architecture plans implemented with skyscrapers and other landmarks could provoke further problems in the city such as gentrification and further social injustice (ASPA Design S.A., 2015).

During the same period of time (2005) LAFRAGE, another private actor of the studied area, presented its own study mainly concentrated in the (re)development of its owned plot. This plan proposed the creation of a large shopping centre in the area where now is functioning the cement industry. This activity is in line with the proposed plan of NBG since the uses are complementary and enhance the idea of a Shipping pole with recreational and leisure activities for the community.

In November 2005, additionally to the proposals made by the privet owners of the plots, the Municipality of Drapetsona-Keratsini, with an initiative od the mayor George Arviadis, signed a contract with the design office of Kloutsinioti and Mesare in order to conduct a new plan proposal for the (re) development of the former industrial area.



Figure 22: Land Use Plan and design of the Kloutsinioti & Mesare plan proposal, committed by the municipal authorities. (Τσάδαρη, 2016)

The municipality and its conditioned researchers acknowledged the fact that the private owner NBG commissioned the Papagiannis' office to create a development study for its own land. Given this has been agreed a cooperation between the members of the two research groups in order to avoid disagreements and conflicts between the two plans. For this reason several formal meeting and discussions were arrange in order to make clear the several interests and objectives for the two proposal and thus create a smoother process. In this way, the proposal conducted by Kloutsinioti and Mesare, from the part of the public authorities, has been presented to Protypos Ktimatiki (NBG) in a formal meeting in the presence of the mayor and deputy-mayor of Drapetsona-Keratsini (Κλουτσινιώτη & Μεσαρέ, 2006).

This collaboration, according to the researchers Kloutsinioti and Mesare, had a positive outcome (Kλουτσινιώτη & Μεσαρέ, 2006). This statement is based on argument that the two studies had a quite common ground in terms of the main design principles and the land uses thanks to the use of all the previous research experience and the conclusions of both researching parties. However, the two approaches are not identical in relation to their adopted philosophy and one can see in the two plans significant differences (Κλουτσινιώτη & Μεσαρέ, 2006). These two opposing approaches will be further discussed as it is essential to understand the grounds of the created conflicts between the plans and consequently between private and public parties.

Benchmarking of the two approaches: top-down vs. bottom-up development

Comparing the main two proposals of 2005 it is evident the opposing preferences of the private and public sector, involved in the project. Although the two plans followed the same basic guidelines, as stated before, the two development approaches are not identical. The main differences are concentrated to the philosophy adopted by the involved parties, which can be distinguished in the two plans ($T\sigma \acute{a} \delta \alpha \rho \eta$, 2016).

Following the previous discussion it is observed that on one hand, the private sector (NBG-LAFRAGE) are searching for development plans that can attract investors and provoke the area's economic growth, by opting for a top-down development approach. While on the other hand, public parties (Municipal authorities) are in favour of more bottom-up developments with cultural and social identity, where the open green public spaces are predominant.

With regard to these differences between the plans, concerning their land uses and their allocation to the site, the general philosophy, the environmental issues and the social effects that these will bring, a brief comparative presentation will be attempted. This comparison is mainly focusing on understand the opposing point of views as presented by the several critiques of the plans. An important role in the benchmarking discussion is given to the uses selected to position between boundaries of "Lipasmata" with the existing neighbourhood, but also to those located on the coastal front.

In the plan presented by Kloutsinioti-Mesare, on behalf of the municipality, the connection to the neighbourhood is sought through the use of urban centre uses, with community activities, soft green areas and through the creation of a low pace residential area ($T\sigma\dot{\alpha}\delta\alpha\rho\eta$, 2016). Regarding the waterfront area, there are areas of general residence, cultural activities, green areas of both hard and soft surfaces. The connection of the rest of the city to the sea is achieved through the soft green spaces by creating public passages for all the inhabitants towards the sea. Private uses, in relation to the private owners of the area, are limited to the minimum (Κλουτσινιώτη & Μεσαρέ, 2006).

The plan carried out by Papagiannis and Associates Inc. on behalf of the private owners, treats the (re)development area as a single plot to a greater extent (Τσάδαρη, 2016). In the areas close to the existing city's urban fabric are located housing, commercial uses and administration functions, while pure residential areas, commercial uses and cultural activities dominate the waterfront front. In this proposal, the costal zone area is seen as more exploitable (Καρολεμέας, 2012). For instance, the free public spaces are limited with an exception of some pedestrian roots. In general, the plans of this study do not separate the soft green areas from the others and from that one can deduce that there is only one concentrated green space to be used as park for the whole the area. Such planning solutions have been highly criticized by the municipality of Drapetsona-Keratsini since are targeting to the creation of real estate value for private owners without considering the social character and importance of the area. This opposing view was based on the creation of large areas with of high-ending single dwellings and the segregation of the public paths with those of the new inhabitants' (Κλουτσινιώτη & Μεσαρέ, 2006).

The public paths are limited only to zones where commercial activities are locates and this creates a situation of social exclusion while limiting to some extent the "open" spaces for the of Drapetsona-Keratsini. (Καρολεμέας, 2012)

The allocation of residential areas in the costal front exists in both plan proposals, but in the case of Papagiannis and Associates Icn. proposal it is more evident and generally used in the whole intervention. As stated by the former mayor of the city George Arviadis "This decision of creating new high-ending residential clusters is a move that leads to great social variations, since it will not primarily address the social groups that make up the population of the neighbouring areas with mainly a medium/low income." (Καρολεμέας, 2012; Κλουτσινιώτη & Μεσαρέ, 2006).

The proposal of the private landowners follows a more international development trends as to attract new investments and capital as essential indicator of economic development. Such "top-down" approach sees the area as a whole and gives to architecture and urban design an upgraded essential role as to promote the stakeholder's ambitions for the area. This international trend carries also additional issues that have not been witnessed in a big amount in Greek cities and societies for mainly historical reasons. Such issues related to this urban phenomenon, occur in almost all the redevelopments, and as already stated previously interests the gradual removal of the local population and the establishment of higher income classes in them, know as gentrification. This process arises predominantly due to the increase of the land value. Locals are usually unable to cope with new prices and are looking for transfer to different more affordable parts of the city.

These two last proposals have been in the centre of discussions and objections by the involved parties for a long period of time. Although the general guidelines were quite equivalent the main principals of the design differ. The difficulties of the Municipality and the two major private owners NGB and LAFFRAGE to create a common sense for the future of the area describes the situation until the current years. The opposing ideas, interest and objectives of the key stakeholders worsening even more the situation by creating delays and further complexity to the development process. The conflicting relationships as, introduced during the stakeholders analysis will be further elaborated in the following paragraph based on the experts perspectives as stated during the semi-structured interviews.

The current conditions and future plans

In recent years and mainly, during the last decade several additional studies and plans have been conducted but since are mainly informal proposals, it is difficult to collect data in order to analyse them. Such proposal are mainly conducted by experts such as private architects, urban planers and designers in search for a development project that will enable again the waterfront area of "Lipasmata". In addition public entities such as the Technical University of Athens mainly for academic purposes are researching the future of the area.

During the recent years, and more precisely in June of 2016, the Region of Attica, with aim the strategic development of the entire region, launched an Architectural Competition of ideas in order to collect proposals for the organized urban (re)development of the waterfront area "Lipasmata" with a total surface of 640 ha in the municipality of Keratsini-Drapetsona.

As stated in the manifesto of the competition after several years and the closure of all the industrial activities in the area, the revitalization and development of this site is one of the most important challenges and opportunities with economic, social and environmental implications not only for Piraeus and Attica but for the whole country.

This area is now foreseen as a strategic intervention in order to upgrade the quality of western Piraeus and of the municipality of Keratsini-Drapetsona. Main goal of the (re)development project is to ensure a high quality environment and infrastructure with main functions and recreational activities by reconnecting the inner city with its waterfront area ($P\dot{\eta}\gamma\alpha\zeta$, 2016). This competition opens for once again the discussions for the future of the area as it can create the conditions for a series of interventions in the Region and the country in general. The outcome of this competition is expected to be announced in July 2017, while it is witnessed, from the organising authorities, the interest of young experts in the field (SADAS-PEA, 2017).

6.3.2. Plan Analysis Evaluation

The previous comparative analysis of the several plans conducted through the several years of discussions regarding the (re)development of the area does not lead to a judgement of a better and a worse proposal, nor was that the main goal of course. It attempts, through the analysis of the main data, to highlight the way that urban planning is implemented in such cases in Greece. Through the exploration of the several proposals it is aimed to understand the main project characteristics as well as the main reasons why for approximately 20 years the area remains undeveloped.

In order to execute this evaluation, facilitate the discussion and draw the main conclusions of the plan analysis a comparative table (Table 5) of the plans been designed. This table is based on the previous analysis and on information derived form the document review. The main information of the several plans, interests the allocation of new uses followed by a general description of the plan, the possible objections and finally some preliminary considerations based on the outcome of the plans.

The discussion based on the analysis outcome focuses on four main themes. These are related to the land uses to be allocated in the area and the development approaches to be implemented, based on stakeholders and finally the role of the public domain in the process.

Land uses allocation

First of all, in relation with the new uses to be allocated in the area, it is illustrated by the comparative analysis that most of the plans are in line. Uses such as recreational activities, housing and public facilities are mostly proposed in the several plans while open green places are an essential part of the proposals. The main objections to such uses interest the position of

Table 5: Comparative table of the several plans and design proposals for the (re)development of the area

Considerations		This proposal aimed to create the condition in order to attract new actors and investors to the areas. Such actors are based on the shipping activities (shipping companies, Ministry of Mercantile Manne). The intensive character of the proposal was criticized as opposing to the general guidelines as introduced by R.S.A. because was targeting only to a particular target group based on the shipping activities.		This proposal was mainly a research for the area based on the "Terra Posidonia" - European Program of the development of waterfront areas. The research was mainly targeting to create the conditions for new discussions not only for the area but for the review of the General Masterplan of the extended area, which was characterized as outdid and limiting.	This proposal as a university research aimed to create new conditions for the decision-making process and the discussions between the key actors. The plan is based on the guidelines of the existing land use plan and on the objectives of the public stakeholders for the development of the city and the society. As an expert the Luiversity gave new insights for the future possibilities of the area while the intervention is characterized as a low pace.	Although the connection of the areas with the port this was the first time that the port authorities OLP participate actively in the discussions for the future area.	The opposing preferences of public and private stakeholders was underlined by this proposal. This proposal characterized as bottom-up approach was proposal characterized as bottom-up approach was targeting to the creation of small paced activities with cultural and social orientation. In this way the area was once again seen as a whole but the private interest was not represented.	This proposal interested mainly the 246 ha land owned by the private company NBG. The proposal was influenced by the top-down international trends and the main objections were based on the idea that such development will create further problems in the city such as gentrification and social injustice.	Although the results are not published this competition opens again after a long period of time, the discussions for the future of the area. As stated in the note of the competition the area is seen as a metropolitan pole however the requirements drives to the creation of a metropolitan park with a few recreational activities for the visitors. Once again the stakeholders are working in different directions, since the public authorities are not taking into account the needs for alternative uses compatible with the private land owners.
Objections		R.S.A (Organization for Planning and Environmental Protection of Athens); Public authorities such as the Government (Ministry of Development) and the municipalities of Keratsini and Drapetsona	·		·	Not Submited	Private stakeholders (mainly NBG - Procypos Krimatiki)	Local authorities (Municipality of Drapetsona-Keratsini)	The results are not yet published
Description	This proposal was developed before the disruption of the industrial activities in the area under the framework of the Urban Reconstruction Enterprise	The proposal had the following goals: a. Uses to be part of broader regional planning and trends in economic activity. b. Harmonic coexistence of functions; c. Ensuring consistency of uses with a view to longterm sustainability of growth; d. Utilization of coastal front: e. Harmonious coexistence of proposed functions with the surrounding urban fabric.	The proposal had the following goals: a. Creation of a coastal development axis with complementary functions; b, Configuring environmental friendly and residential uses; c. Eurctional and spatial integration of a wider c. Scala axis; d. Positive social impacts.	The proposal is based on economic, social criteria and environmental criteria for: the attraction of investments, creation of jobs, correlation of functions related to port activities, creation of public amenities, recreational areas in the waterfront areas and strong connection of the urban center with the sea front, while promotion and reuse of industrial elements and upgrading of the image of the Port.	With a research conducted by a scientific panel of researchers form mainly the faculty of Architecture, the proposal is based on the creation of a complex of activities for education and culture and a series of public services for the citizens. The proposal is characterized by a small exploitation of the land while targeting on the reuse of the industrial buildings.	Not Submited	The proposal places greater emphasis on the creation of public spaces and amenties with green areas, while reduces the commercial character of the area by avoiding strictly orienting investment activities in the business and shipping world. It proposes a mild exploitation of the land, but does not exclude the business and commercial exploitation of the area.	Overall, this plan proposes a fairly intensive exploitation of the land and has in general, a strong investment, business and commercial character. The way it allocates the space per land use also specifies the users it targets.	In the note of requirements Attica Region expects for architects the design of a Metropolitan park with several additional recreational activities and facilities for the society.
Usage	Creation of an "Industrial Park"	Commercial/Shipping Center/Logistics	Business, Services and Leisure Park	Mixed Use with emphasis a) commercial activities b) light industrial activities	Mediterranean Center for Science and Arts	Mixed Use with emphasis on a) commercial activities b) housing	Urban Center with mixed use spaces based on housing. leisure and green spaces	Hyperlocal Maritime Business Center with mixed use functions (housing, leisure, culture, etc.)	Metropolitan Park
Commissioning	ı	•	T.	R.S.A.	University research	OLP (Piraeus Port Authorities)	Municipality of Drapetsona-Keratsini	NBG - Protypos Ktimatiki	Attica Region (Dip.Western Piraeus)
Year of proposal	1980's	1992	1997	2000	2001	2004	2006	2006	2017
Researcher		AN.DIP. SA	DEPOS (Public Corporation for Urban Development and Housing)	TERRA POSIDONIA Kloutsounioti-Toropidi	National Technical University of Athens	Rogan Associates S.A.	Kloutsounioti-Mesare	Thymio Papayannis ans Associates Inc.	Open Architectural Competition
#	*_	7*	* *	*	ю	9	7	ω	6

^{*} For this proposal no other information are found, during the document review and literature review.

the uses in the area, the ratio between the new constructions and the green spaces as well as the amount of public spaces to guarantee the accessibility of the citizens in the area and the see. Other uses are mainly based on the character of the plan and the interests of the commissioning party (mainly the landowners). The conflicted land uses interest the creation of new commercial activities, corporate clusters based on the shipping and touristic sectors. Mainly the private proposes those uses that together with the addition of the previously stated uses aim to create profit and value for their corporate activities. Additional uses such as cultural and educational activities are also reported in the plans as in will create added value to the city and may attract a larger amount of target groups, e.g. students, tourists. etc. as proposed by the plans of Terra Posidonia in 2000 and the one of the Technical University in 2001.

These conflicts in relation to the lad uses derive from the stakeholders' perspective in the area. Mainly the public actors are driven towards more social-related land uses such as parks, public spaces etc. that have a high social and environmental impact but also a high economic value in terms of construction and maintenance. This uses interest mainly the plan of 2004 and 2006 commissioned by OLP (Port authority) and the municipality respectively. In this direction is also focusing the current Architectural Competition commission by the Region of Attica and the Municipality of Drapetsona-Keratsini. On the other hand the private parties, as stated, are interested mainly to create profitable activities in their owned plots and in the same time support more social-related activities to the rest of the area. This allocation of uses is mainly presented in the plans of 1992, 1997 and 2006 (NBG and LAFRAGE).

The diversification of the uses based on the interests creates additional complexity to the development process. Except of the opposing actors' preferences this issue is created mainly because of the absence of an updated General Land Use Plan (Bitsakaki, 2017). The General Plan that govern for many years the area of "Lipasmata" was proposing for the area the allocation of industrial facilities, even after the closure of the Lipasmata industry, in combination with facilities and services related to the neighbouring port. The inefficient land-use plan adds additional uncertainty and limits even more the development process. This unclear land-use conditions witnessed also by the multiple plan proposals, limits the creation of common grounds between the landowners and promote a smoother and more fruitful discussion. Therefore, although the mixed-use character of a plan can create better conditions for the future of the area as stated by Tiesdell and Adams (2011), the municipal authorities are negative to such a development as it downgrades the historical character of the area and the need for open and public places for the citizens. Currently the General Land Use Plan of the entire Region of Attica is under discussion in order to be updated given the Structural Vision of 2021 (R.S.A., 2011).

Development approaches

The main consideration based on the different development approaches is focusing on the most recent plans. In these plans, as previously stated, are taken into account the shared general guidelines while the proposed uses are quite the same. However, the character and the perspective of each actor, commissioner of the plan, are illustrated by the outcome of the plans and the way that are aimed to be developed. This mismatch of the approaches lead to another consideration

for the future of the area, which is not in line with the literature presented in the introduction of the research.

This consideration based on the development approaches, is related to the creation of a unique plan for the entire area as a solution to the conflicting interests. As presented in the academic literature, there is a tendency in the Greek urban design practice to create mainly small scaled, episodic, fragmentary and soft interventions (Gospodini, 2001). This way of practice is questioned by Gospodini (2001), while she suggests a better solution to the move towards large scaled interventions and avant-garde physical design of the space in order to create a more competitive image for Greek cities. Although such approach is internationally applied in many waterfront development examples (e.g. Bilbao), this suggestion is questioned based on the previous analysis. From the plan analysis is illustrated the conflicted development character of the main stakeholders. For instance the last two plans of 2006 had a completely different approach based on their previous benchmarking. On one hand the private owners presented a top-down plan focusing mainly on their owned lands, while the municipality with its proposal opted for a more bottom-up that covers the entire area.

Based on this discussion it is difficult, given also the current socio-economic conditions, for the several parties to come to accordance for the development of such a large area as a unique place. Additionally is even more difficult to find the resources in terms of investments to finance the complete area. This argument presents the gap in the Greek academic literature since it can be considered as out-dated. The main literature resources are dated back in 2000's. Therefore, given the current conditions in the country alternative approaches need to be taken into consideration in order to activate possible scenarios for the area.

The Role of the public domain in the process

The public parties involved in the project can considered as internal stakeholder since have stakes in the area and as external ones based on their political and bureaucratic resources. This makes their position in the project even more important as they have the power to promote or kill the project, as presented in the Stakeholders Analysis. In the plan analysis mainly the Municipality of Drapetsona-Keratsini, the port authorities OLP and the Region of Attica are presented several times as commissioners of a plan proposal (2000, 2004, 2006), while the Municipality and Region as promoters of the civic sector's opinion are opposing to plans with a more real estate orientated character and thus the private initiative.

This continually opposing attitude limits the process of creating a common ground for discussions between the actors, something that is also witnessed during the past 20 years and the 8 plans executed. Although the essential differences that public and private parties have, the public domain need to act as a promoter of the development and not as an opponent to any initiative. According to David Adams and Tiesdell (2010), the public parties, in the urban development practice, with their respective planning actors need to realise that are market actors and by working together with the private sector can re-make the market conditions and can steer to successful development schemes for the socio-economic growth.

This, last consideration, will be discussed also further on, as it is a topic cited by several experts during the interviews.

Based on the previous information and the several discussions made until now, the following paragraph aims to explore the case study in relation with the point of view of several experts in the field. Their opinion has been documented through qualitative interviews. By analysing and discussing the qualitative data from the several semi-structured interviews, it is possible to add more value to the case study analysis and the empirical part of the research.

6.4. Exploration of "Lipasmata" case based on the results of qualitative interviews results

In order to elaborate better on the issues that influence the creation of development strategies and to strengthen in that way the research several semi-structures interviews with experts of different fields have been executed. The key finding of the interviews will be discussed and analysed in detail in the following paragraphs. The qualitative information gained from the interviews will be presented based on a general discussion. The investigation of the case study based on the interview results will give additional insights on the study towards the conclusion of the empirical part of the research. The knowledge gained during the interviews will be used as supporting information to the research outcome.

During the fieldwork in Greece (March 2017) six different semi-structures interviews to experts have been conducted. This method permits to gain insights and in-depth information related to the development process of "Lipasmata." and in general to the topic of waterfront development practice in Greece. Starting with a small amount of questions related to the case study the goal of such interviews was to collect valuable information in order to understand the problem stated, validate the research topic and collect ideas that will drive towards the creation of the future development strategy. In many cases the interviews were extended to broader discussions, which gave the opportunity to collect further information and data not only for the case study but also for the whole research.

The interviews were mainly based on the following topics:

- Reasons of not implementing development projects in "Lipasmata";
- · Need for such project in the age of crisis;
- Need for an alternative development approach;
- · Conditions for the future.

The following section is structured based on these main topics in order to have a general overview of the interviews' outcome. As introduced in the methodological chapter the protocol of the interviews and the interviewee details can be consulted respectively in the Appendices I and II. It is important to mention that two of the interviewees requested to stay anonymous. Hence, in the following discussion are cited as Expert A and Expert B, while the rest of the interviewees are cited normally with their names.

6.4.1. Drawbacks and limitations of the current approach in "Lipasmata"

By taking into account the "Lipasmata" area it is possible to affirm that there is a combination of elements that influence the development of the area. Such elements are considered as barriers that add complexity to the current practice in Greece. It is possible though to some extent generalise the discussion since such barriers are witnessed also to other similar projects in Greece. Based on the previous analysis such drawbacks can be divided in two main categories related to their level of influence in the outcome. The first category is related to barriers that are internal to the area, for instance the multiplicity of stakeholders and their opposing interests (Bitsakaki, 2017; Grozopoulos, 2017) that influence the outcome of every proposed plan, as presented in the previous section. While the second category interest external limitations, know also as institutional, related to issues caused by the planning culture in Greece or several political reasons. In this category the main barriers are related to the inefficiency of the current landuse plans (General Land Use Plan of the area), the multiplicity of the current legislations related to development projects or other institutional/political problems that affect the relationship between the private and the public sector (Bitsakaki, 2017; Vavaletskos, 2017).

More in detail, in relation to second category of the external barriers, during the interviews was mentioned by multiple experts that the inefficiency in the development of major urban regeneration projects is solely due to internal pathogens of the state machine (Expert B, 2017). The bureaucracy is the permanent enemy of private and public initiatives. The National government controls most of what is decided in Attica Region, but its highly departmentalisation making the cross-sectorial integration extremely difficult (Expert B, 2017). This affects also the relationships between the several public authorities (Municipalities, Ministries etc.).

"It is well-known and witnessed that large investments in our country have "stumbled" upon the several bureaucratic issues related mainly to the incapacity of the public administration to facilitate the development processes... In particular, the attempted redevelopment of the "Lipasmata" area is due to bureaucratic rigidities, but above all, I would say, to the outrageous discontinuity of decisions characterizing the Greek State." (Expert B, 2017).

In particular, the attempted redevelopment of "Lipasmata" is delayed due to bureaucratic rigidities related to the discontinuity of decisions characterizing the Greek State. As illustrated also during the plan analysis, the several proposals have a different orientation in terms of development characteristics (land-uses, ration of private/public spaces etc.) that is due to this discontinuity of decisions and the lack of a coherent political/institutional/legal framework to support them.

During the last 20 years, the political stage of the country, in a local, hyper-local or national level, is continuously changing and so does the decisions upon such important developments. This is also due the current centralized system in the country, in which the role of the central government in policy making is critical. In the same direction the municipality are hesitating to take control of any initiative to promote the development of the area although is claiming the importance of such operation for the city and the citizens.

"The municipalities should be the initiators of such developments in order to protect the cities and the societies and create new opportunities fro the citizens." (Bitsakaki, 2017)

"In Greece and especially in the case of "Lipasmata" in order to be elected and for canvassing reasons the municipality is stepping back and not taking the responsibility of promoting such ambitious project" (Expert A, 2017)

Another essential problem connected also with the previously stated issue is also the huge gap between the decision-making process for a project and its implementation resulting on a last-long process (Vavaletskos, 2017). In many cases is witnessed that even if such development projects bears the consent of the social and local actors, it is quite likely to be blocked because of a bureaucratic issues due to the current legislation that governs the brownfield areas and in general the development processes in the country. The multiplicity of laws and regulations, considered also as out-dated, is not promoting or facilitating the actions for implementing a specific strategy (Expert A, 2017). It is, therefore, also the multiplicity of law and regulations that acts as a brake on such investments. As mentioned by the architect and urban planner Bitsakaki (2017) during the interview there are multiple planning laws that governs such developments and vary based on the planning level. In order to create such development projects one must take into account these laws that in any case does not facilitate a smooth process and several delays may arise. In order to have an overview of the regulations that governs the planning system in Greece Bitsakaki (2017) granted the following Legislative framework (Figure 23).

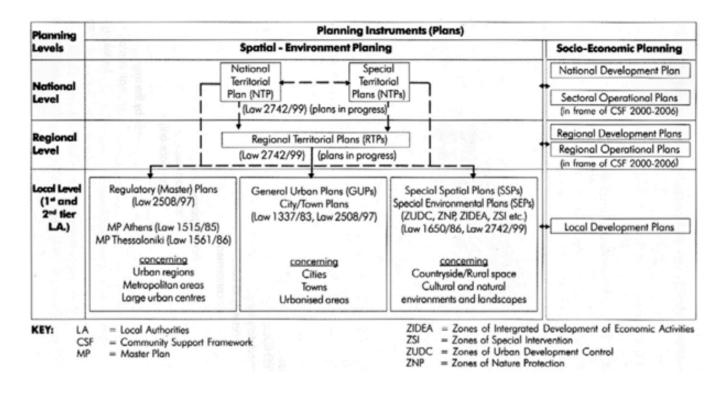


Figure 23: The general structure of the Greek planning system and its legislative framework (Bitsakaki, 2017)

On the other hand in relation to the internal barriers, another important limitation is related to the multiple stakeholders involved. This in many cases influences the process of creating a unique strategy for a certain area, since conflicted interests are involved by adding more complexity. In several examples as well as in the "Lipasmata" case, the division of the land in different owners creates difficulties that influence the advancement of the project.

".... among other drawbacks the main barrier in creating a waterfront development strategy in the costal zone of Attica in basically, the fragmentised ownership status." (Expert A, 2017)

More in detail, in the "Lipasmata" case the complexity of the multiple site ownerships and the controversy of interests leads to the failure of every development. This controversy derives as stated during the stakeholders' analysed form the type of each actor and their resources in the process. For instance as declared by the their plan proposal (see Papagiannis 2006 proposal) the private owners aim towards a more profitable real estate development to create added value to their corporate activities while targeting also to some social and public activities as part of their social responsibility to the citizens. On the other hand the opposing view of the municipality is opting for a more social-orientated development without taking into consideration any economic future risks by targeting to the creation of large parks and public spaces and limiting the profitable uses to the minimum (see Kloutsounioti-Mesare proposal of 2006).

"The local authorities (the Municipality of Drapetsona-Keratsini) for many years declares the creation of a metropolitan park in the area of "Lipasmara" and are opposed to any other proposal. They cannot understand that such a large area cannot only be a huge green space with sports facilities and other public amenities, since it is economically unfeasible and difficult to maintain in the future without any economic activities in the area." (Bitsakaki, 2017)

Additionally, most of the existing proposals for the waterfront do not answer effectively neither to the complexity of the site, in terms of current/future uses and demands, nor to the different stakeholder's benefits. The different parties interested for the waterfront's regeneration had their own version, approach and methodology for the development, which differs in scale, use, target group, etc., as presented during the plan analysis. (Bitsakaki, 2017; Grozopoulos, 2017). Furthermore, public parties have recently acquired part of the waterfront but unfortunately do not have an overall plan for the site.

"The case of "Lipasmata" is quite unique since it is one of the few so complicated in terms of socioeconomic and political context. The waterfront area hosted industrial activities for more than a century so it is considered as a brownfield site. However, after the deindustrialization several stakeholders acquired the land. Among them there is a private real estate company, the municipality, two industries that are still active and the authority managing the port of Piraeus. The complexity of the multiple site ownerships and controversy of interests leaded to neglect the waterfront." (Grozopoulos, 2017)

Moreover, the incapacity of public and private parties to create a common ground for discussions was a huge obstacle in the development of the area (Vavaletskos, 2017). The private initiative should not be hindered because of the state's inability to manage such important public land plans (Expert B, 2017). Is crucial for the public domain of all levels (the state and the local authorities) to co-operate with private stakeholders in order to promote development areas.

"Public bodies need to be able to co-operate with private individuals and lead jointly the public debate in consensual, for the developmental, solutions." (Tolis, 2017)

In this way public parties can act as market actors and steer the development into a profitable for the society plan while creating condition for attracting new investments in the area.

6.4.2. The importance of development projects during the crisis

Many experts stated that the importance of such development projects in crucial especially during this period of socio-economic crisis. All brownfield sites have great potentials since their reactivation could benefit the cities in various ways and thus are considered as ambitious and of a great importance. First, is the potentiality of these disused sites to become green-open spaces that modern cities and urbanised areas are lacking of. Derelict sites, grey zones, factories and warehouses hold either explicitly or implicitly an architectural, aesthetic and historic value, which has often proved of a great importance for humanity and are considered as parts of the cultural heritage. Furthermore, most of these abandoned areas present an economic potentiality, since through their revitalisation they can generate profit and employment opportunities for the local and surrounding communities. And last but not least, these sites could benefit significantly the environment in territorial or even regional scale through sustainable design proposals (Grozopoulos, 2017). In a long-term horizon waterfront development can play an important role in the further boosting the tourisms it can be a potential touristic attraction for the national or international tourists (Vavaletskos, 2017).

"For instance, as far as I know the newly developed cultural centre of Niarchos Foundation in Faliron from its completion, in August 2016, has hosted approximately 700.000 visitors. Think about how can a bigger scale project attract even more visitors. (Figure 24)" (Vavaletskos, 2017).

For these reasons, the Region of Attica and the major cities consider that promoting and creating urban regeneration projects is an important step towards the overall development of the society and the economic growth (R.S.A., 2011). Thus, several strategic and regulatory plans incorporate the development of specific areas as essential parts of their Visions for the future. The experts also support this statement since they consider that the development of the urban environment is extremely related with the quality of life and the strengthening of the society, thus the advancement of the cities (Bitsakaki, 2017; Expert A, 2017).

"Except from the improvement of the quality of life and the urban structure of the cities, the development of brownfield areas is essential for creating new job opportunities, during and after the completion of the project. In my opinion the municipalities in Attica that hold such areas are

very lucky. Of course what is needed is a good governance and management of the resources, since especially for waterfront areas there is a lot of interest in terms of private investments." (Expert A, 2017).

".... I strongly believe that by solving the several issues and by creating development plans, such brownfield areas, after the completion of the project, will stop being urban voids and in addition they will be created new land uses and activities that will benefit further the society and will change a lot the people way of thinking, see for instance the newly developed cultural complex of Faliron." (Bitsakaki, 2017)

6.4.3. Towards a new development approach and conditions for the future of the development practice

In order to create a new development strategy, is important to understand which is the current strategy. Currently the only existing strategy for Lipasmata is for the main private owner to take over the whole project in order to create an attractive pole that can be economically advantageous, while creating new opportunities for the society by protecting its corporate responsibility. It is obvious that with all the limitations that govern the current legislation and in general the planning practice in the country such approach is difficult to be implemented since there is no involvement of the public parties. Apparently such approach is not enough given the current challenging context and a more social approach could be addressed (Bitsakaki, 2017).

For that reasons many of the experts addressed the importance of have a strong political will both from the central and the local governments in order to create the conditions for the future of such areas. While in many case is needed the involvement of the state as a market player in the process.

"In my opinion it is important to create a public authority or even a specific Ministry for the development of waterfront areas in order to create the conditions and facilitate the process of creating such strategic plans. By creating this authority it will be possible for the state to manage the several departments and regulations and create in this way better conditions for the investors or the landowners." (Vavaletskos, 2017)

As stated by Expert B (2017) the key elements that need to be taken into consideration in order to create a more effective development strategy are summarized in the following points:

- Active involvement of the Municipalities and other public bodies related the development projects;
- Understand and analyse the development needs of the Region;
- Creating a Memorandum of Understanding among the landowners in order to achieve a common sense and bare the development risks and responsibilities;
- The creation of a Joint Action Plan for the regeneration of the area
- Update the legislation with New Regulations for the development areas (e.g. Updated land use plan etc.).

In addition to that characteristics, the only way for all parties to be benefited from a future agreement is through a site-specific framework provided by the state in collaboration with private sectors so that new regulations and planning tools could be developed and used for the case. Moreover, when the proposal for the urban planning of the site is agreed from all parties it will be easier to address and attract investors (Bitsakaki, 2017; Grozopoulos, 2017).

Finally, drawing on previous successful examples of participatory planning, collaborative approaches or even bottom-up practices, someone could answer that there is always a chance for an alternative approach. However, no matter which direction will be implemented, there needs to be a framework to provide tools and flexibility to all actors to engage and develop the project (Grozopoulos, 2017).



Figure 24: Stavros Niarchos Cultural Center, Development of the new National Library and Opera in the Faliron bay

6.5. S.W.O.T. Analysis

In order to conclude this part and the case study exploration, the SWOT analysis is used as a tool to analyse and map the main points that need to be taken into consideration for the advancement of the research. SWOT analysis is a managerial analytical tool used also in strategic planning including also urban development. It is used to assess the internal and external environment of a development as to understand its potentialities and limitations (Mobaraki, 2014).

Hence, in this stage of the research, the analysis focuses on the exploration of the internal and external environment of "Lipasmata", based on the data and document review, the stakeholders and plan analysis as well as the results of the qualitative interviews. This analysis will help to point out the main drivers and limitations of opting for the waterfront development of "Lipasmata" by considering the several Strengths, Weaknesses, Opportunities and Threats.

The analysis is executed based on the empirical research results as presented in the previous paragraphs and main sources of information are the data collected during the case study analysis.

6.5.1. The methodology behind the analysis

The objectives for the creation of a complex project, such the one related to the waterfront (re) development of "Lipasmata", are the result of a mechanism of a continuous feedback, which brings into play various aspects and problems that are binding during the pre-design phase or the decisionmaking phase. These goals can be obtained and observed by taking into account aspects related to the general area's environment and the territory, which greatly affect design and decisions. One of the tools used to analyse most of the problems affecting the creation of the strategies of a future project is the SWOT analysis (Dyson, 2004), also known as SWOT matrix (Figure 25). This type of analysis is a fundamental tool to support the development of tactics and satisfies a need for rationalization decision-making processes. SWOT analysis is a systematic methodology, as well as a marketing tool, with main objective to facilitate the development and the management of the intervention strategies. It allows, by measuring the important aspects of complex realities, to establish which are the priorities to be taken into account in the definition of objectives and programmatic actions (strategic choices) within a decision-making process. The acronym SWOT is derived from reading keys used to identify the phenomenon examined. The keys also known as Strengths, Weaknesses, Opportunities and Threats are the points that concern the analysis of the environment surrounding the development operation. This operation allows representing the main factors that can affect the success of a strategic plan (Bottero, Lami, & P., 2008).

The reasons why such analytical tool is used are multiple. It consists of an easy way to map the several collected information and is easy to understand by a large amount of people (Mobaraki, 2014). Using such tool can promote discussions between multiple stakeholders during the decision-making process and when talking about participatory planning it is an easy way to interact between experts, citizens etc.

The following parts will introduce the results of the analysis based on firstly the strengths and weaknesses (internal factors) - Table 6- and secondly the opportunities and threats (external factors) – Table 7. Finally, an overview of the key findings will conclude the analysis by presenting the final matrix (Figure 26).

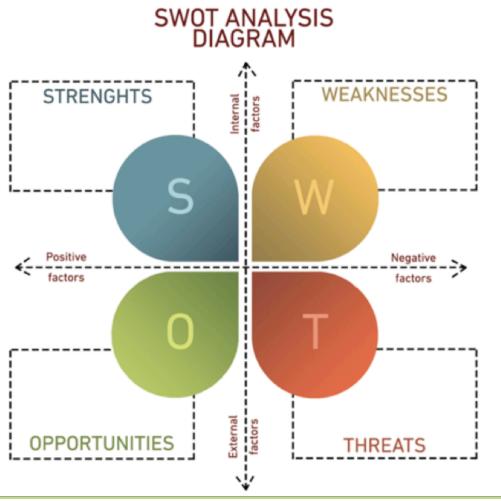


Figure 25: Example of SWOT Analysis Matrix

6.5.2. Mapping Strengths and Weaknesses

Strenghts

"Lipasmata" area, as discussed also in the previous sections, is considered as a strategic one for multiple reasons. This point of view introduced in the analysis though scales and supported by the interviews is one of the main strengths for the area. The proximity with the main port of Greece, the direct connection with the sea and the high accessibility constitutes essential factors for its future development (Vavaletskos, 2017). Such characteristics of the area can attract a plethora of different activities for the area (e.g. touristic facilities) that together with additional public amenities and green spaces can give to the city and the society new opportunities to flourish (Tolis, 2017).

In relation to the area itself, after the recent demolition of most of the degraded industrial facilities, facilitates the exploitation of the area in different ways. For instance, in search for a new development strategy, the area can be used in multiple ways to stimulate initiatives that can enable the discussions for the future of the area such as concerts flea markets, festivals etc.

Although the multiplicity of stakeholders with different goals and perspectives for a potential development, the size of the area (640) and of the several sub-properties, permits to use the area in different ways, and start smaller plot-by-plot developments that will create a chain of changes. Especially, in a period of crises where the economic resources are limited, initiate smaller developments can be a solution to attract more investments. This strategy can create the conditions for smaller initiatives that can stimulate the interest in the area. Alternative approaches can be also taken into consideration that will create more flexibility to all actors to be engage and develop the project. Thus, exploring the possibilities of bottom-up practices, participatory or collaborative planning can give to the main actors the possibility to develop the area in a more innovative way (Grozopoulos, 2017).

Finally, in relation to the previous plan analysis, it is essential to mention that although the multiple inefficient attempts to create a plan for the development of the areas the presence of different proposal and studies of the area can be a source of starting a series of new discussions between the actors. By critically evaluate again the main plans and their content it will be possible, for the landowners, to draw some general guidelines for the future.

Weaknesses

Despite the previous strengths presents in the area of study, there are multiple weaknesses that create or will potentially create frictions to the (re)development process. First of all, the waterfront area hosted industrial activities for more than a century so it is considered as a contaminated brownfield site (Bitsakaki, 2017). Such contaminations establish new mismatches in relation to the future land uses and the possibility of completing the development without any delays (due to excavations for cleaning the area etc.).

Furthermore, the saturation of the city's urban fabric, the lack of green public spaces and the lack of parking plots in the area influence further the possible new land uses to be allocated in the area. The need of the city to resolve such problem, implicates a very attentive study in relation to the future of the area, in terms of new uses, percentages of buildable areas or permeability and accessibility to the place. The several plans that have already proposed by the several stakeholders, as discussed previously, did not answer to such complicated issues fact that led to last-long process also in the past and the steady neglaction of the area.

Moreover, most of the existing proposals for the waterfront regeneration do not answer effectively neither to the complexity of the site in terms of current/future uses or to the different stakeholder's benefits (Expert A, 2017). This controversy of interests and opposing ideas are worsening further the situation.

While the connection of the municipality as key stakeholder with the central political scene, especially nowadays, creates straggles to the private parties, when trying to initiate a project proposal.

In addition to the previous description, Table 6 illustrates the findings of the SWOT analysis in relation to the internal factors (Strengths and Weaknesses).

Table 6: Internal factors of the (re)development project, Strengths and Weaknesses

Internal Factors

Positive Factors	Negative Factors
STRENGHTS	WEAKNESSES
The area is considered as strategic in a local, regional and national level;	Lack of green and public areas;
Strategic position of the area close to the main port-gateway of the Mediterranean;	Lack of parking areas;
Excellent geo-strategic position (close to the port of Piraeus, vicinity of the area to Athens city centre, easy access), transport corridor;	Contaminated soil due to the previous industrial uses;
Direct interface of functions of Drapetsona-Keratsini municipality with neighbouring municipalities such as Piraeus;	Severe air pollution;
Proximity to crafts and industrial units as well as to major transit centres (logistics);	Saturation of the adjacent urban fabric;
The rich topography of the area and especially the contact with the sea, creates the conditions for the development of leisure areas, other economic activities and networks capable to attract and absorb tourism;	Isolation of the city and citizens from the waterfront and harbour area;
Presence of exploitable former industrial heritage buildings;	Influence of public stakeholders in the local and hyper local politic;
Clean surfaces (in terms of buildings from previous uses) ready to be developed;	Multiple landowners;
Surrounding (residential) areas within walking/cycling distance;	Controversy of interests opposing views of stakeholders lead to the waterfront's neglection;
The size of the area and the presence of different landowners gives the possibility to create separate development activates;	The particular ownership status does not permit the creation of an integrated development plan for the area;
Possibilities for tourism development: close to the cruise terminal of the port, prominent cultural and industrial monuments part of the cultural heritage;	Incapacity of stakeholders to meet a consensus in relation to the areas future development;
Presence of multiple preliminary stadies (development plans over the last decades) that could be used for discussions between the stakeholders;	Little involvement of other stakeholders (e.g. experts, civic sector) in the discussions and the decision-making process;
Multiple landowners with power to attract economic resources/ investments;	Existing proposals for the waterfront do not answer effectively neither to the complexity of the site in terms of current/future uses or to the different stakeholder's benefits;
Influence of public stakeholders in the regional and national politics;	Absence of a Masterplan or planning vision to enable the discussions and initiatives for the development of the area;
Interest of economic stakeholders in the project (investors, private companies etc.);	
Positive attitude of project area inhabitants towards revitalization;	
Presence of human resources at the municipal level which could, with appropriate incentives, reconstitute the image of the social policy of the municipality;	
Possibility for targeted interventions at municipality level (bottom-up).	

6.5.3. Mapping Opportunities and Threats

Opportunities

"Lipasmata" by being part of a larger environment of Attica Region, considered as strategic for building the Region's competitive advantage, benefits from important decisions related to the improvement of the urban structure (R.S.A., 2011). In this direction, the Region targets especially to urban voids close to its costal zones, as they provide a lot of potentialities for the future. More in detail, the proximity of the area to the port of Piraeus and the presence of international private investments for development of the piers creates new conditions in which, "Lipasmata" is seen mainly by private owners and investors as a potential area to host complementary activities and create a metropolitan pole. The expansion of the port's touristic activities and changes in the areas infrastructure (with gaol the better accessibility) creates new possibilities to rethink the area as part of a bigger network.

On the other hand, it is essential to mention that the current socio-economic trends can be seen as potential opportunities. As discussed previously, from 2008 the economic crisis in the country is seen as a barrier to any development. Such projects for many years are seen as expenditures for the country due to the limited financial resources rather than opportunities to growth. There are several examples where the socio-economic crisis is seen as a new opportunity and a game changer for a series of structural changes towards the development of a country/city. The current austerity measures imposed in Greece by the European Commission suggest the development of brownfield areas as a potential tool for cities to build a more competitive identity, while creating new socio-economic conditions for the citizens.

Threats

In addition to the existing weaknesses that affect internally the area in exam, there are several threats based on the external environment. Those interest mainly social, economic and institutional trends of the country's greater environment. More in detail, high rate of unemployment, the movements of young unemployed people, the rapid decline of the construction industry are some of the issues influenced by the last years' socio-economic crises and affect the cities negatively. Such threats must be turned into opportunities through the development of areas that can create growth.

Additionally, institutional trends affecting the process are related to the current practice of planning in the country, the power of the public administrations and the stakeholders' involvement. First of all, the way of opting for regeneration projects in the country is influenced by the international trends without tanking into account the pathogenic of the Greek reality. Integrated planning is considered by the literature as a way to promote the (re)development of "Lipasmata" but the previous analysis and the efforts presented over the last years illustrate the incapacity of such approaches to promote and achieve the final goal. The interfering power of the State to kill the project together with the lack of a comprehensive General Land Use Plan and or Vision for the area constitutes the promotion of the discussion between the stakeholders difficult (Vavaletskos, 2017). In this complexity the chaotic character of the legislative framework that governs the (re) development projects, as presented previously, creates a situation where institutional changes need

to be though. Such institutional issues are seen as obstacle of any initiative (mainly private initiative) towards the redevelopment of the area.

In this direction, the incapacity of non-involving the civic sector in the decision making process limits the dialogue for the future of the area, mainly between the landowners implying a loop in the discussion as illustrated in the plan analysis. In this way the social importance of the projects is undermined by the private and political goals and interests (Expert A, 2017).

Table 7 presents an overview of the findings of the SWOT analysis in relation to the external factors (Strengths and Weaknesses). In the following paragraph the result of the SWOT analysis will be discussed as to give input for the following step of the research, the Synthesis, where a solution to the proposed research will be framed.

Table 7: External factors of the (re)development project, Opportunities and Threats

External Factors

Positive Factors	Negative Factors
OPPORTUNITIES	THREATS
Piraeus is the second important metropolitan centre after Athens, in the Region of Attica;	Declining urban structure of the city;
Piraeus is a city with significant international links;	High rate of unemployment;
New strategic visions in local level (Piraeus 2020) and regional level (Attica 2021) that promote the (re)development of the area as important step to establish a competitive identity for the city and the Region;	Movements of the young population;
New investments in the commercial port and the cruise port enhance growth prospects for the creation of an international shipping centre;	Rapid decline of the construction activity;
Attitude of the regional politics towards revitalization of inner town areas and edge of town developments (Piraeus 2021)	Centralized planning system;
Upcoming (re)development projects and improvement of connectivity in the city (tram , metro lime) enhance the growth prospects of Piraeus;	Political instability create a discontinuity in terms of decisions;
Private investments in the piers II and III of Piraeus port, associated with rapid increase in movement of the commercial port, create economic activities in the city;	Internal pathogens of the public domain;
The expansion of the southern cruise port is expected to attract more ships and tourism in the city;	The state has power to break any private initiative;
Industrial, commercial and shipping centre of the country with activities of hyper local importance;	Limited power of local authorities to initiate a development project;
International gateway of commerce and trade;	Complicated legislative framework, with multiple planning laws and regulations in different institutional levels;
Activation of strong shipping units near the harbour;	Out-dated Land Use plan;
The large number of existing industrial sites enhances the prospect for creating hyper local functional poles with emphasis on the promotion of cultural heritage combined with the development of innovation, manufacturing, leisure activities, tourism, etc.	Lack of open discussions and consultations to the citizens in relation to the development;
Incremental population;	Incapacity of the state and the local authorities to attract investments;
Austerity measures, due to crises, promoting the urban development as opportunity of socio-economic growth;	
Interest from private national and international investors;	
Discussions in order to update the General Land Use Plan of the city;	
Possibilities for economic potentiality from the new uses;	

6.5.4. SWOT analysis outcome

Based on the previous analysis, and the discussion related to the internal an external environment of the development project is time to reflect on the case study based on the SWOT analysis key findings (Figure 26). During the SWOT analysis the several aspects of the area, project were considered as to map the key information to use latter on in the research. In this way, it is thought to see the several positive aspects (strengths and opportunities) as potential drivers for implementing development approaches for "Lipasmata", while the negative factors (weaknesses and threats) complete the image of the drawbacks/barriers of that can affect the outcome of any development initiative. The following discussion seeks to draw some recommendations based on the SWOT analysis outcome that can be taken into account in the finalization of the study.

As introduced in the previous chapter, the vision of the Municipalities of Drapetsona-Keratisni and Piraeus and of Attica Region for the area can be formulated as follows (Piraeus Municipality, 2016; R.S.A., 2011): "Lipasmata" must become a dynamic pole of sustainable development and a landmark waterfront area next to the main port activities, a place of housing and new labour opportunities with mild forms of economic activity, distinct cultural identity and modern services for residents based on a cooperative way of local government. By talking into consideration the main strengths and opportunities and by trying to mitigate the weakness and brake down the several threats, the new approach for "Lipasmata" must target to create a pole of investment attraction, with new innovative activities while ensuring social equality, respect for the environment and the emergence of a cultural identity of the area with acceptance by the residents themselves.

In other words, this vision targets to the promotion of economic development, social cohesion, to the environmental protection and citizen participation based on the principles of sustainable development. In this, way, the local authorities need promote any activities towards this direction and not creating further straggles to the development. As a reppresentative of the civic sevtor, the municiplatity need to initiate and facilitate the discussions with the rest of the stakeholders, in the extent that their objectives can come to a consensuss towards the benefit of both the society, the city and the private actors.

Towards this diraction and bassed on thre current situation the first step towards a creation of a new strategy is to understand, which is the current strategy for "Lipasmata". Based on the previous analysis, it is evident that the stakeholder with the larger stake in the area, NBG, is the main initiator of the development (Expert A, 2017). With multiple researches and plan proposals for the area, its ambition is to create an new development pole that will create further profit for its corporate activities, while incorporating ohter public services and activities to the society's benefit.

This is considered as monochromatic strategy, without the participation of the public owners (Bitsakaki, 2017). The latter ones are stacked to the state-driven mentality and the culture of public-sector orientated philosophy without taking any initiatives (Expert A, 2017; Vavaletskos, 2017). The solution can be found to alternative more social approaches, in terms of a more active participation of the citizens and the local authorities in the decision-making process.

Especcially the local authorities need to chenge attitude and be part of the process as private actor in order to opt for a more beneficial resaults for the society, in terms of profit and added-value to the city and its inhabitants (Tolis, 2017).

Given this first insigh the solution will be further elaborated in the last part of the research.

STRENGHTS WEAKNESSES - The area is considered as strategic in a local, regional and national level; - Lack of green and public areas; Strategic position of the area close to the main port-gateway of the Mediterranean; - Lack of parking areas; - Excellent geo-strategic position (close to the port of Piraeus, vicinity of the area to Athens city centre, easy access), transport corridor; - Contaminated soil due to the previous industrial uses Direct interface of functions of Drapetsona-Keratsini municipality with neighbouring municipalities Severe air pollution; Saturation of the adjacent urban fabric - Isolation of the city and citizens from the waterfront and harbour area; Proximity to crafts and industrial units as well as to major transit centres (logistics); - The rich topography of the area and especially the contact with the sea, creates the conditions for the - Influence of public stakeholders in the local and hyper local politic; development of leisure areas, other economic activities and networks capable to attract and absorb tou-- Controversy of interests opposing views of stakeholders lead to the waterfront's neglection - Presence of exploitable former industrial heritage buildings; - The particular ownership status does not permit the creation of an integrated development Clean surfaces (in terms of buildings from previous uses) ready to be developed; Surrounding (residential) areas within walking/cycling distance; - Incapacity of stakeholders to meet a consensus in relation to the areas future development; The size of the area and the presence of different landowners gives the possibility to create separate - Little involvement of other stakeholders (e.g. experts, civic sector) in the discussions and the de cision-making process; Possibilities for tourism development: close to the cruise terminal of the port, prominent cultural and - Existing proposals for the waterfront do not answer effectively neither to the complexity of the industrial monuments part of the cultural heritage; site in terms of current/future uses or to the different stakeholder's benefits; Presence of multiple preliminary stadies (development plans over the last decades) that could be used - Absence of a Masterplan or planning vision to enable the discussions and initiatives for the devefor discussions between the stakeholders; - Multiple landowners with power to attract economic resources/investments; looment of the area: - Influence that public stakeholders have in the local politics; Interest of economic stakeholders in the project (investors, private companies Positive attitude of project area inhabitants towards revitalization; Presence of human resources at the municipal level which could, with appropriate incentives, reconstitute the image of the social policy of the municipality; Possibility for targeted interventions at municipality level (bottom-up) Negative Positive factors factors **OPPORTUNITIES THREATS** - Piraeus is the second important metropolitan centre after Athens, in the Region of Attica; - Piraeus is a city with significant international links: - Declining urban structure of the city; - New strategic visions in local level (Piraeus 2020) and regional level (Attica 2021) that promote - High rate of unemployment; the (re)development of the area as important step to establish a competitive identity for the city -Movements of the young population; and the Region; -Rapid decline of the construction activity - New investments in the commercial port and the cruise port enhance growth prospects for the Centralized planning system; creation of an international shipping centre: - Political instability create a discontinuity in terms of decisions - Attitude of the regional politics towards revitalization of inner town areas and edge of town deve-- Internal pathogens of the public domain; lopments (Piraeus 2021) - The state has power to break any private initiative; - Upcoming (re)development projects and improvement of connectivity in the city (tram, metro - Limited power of local authorities to initiate a development project; lime) enhance the growth prospects of Piraeus; - Complicated legislative framework, with multiple planning laws and regulations in different - Private investments in the piers II and III of Piraeus port, associated with rapid increase in moveinstitutional levels: ment of the commercial port, create economic activities in the city; - Out-dated Land Use plan; - The expansion of the southern cruise port is expected to attract more ships and tourism in the - Lack of open discussions and consultations to the citizens in relation to the development; Incapacity of the state and the local authorities to attract investments: - Industrial, commercial and shipping centre of the country with activities of hyper local importance; - International gateway of commerce and trade; - Activation of strong shipping units near the harbour; - The large number of existing industrial sites enhances the prospect for creating hyper local functional poles with emphasis on the promotion of cultural heritage combined with the development of innovation, manufacturing, leisure activities, tourism, etc. Austerity measures, due to crises, promoting the urban development as opportunity of socio-eco-Discussions in order to update the General Land Use Plan of the city;

Figure 26: SWOT analysis Matrix outcome

Findings of the case study analysis 7.

The aim of this part of the research was to gain insight on the case study in order to contribute with additional empirical-related knowledge to the completion of the research and the answer to the main research questions. During the case study analysis the triangulation of several research methods was deployed in order to reach more repayable results. Among these methods are analysed the collected data and other empirical documents, implemented with a stakeholders analysis, a plan analysis. An essential part of this research was the expert's perspective integrated in the analysis through qualitative interviews as to give more insights to the analysis. Key experts were interviewed and gave their subjective opinion in relation to the case study and in general the development practice in Greece. Key stakeholders such as the Municipality of Drapetsona-Keratsini (public landowner) were difficult to contact and thus, was not possible to report their perspective. Although this difficulty in the interviewing processes some general conclusions are drawn bases on the plan analysis results. Finally, a SWOT analysis was deployed as to map the several internal and external - positive and negative factors influencing the development of "Lipasmata". Based on the knowledge gained during the empirical research mapping all these aspects gave the possibility to draw some preliminary conclusions towards the future of the area and gave insights for the exploration of a potential implementation of an alternative strategy.

Based on the previous analysis, which approached the study area through a series of parameters, several initial conclusions are drawn regarding the development character of the area, its current situation and its programmatic role through the longitudinal examination of the different Planning levels (supra-local - strategic, local/urban /regulatory) and the degree of their implementation. The strategic position occupied by the studied area in the urban system of the wider region of Attica is taken for granted, as it is located in the canter of the coastal zone of West Athens, and in direct contact with the port of Piraeus. The main characteristics that give to the area a special identity and a differentiated role are its connection with the industrial zone of Attica, with similar buildings and equipment, the strong elements of its coastal natural landscape and the dominant uses prevailing in the surrounding area housing, manufacturing, crafts-industry, retail and services. New potentialities are presented thanks to the development of new facilities in the port area while the willingness of the city to enter more dynamically to the international competitive landscape (see Attica Capital of the Mediterranean or Piraeus European Capital of Culture 2021) brings new horizons for the possible future use of the area (Piraeus Municipality, 2017; R.S.A., 2011).

This first approach to the case study underlings the complicated ownership status of the area, which involves several private and public parties. From the stakeholders analysis is underlined the power of the several landowners to strategy implementation process. As presented by the plan analysis most of the parties involved have their personal perspectives on the area while their interests are also emphasized in their proposals and the proposed development methodology/ approach. Private parties are targeting to more profitable development to maximize their potential revenues and profits while the public administration seeks of a more social-orientated development for the citizens' good. This leads on the creation of conflicts between the main

bodies of power something that is supported by the multiple plan proposals during the last year. Main drivers of this incapacity are the opposing opinions mainly related to the development approaches to be used for instance bottom-up vs. top-down approach as illustrated in the plan analysis. The main differences are based on the character of the area after the completion of the project. This creates an even complicated decision-making process, and additional delays on the planning of the development and the initiation of any activities.

Based on the interviews' results. the possible future must be search in between those opposing views. From one side the private owners must collaborate with the public ones in order to achieve a consensus based on a win-win situation for both sides. On the other side the public authorities (mainly the Municipality) need to understand that the size of this area does not permit the creation of only public activities (Metropolitan Park as stated) without any economic activities as resources to support the project during the construction and after during the maintenance phase.

In addition to the previous issues, other institutional drawbacks are also influencing the process. Such issues interest the low power of local administration and the interventional character of the State in any initiatives for development processes. The out-dated legal framework based on the centralized planning system of Greece is a crucial aspect in need of a structural change.

Further complications on an institutional level are created due to the multiple laws and regulation that governs such big development projects. The several laws including planning regulation, building laws etc., as introduced by the interviews, influence the outcome of the project and create additional complexity to the process. Towards this direction, the obsolete General Land Use Plan of the extensive area steers to further discontinuities in the proposed plans. As presented in the plan analysis, multiple activities and land uses with different character and target group orientation are proposed and make difficult the discussions for a unique general strategy. A revision of the current Plan needs to be taken into consideration in order to limit or promote the stakeholders ambitions to the area.

As a consequence of the multiplicity of laws and regulation and the interventional character of the State in the process there is witnessed a bureaucratic attitude of the public domain, which imply long-term process that consequently discourages the attraction of investments for the area and the implementation of any development plan. In this way the existence of multiple public offices do not facilitate the development procedures, while creating additional frictions to any private initiative.



PART 4 SYNTHESIS

This final part of the thesis aims to discuss the outcome of the research by focusing on answering the main research questions. As the thesis' main topic is how to manage waterfront development projects in Greece the main focus is given on understanding the drawbacks of the current practice and try to find effective solutions for the future based on the international practice and the academic literature.

As synthesis, the main findings of the academic and the empirical research will be discussed in order to draw the lesson from the Greek context and drawing the thesis conclusions. An important role of this part plays the need of answering the analytical part of the research questions in order to give insights and contribute to academic knowledge as well as a policy debate on 'waterfront development management' in large Mediterranean seaports.

Discussion on research findings 8.

The intention behind this research was to examine how the latest socio-economic crises, has affected the contemporary cities by focusing on the emergence of a worldwide planning and development phenomenon: the urban waterfront. With reference to the challenging Greek context and the specific brownfield area of "Lipasmata", the thesis goal was to explore and analyse the threats of the declining urban fabric for cities, while investigating strategies of how to turn such threats into opportunities for the development of the country.

The main discussion is based on the main themes of this research the drawbacks of the current development practice in Greece and the reasons why choosing the "Lipasmata" case to analyse. In order to structure in a better way this paragraph the questions related to what, why and how will be answered. Thus, the following discussion will be based on answering and reviewing the sub-research questions, while reflecting on the outcome of the literature and empirical study.

What are the main barriers of waterfront development in Greece?

Urban waterfronts represent an important morphological feature of Greek cities (Gospodini, 2001). Despite this fact, that there are a plethora of brownfield areas seeking for regeneration initiatives, the few examples of (re)development projects illustrate the lack of formal and practical knowledge related to the topic. Gospodini (2001), states that the lack of experience, in terms of ability to propose and implement (re)development schemes, is provoked by the incapacity of collaboration between local, national and port authorities.

The policies introduced by local authorities are limited in the creation of design projects that will enable a future development. According to the literature, such projects most of the time concern, the only redesign of episodic and fragmented parts of areas or the restoration of former industrial buildings, described as "over-localized" design approach. This means that the few examples of intervention in waterfront areas, interest the transformation of specific parts of the area or the only renovation and re-use of single buildings, characterized as heritage.

This statement is not confirmed by the analysis of the case study. In the case of "Lipasmata", during the last 20 years, the several plans proposed by multiple stakeholders are not limited in the development of small parts of the area or only few buildings in the area. The former industrial area is presented as a whole, while the several parties with their proposals tried to give an overview for the future development as a way to enable discussions between them.

Additionally another main aspect discussed in the academic literature is related to the tendency of creating monothematic development projects in Greece, which are not in line with the findings of the literature regarding the revitalization of the areas towards a sustainable urban development (Zazzara et al., 2012). This approach of transforming urban areas is in contradiction with the international experience in the field of regeneration strategies (Gospodini, 2001).

The existing literature in the field of urban planning and design is arguing that opting for more mixed-use plans integrated with public and leisure activities is crucial in order to create successful development plans (D.Adams & Tiesdell, 2012) for the revitalization of the waterfront areas and the growth of the entire city/society.

The insights gain from the plan analysis of the case study in relation to this issue, tends to partly agree with the above argument. The experience through the past years illustrate that mainly the public owners of the area tend toward the creation of monothematic projects mainly focusing on the creation of a metropolitan park with slow pace social activities. On the other hand the private owners based on their interests regarding corporate profit and their corporate responsibility towards the society tend to opt for more mixed-use plans according to the international examples.

Finally, another barrier stated by the literature is related to the obsolete planning framework governing such development projects, which creates last long (re)development process, mainly due to the several conflicts at the local and national level. The centralized spatial planning system give to the State a lot of power to influence the decisions, while the power of local authorities is marginalised or restricted. The spatial planning of Greece is described as a "planning system: [with] multiplicity of laws and regulations, predominance of a centralized, regulatory and hierarchical planning style" (Nagy et al., 2014). The multiplicity of laws and regulations do not give any added value to the planning process but on the other hand create a lot of problems.

During the interviews with the experts as part of the empirical research the, problems related to the influence of the central State's political scene to the development of regeneration projects was mostly stated as the main barrier of the current practice. Additionally, the State with the multiple offices responsible for such operations tends to decelerate the development procedures even on an early stage of the process, while limiting the possibilities for attractive new investments for the area. Therefore other institutional related issues arise based on the experts' opinion. These are related to the rigid and complicated legal framework, which affects negatively the development practice by adding more to its endogenous complexity (time consuming procedures, bureaucracy, etc.).

What planning systems influence the urban development practice in Greece?

Based on the previous consideration it was essential to study in which planning style is Greece categorized. In this way it was possible understand the main characteristics that influence negatively the current practice, since planning systems determine how urban development takes place.

Generally, planning systems and planning policies differ form place to place based mainly on characteristics such as the type of the welfare state (Heurkens, 2012). Greece as part of the Southern Mediterranean countries is mainly governed by the Napoleonic planning system. This system uses abstract legal norms and enjoys a greater theoretical debate. The extension of the

Napoleonic system in countries like Greece implemented an even more centralised culture. The degree of centralization in such cases is extremely related to the economic prosperity of the country. In cases of economic recession a more centralised approach is likely. Furthermore, in the Southern European countries, there is a tradition of alternative informal mechanisms and greater flexibility in conforming to the laws. This means that in countries such as Greece, it is very likely to come up against a disparity between the formal laws and regulations and implementation.

More precisely in Greece, this more "flexible" attitude provokes a series of discussion and more bureaucratic inertia since it results to a high fragmentation between laws and implementation and increases more the complexity of creating development plans (Newman & Thornley, 1996).

The main issues that are underlined and need to be faced are related to this over-centralised governance, the lack of control over urban growth, problems of enforcement, the lack of planning skills and the continually changing rules and regulations. Such issues lead to the creation of a gap between planning intention and the reality.

What conditions that shaping the current development environment in the greater area of "Lipasmata"?

What are the motives, for city administrations for implementing waterfront development projects?

As a response to the growing challenges, (re)developing such brownfield areas could create a lot of opportunities for cities and the country in general. Gospodini (2001) in her research, recognizes the importance of developing waterfront areas of the Greek cities as a way to be more competitive in the European landscape. She mentions the potentials of such operation, as a mean of economic development and spatial resilience. Additionally, she observes the importance of improving the quality of such transition spaces within the cities' fabrics and the need for the development of urban tourism for the Greek cities. This importance is highly underlined especially given the current socio economic conditions. Based on the empirical research and the analysis through the several levels of scales, (re)development projects are considered as way to overcome internal pathogens of the cities while building a more competitive identity. Towards this direction steers also the European Community with its Cohesion policy for 2021 (R.S.A., 2011).

Particularly for the case of "Lipasmata" the positive outcome from a future development of the area influences a lot not only the municipality of Keratsini-Drapetsona, where is located, but also Piraeus due to the connection with its port. As presented in previous chapters and during the SWOT analysis Piraeus currently is steering towards the establishment of a new identity and strengthening its role as transit centre in the Mediterranean basin. In this direction the cities are planning to the upcoming years to improve their attractiveness and competitiveness by opting for development strategies for the creation of new innovative poles.

Therefore areas in the city's marine front, such as "Lipasmata" are considered as opportunities to fulfil the future strategies. (Piraeus Municipality, 2014).

Moreover, opting for (re)development projects can lead to the mitigation of other socioeconomic threats which are considered as key priorities for the cities. Such threats are related to environmental issues in the city, social segregation and injustice, economic disparities etc. Therefore a broader scope for the development of such areas and key drivers for cities such as Drapetsona-Keratisni is related to the following concepts:

- Smart, with more efficient investments in education, research and innovation;
- · Sustainable, because of the decisive shift to a low carbon economy, and
- Inclusive, focusing especially on job creation and poverty reduction.

Which international development approaches could be considered within the current system in Greece?

To what extent is the current strategy of "Lipasmata" aligned with the planning culture of the community-led development approach?

As introduced by some of the interviewees during the case study analysis the previous strategy for "Lipasmata" was mainly related concentrated in top-down development approaches based on the initiatives of the key private landowners (NGB, LAFRAGE). Such initiatives interested mainly real estate developments and an essential number of new economic activities towards the profitability. In parallel local authorities or other public institutions proposed several plan that where more orientated to public values. Such plans proposed mainly the creation of parks, public services or also educational activities with a low amount of constructions and economic activities, by targeting to a more bottom-up process. This controversy in the are proposing approaches lead for a long period of time to delays and therefore the area remains still undeveloped. This way of operating is considered by the experts as inefficient, while they stated the importance of an alternative approach targeting to the society.

In this direction, one of the interviewed experts Grozopoulos (2017) stated that given the current socio-economic conditions, in order to create an alternative strategy for the implementation of a development project the key actors need to open their minds and learn some lessons based on previous successful examples of participatory planning, collaborative approaches or even bottom-up practices. Therefore the cimmunity.led development approach could be a solution for a new strategy creation.

The current practice in Greece and consequently the current strategy of "Lipamsata" are not aligned with the planning culture of such more collaborative development approaches. The main problem is of course related to the current rigid State-drive planning system and the discontinuity

of laws and regulations that limits the potential initiative of local authorities or other stakeholders. Moreover, another limitation of this system in relation to the community-led approaches is the marginalisation of the interests and the limited power of the civic sector. Citizens or other important stakeholders (experts, students etc.) are neglected from the decision-making process, while they could contribute towards a more innovative outcome.

Additionally, nowadays, there is a tendency, confirmed also by the academic literature, for the stakeholders to see such brownfield areas a whole. This characteristic is part of a more integrated top-down development approach and thus not aligned to the plot-by-plot planning of a community-driven strategy.

The confirmation of the academic literature can be critically considered as obsolete, related to a more integrated approach, given the time of period that the research was executed. Such arguments were based on literature study, related to the waterfront development practice in Greece, dated back in 2001 and a different socio-economic context in the country. The current socio-economic condition of the country, as explained in the case study analysis, lead to new ways of operating given the limited amount of economic resources.

The possibilities of such community-orientated development approach will be discussed, further on in the following chapter in order to create a possible step-by-step plan a strategy solution for "Lipasmata".

9. Handmade development: towards a community-led approach for "Lipasmata"

9.1. In search for an alternative approach

In the realm of urban space, it is reported in many cases the marginalization of vulnerable social groups and the dominance of wealthy social classes. Waterfront and in general brownfield urban re-development are typical examples where high-end communities and retail are dominating by implementing the well-known top-down approaches. Such investments are extremely popular also during times of socio-economic crisis as present good opportunities for economic growth.

Therefore, at this point it is essential to underline that the problem is not only up to architecture, urban design or even urban planning to resolve. There is also an institutional link given the dynamic character of waterfront development, particularly during the current challenging context of crisis. Consequently there is the need of new dynamics and correlations between the political and the social sphere the key stakeholders and the other actors.

The story of "Lipasmata", so far, has shown the exact opposite. The incapacity of collaboration, between the involved parties, in relation with the multiple and strict rules and regulations have witnessed the difficulties in implementing urban development projects. This leads to the creation of multiple studies and proposals for the development of the area and the creation of new doubts related to the future. Why after all these years, "Lipasmata" remain abandoned and underdeveloped although its strategic importance? Why do we need another plan?

The answer is based on the need of thinking how spatial organization should respond to the challenges of our times. Therefore the research is not seeking to create the conditions for a new proposal by simple investigating the needs in terms of services, uses etc. But aims to built new conditions for a new way of living.

Therefore, as a potential solution for "Lipasmata" in Drapetsona-Keratsini has been examined the example of development practice in the UK after 2010 and will be further discussed. The main goals of the Coalition Government, as described in literature, was to restructure the local society and create new growth opportunities by targeting to a smaller scale where the local authorities have the main power to promote regeneration projects.

Pugalis and McGuinness (2013) are also referring to the transformation opportunities in the age of austerity by stating that this time presents considerable challenges for the planning practice. Main aspect of this new era is as described the recalibrated urban policy measures and the shift from the dense national regeneration framework based on a plethora of area-based initiatives towards a more minimalistic "regeneration" practice to enable growth (Pugalis & McGuinness, 2013). This new way of acting seeks to mitigate some of the social, economic and environmental injustices produced by the capitalistic models of production and state-led developments. The proposal of the "coalition toolkit" refers to the community-led approach of development practice by pointing out the importance of aiming for the benefit of the society. Pugalis and McGuinness

(2013) conclude that such approach seeks to understand the economic development as part of regeneration. The economic development is one of several components collectively required to regenerate social spaces.

In this direction, the European Union in its Cohesion Policy for Europe 2020 declares that community-led development (CLLD) approach constitutes a specific tool for use at a sub-regional level that can in the same time be useful to support development at a local level. CLLD, as stated, can mobilise and involve local communities and organisations to contribute to achieving the Europe 2020 Strategy goals of smart, sustainable and inclusive growth, fostering territorial cohesion and reaching specific policy objectives (European Commission, 2014). CLLD is carried out through integrated and multi-sectorial/area-based local development strategies and key drivers of implementing such approach are the local needs and potentials, including innovative features in the local context, networking and, where appropriate, promote the co-operation between the involved parties.

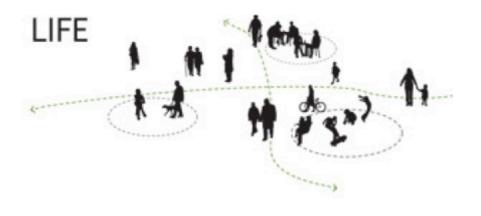
As stated in the academic literature the CLLD is a cyclical approach of continual learning and checking of progress and aims to (European Commission, 2014; Pugalis & McGuinness, 2013; Tallon, 2013):

- · Encourage local communities to develop integrated bottom-up approaches in circumstances where there is a need to respond to territorial and local challenges calling for structural change;
- Build community capacity and stimulate innovation (including social innovation), entrepreneurship and capacity for change by encouraging the development and discovery of untapped potential from within communities and territories;
- · Promote community ownership by increasing participation within communities and build the sense of involvement and ownership that can increase the effectiveness of EU policies;
- · Assist multi-level governance by providing a route for local communities to fully take part in shaping the implementation of EU objectives in all areas.

Essential component of this approach is the society itself. By giving more power to the local authorities to create a development plan the CLLD seeks to give power to the citizens, the local action groups and the rest of the stakeholders by creating co-operation towards the creation of new opportunities. In this way community driven projects supports and encourages local authorities and residents to drive local regeneration through a wide range of new powers and incentives within the decentralisation, localism and "big society" agendas (Tallon, 2013).

9.2. Aligning the community-led approach to "Lipasmata"

As introduced previously an alternative development approach for "Lipasmata", given the current socio-economic conditions in Greece, could be a more community-orientated. As described previously such approaches enable the citizens and local communities to participate actively in the development process while opting for a more bottom up approach. A successful place in urban planning is something that anyone can benefit from. A vibrant place with different activities, while being social inclusive, a place that everybody can create and be part of it (D. Adams & Tiesdell, 2012). Therefore the users and the citizens are in the centre of the city initiatives (Figure 27).



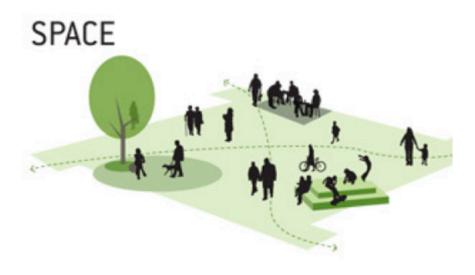




Figure 27: Steps toward a successful area development

In the particular case of "Lipasmata" during the several analysis of the empirical part of the research resulted that the civic sector (citizens, users, NGO's, experts or other local organisation) are marginalised and not participating in the decision-making process. It is witness that the main stakeholders (especially the landowners) are the in the centre of the discussions while the State has a lot of influence as well. Therefore it is important to mention that structural changes need to be done in order to opt for a community-driven approach. For instance institutional changes need to be evaluated towards the decentralization of the planning system and the upgrade of the power of the local authorities to steer towards new developments. For that reasons changes in the current legal framework could contribute to create more freedom and flexibility as to engage all the possible stakeholders in the process. By giving power to municipalities and local authorities is a step to come closer to the citizens and the actual problems of the local society.

However as a step forward, in this part of the research will be formulated an action plan in how to steer the community-led approach for "Lipasmta" besides the institutional changes described previously. The plan is based on key steps as to attract the public opinion and create a common sense upon shared interests and benefits. This plan can contribute to the development of the area initially with small scale, while creating a chain for a series of developments in the area designed step-by-step and plot-by-plot. As it is considered a community-led approach for "Lipasmata" those initiatives can start form the plots owned by public authorities such as the on owned by the municipality of Drapetsona-Keratisni close in proximity of the city interface. Such initiative can attract the interest of the rest of the landowners and or other external stakeholders (e.g. investors) and collaborate with the local community in order to design the future developments in the rest of the plots.

More in detail, the actions, in order to enable and stimulate the community as a way towards the CLD, interest the following steps:

- Launch the community-led program by informing the citizens and other stakeholders about the approach and build an initial vision about the possibilities for the future;
- Identify the key actions based on community resources. Make use of the local expertise
 in order to analyse the possible issues that need to be tackled and decide upon the
 program's priorities;
- Understand and inform the community by giving evidence to the local needs and aspirations, address concerns for the city;
- Enable and engage the communities to take part on the discussions by establishing the
 possibility of hearing the public opinion through workshops, focus groups and meetings
 with experts, as to share their expertise and inform further, educate in urban topics the
 community;
- Create dialogues and communication by enabling the creation of urban labs, urban centres and observatories where people can be informed for initiatives going on a local level;
- Build trust and alliances by engaging the community to formal and informal discussions.
 Promote the communication with other stakeholders and potential supporters of the community initiatives;
- · Empower citizens and build in their interest. Create initiatives that will attract people to

- the area such as festivals, flea markets, open air activities and exhibitions while promoting local businesses to participate in such activities as to support the local economy;
- Take action. Make choices for allocating certain types of development/activities in specific
 parts of the area enable temporary activities to the area that will contribute to create a
 new vision for the area.

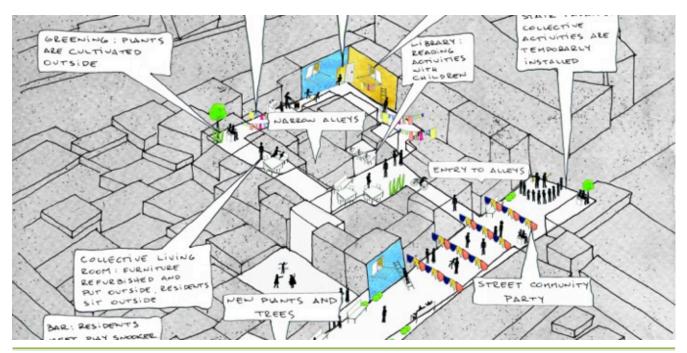


Figure 28: Schematic illustration of local initiatives in community-led approaches (Rosa & Weiland, 2013)

Finally, as to support the local initiatives the private landowners of the other plots in area can actively participate and be engage by implementing several activities. Towards this direction and in order create added value for a future development such actors can make use of temporary development. The basic idea is to provide useful functions to support the urban development initiatives (community-orientated initiatives). These functions have to be highly functional and financially feasible. Sometimes the ownership of these parts of the project is mediated between public and private owners. This setup is made to boost feasibility and quality of facilities towards the future exploitation of the plots. Such temporary developments can be based on the guiding principle of Bruijning (2016) as presented in Figure 29. Meaning, that over time, economic-, social-and property value will be considered as a returning process.

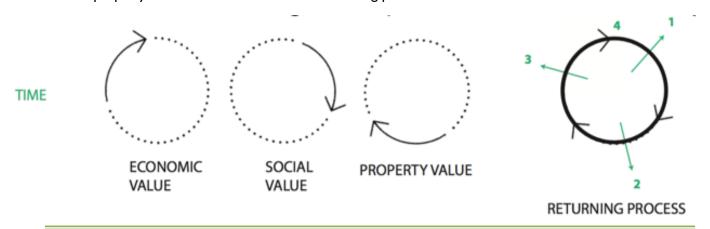


Figure 29: Guiding principles of temporary development (Bruijning, 2016)

To conclude this part a collage of action and functions as visualisation of a possible future of "Lipasmata" is created to support this step of the research. Figure 30 presents possible uses of the area and a future development of the area based on several development stages in a time period of 20 years.

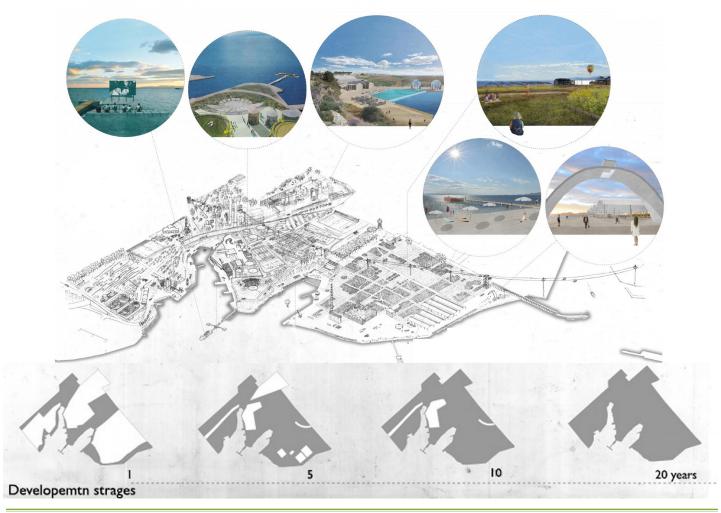


Figure 30: Possibilities for community-led developements in "Lipasmata" in several development stages

10. Conclusions and recommendations

For many years after the cease of its operation, "Lipasmata" area remains one of the larger abandoned urban voids in the fabric of Attica Region. Up to nowadays, after long discussions for the future development of "Lipasmata" and the importance of such operation for the whole city, the several proposed development strategies and attempts have not yet been fruitful. Today, in such a critical time of economic recession and social segregation, questions related to the "Lipasmata" urban void emerge and traditional redevelopment practices are questioned.

Piraeus, as one of the main cities in the Attica region, undergoes a severe urban crisis, which affects several aspects of the society. The arising problems are mainly related to demographic, economic and environmental issues. This urban condition in relation with the city's vision for the future questions the role of a typical urban development and opens up the possibilities for alternative strategies.

The above-described controversy is highly illustrated in the case of the former industrial complex in "Lipasmata" area. From one side the strategic position and its direct connection with the port of Piraeus create a lot of possibilities for the future of the city, while on the other side are witnessed difficulties and delays on implementing a development strategy. The site has been described by the key stakeholders, the city it self as well as from the region as one of the most important priorities loaded with a lots of expectations.

This research, by focusing on the reasons why such attempts have not yet been fruitful, analysed the drawbacks of the current planning and development practice in Greece in order to investigate the possibilities for the future. Such possibilities interest the future of the area as an important metropolitan pole, next to the port of Piraeus, as well as the development approaches to be implemented and the ways of managing the process of this waterfront revitalization.

10.1. Research evaluation: Answering the main research question

Towards the completion of the research it is essential to answer the main research questions and give some insights for the future research and practice. Having discussed the research findings by answering the several sub-research questions it is time to summarize the key findings. The initial aim of the research was two-fold based on the two main research question. The first research question defined as more analytical aimed to explore the drivers and barriers of the current waterfront development practice in Greece.

Thus the first research question was formulated as follows:

What are the main drivers and barriers of managing waterfront redevelopment projects in Greece?

As resulted from the case study analysis and the semi-structures interviews with the several experts the main limitations as described can be divided into two categories. The first is related to the development process and the way of their management, while the character itself of the regeneration projects influences the second category. The main issues referred in the first category are related to institutional issues that affect the process. Those are related to the obsolete land use plan, the complicated legal framework with the multiple regulations and laws implying long-term processes, the incapacity of the public authorities to facilitate as much as possible the procedures of creating and adopting a transformation plans, the difficulties of the public sector to attract and manage private investment or funds from the European Union.

Other main limitations, defined also as "strategic barriers, interest mainly the current practice of creating development projects as well as in the Greek planning system, which can be defined as out-dated. These possibilities and limitation can be described in the following main points:

- The ways of governance of such challenging process (power to local authorities);
- The multiplicity of stakeholders involve and the way that they collaborate;
- The involvement of the civic to the creation of the best solution;
- The creation of economically attractive and advantageous solutions;
- The contribution of the development to the economic and social growth of the city (social inclusiveness, creation of job opportunities);
- The contribution of the development to improve the city's outlook (competitiveness);
- The use of a poly-thematic development schemes;

On the other hand, the second research question was more practical and design-orientated and aimed to explore the possibilities of implementing a community-led approach in the case study area, "Lipasmata". This second research question was formulated as follows:

How can a community-led waterfront development strategy for "Lipasmata" area be implemented in order to create new transformation opportunities?

A community-led approach was finally considered as a possible alternative strategy for the future development of "Lipasmata". The main reason for opting for such approach are summarized as follows:

- Encourage local communities to develop integrated bottom-up approaches in circumstances where there is a need to respond to territorial and local challenges calling for structural change;
- Build community capacity and stimulate innovation (including social innovation), entrepreneurship and capacity for change by encouraging the development and discovery of untapped potential from within communities and territories.

Finally in order to opt for such approach in the Greek reality, several structural changes based on institutional levels need to be evaluated. There is a need for shifting power in public administration as to give more power to local authorities (municipality) and to enable the participation of the civic sector in the decision-making process.

Therefore are proposed the following steps for "Lipasmata" as potential action plan for the implementation of community-driven initiatives:

- · Launch the community-led program by informing the citizens and other stakeholders;
- Identify the key actions based on community resources;
- Understand and inform the community;
- Enable and engage the communities to take part on the discussions;
- · Create dialogues and communication;
- Build trust and alliances;
- Empower citizens and build in their interest. Create initiatives that will attract people to
 the area such as festivals, flea markets, open air activities and exhibitions while promoting
 local businesses to participate in such activities as to support the local economy;
- Take action. Make choices for allocating certain types of development/activities in specific parts of the area enable temporary activities to the area that will contribute to create a new vision for the area.

As starting point and incubator of theses community-driven initiatives the plots of "Lipasmata" owned by public actors (municipality) can be considered. This could create a chain of potential development based on the idea of plot-by-plot regeneration and the engagement of the rest of the private owners.

Finally, in order to promote such initiatives and enable the engagement of other landowners in the development creation process it is proposed the use of temporary development. The basic idea is to provide useful functions to support the urban development initiatives (community-orientated initiatives). The new activities have to be highly functional and financially feasible with minimum resources. This setup is made to boost feasibility and quality of facilities towards the future exploitation of the rest of the plots. Key driver behind this way of development is that over time, economic-, social- and property value will be considered as a returning process.

10.2. Research Recommendations

The main recommendation as underlined by the interviewees is related to the importance of opting for development projects during this age of crisis. The development projects are characterized as of crucial importance not only for the economy but also for the society. Economically such projects could be supported by private investment or funds from the European Union. As already stated, as main ways to overcome the several barriers and create more successful waterfront development projects it is needed to give more power to the local authorities and voice to the society by promoting a more community-led attitude. In parallel the public domain must play a more active role by creating the conditions in order to attract private investment in national or international level and facilitate the development process by promoting a more effective collaboration between the main parties involved.

In order to support the process of exit from the crisis and return to economic recovery, by implementing development projects, is required a thorough review of the existing spatial planning

system and planning legislation and consequently multi-level policy (Γιαννακούρου & Καυκαλάς, 2014). Central objectives of this spatial and urban reform and in particular of its institutional framework are; to "clean" the existing legislation from obsolete and redundant rules, tools and institutions, enhance the efficiency and effectiveness of the spatial planning system and the planning regulations by removing spatial barriers, towards the entrepreneurship and exploitation of the real estate, as well as the active support of other public policies and structural reforms in order develop and improve a better business environment and attract new investment opportunities.

The creation and implementation of a new development strategy requires a new way of thinking, bold steps, disengagement from obsessions of the past as well as new legal tools and institutional approaches that will exploit common knowledge and creativity, as well as the dynamics and good practices of both the private and an upgraded public sector (Γιαννακούρου & Καυκαλάς, 2014). As the old development system is becoming out-dated, the possible reactions and resistances that have occurred in the past, mainly because of the traditional land use and dwelling system plan, seem to be weakened or shifted to other fields. In this sense, the crisis seems to be an opportunity for total remodelling of the Greek spatial planning system, in other words, a true model change.

There are multiple and complex issues to be addressed by a spatial and urban reform in order to achieve the creation of the new development strategy. It would be wrong, however, to put everything on the agenda without debate the priorities, the mix of measures, their time scale, the means have been decided before and policy tools and the forces of society and the economy they will be called upon to support the necessary actions. In other words, spatial planning and urban planning require a planning program, with specific objectives, axes and actions at each stage, monitoring an evaluative mechanisms of results, as well as building the appropriate alliances in institutional and economic level (Γιαννακούρου & Καυκαλάς, 2014). Towards the creation of this strategy there are several limitations that need to be considered as they can compose an unfriendly, institutional environment to promote and, above all, implement this reform. Those are related to the lack of financial resources, the bureaucratic inertia, the conservatism and the inertia of the spatial planning and town planning administration bureau.

To conclude, "Lipasmata" has all the potentials of becoming a strong urban manifestation for the post-crisis era. The prime location of the site and its valuable natural assets can symbolize a fundamental turn the way of thinking and governing. The fact that so many years of its former operation "Lipasmata" remains underdeveloped reveals a need for a strong institutional and social statement about how spatial organization should respond to the challenges of our times. For that reason the questions is not which is the best proposal for the development of the area (a park, a new residential or activity-based district or a combination of them) but the way that the involved parties can manage such development. Based on the analysis of the case and on the academic roots the thesis concludes by providing an alternative strategic vision for "Lipasmata", based on a community-led approach.

In parallel with that, what architecture and urban design can do for the future of such brownfield areas is to contribute as a powerful tool of creating visions and common grounds for future developments. Even though an urban design project does not have alone the power of implementation, its manifestation can aspire communities and policy makers to make actions for the future.

10.3. Further Research

During this last year of trying to formulate and conduct this thesis research I came across multiple questions and themes related to thesis topic that could have be researched in the boundaries of waterfront development practice in Greece. Given the limited amount of time the research focused on analysing and understanding the motives of implementing waterfront development projects in Greece and on exploring alternative approaches could lead to a more efficient management of such developments. This is considered as an essential first approach to the complicated development practice in Greece, given the limited amount of Greek literature in the field. Hence, as a last step of this research is presented a recommendation related to possibilities of future research in the field of this study.

As presented in this research there is a plethora of drawbacks in the Greek development practice. Those were divided in mainly two categories related to internal to the area barriers (stakeholders involvement etc.) or other institutional drawbacks related to the obsolete legal framework of the State's involvement in the process. Therefore it will be beneficial to further analyse the perspectives of the public or private stakeholders in the decision-making processes. The difficulties in collecting insights from the landowners of the area or the local authorities, during the qualitative interview can bring new questions for the future practice. Additionally, given the several institutional limitations it could be interesting research further the role of the State in the planning systems as to search solutions on more effective collaborations between the central political scene, the local authorities and the private actors.

Finally, based on the alternative proposed development approach it could be stimulating research how the civic sector could be more engage to such operations and by conducting workshops and several focus groups with citizens steer to final proposal. This proposal can lead to more quantitative analysis, while exploring for instance its feasibility in terms of implementation by conducted a cost-benefit analysis.

II. Reflection

Writing a master thesis is not an easy task and requires a lot of different steps to execute in order to arrive in the final result. Starting from framing a first research proposal, in an early stage, to arrive in creating the research findings and conclusions, there are several moments during the process that going back and forth is needed. This iterative procedure is a continuous on going process with main ambition to learn and gather more knowledge regarding the chosen filed of study, the process of conducting an academic research and yourself.

In order to conclude the work it is important to step back and consider for one last time the work done to achieve the final results. Thus, this chapter aims to give a reflection regarding the process followed to accomplish this thesis project both in terms of content and outcome. The structure of this section is in line with the main steps followed to create this research. In this reflection the main steps of this cyclical process are discussed starting from the early stage of this research to arrive in the final outcome. Thus, firstly the research is positioned within its graduation laboratory, followed by a reflection upon the research process and methodology, while finally a consideration regarding the final outcome is provided.

II.I. Research within the graduation laboratory

This master's thesis is the outcome of the research started in September 2016, within the "Next Generation Waterfront" graduation laboratory of the master track Management in the Built Environment. The graduation laboratory of NGW tutored by T. Daamen and E. Louw aimed to drive students to research a particular form of urban development practice, precisely the waterfront development. Main topic of this theme is to analyse and understand how to manage development projects to turn the declining brownfield waterfront areas into places of opportunities and innovation.

Starting by this general topic, this research seeks to explore the management of waterfront development projects in Greece by analysing a specific case study and try to find solutions to overcome the drawbacks of the current practice. During the period of the research proposal formulation, the interaction between the members of the laboratory (students and tutors) was extremely valuable. The feedback during the several sessions was used in order to sharpen the final proposal and improve the learning curve of the process. The research proposal was reformulated for a couple of times based on the several comments and the new knowledge gain through the literature study.

11.1.1. Next Generation Waterfront

Studying the content of the graduation laboratory, the topic of the waterfront development management in Greece came up spontaneously. Greece is a country full of waterfront areas and port cities that in a large number are suffering from the presence of abandoned and degraded spaces, following the decline of old harbour sites and waterfront industrial areas in the second half of the 20th century (Gospodini, 2001). Such characteristics in relation with the current economic and social crisis presented in the country drove me to connect the laboratory's theme with my research topic. Exploring the spatial extensions of crisis in relation with the lack of formal knowledge and

experience in implementing regeneration strategies in Greece, results a very challenging topic to examine.

11.2. Research approach

An important aspect of conducting the research and writing the thesis is to structure them. In other words the methodology to be used in order to create the several thesis stages. This particular research is created based on a conceptual framework (literature study) and a more empirical one. The main method used is the qualitative one based on a literature review and a single case study analysis supported by semi-structured interviews (Bryman, 2012). The case study design as an empirical inquiry was chosen to investigate the contemporary phenomenon within its real life context (Yin, 2009).

Waterfront development such as urban development is a field of practice that has been researched a lot and there is a plethora of academic literature referring to the topic. Thus, finding literature to acquire the background information needed for this research was a chaotic procedure. For that reason the iterative process of working helped me a lot to narrow down my research structure my literature review. After reading and choosing the main academic resources to base my research proposal, collecting and analysing the first data related to the case study was my second step. This helped me a lot gain an insight on the problematic situation of creating waterfront development in Greece and find the main points of focus. Such points were afterwards, critically, observed, discussed and interpreted in order to arrive in more concrete concepts useful to go ahead with the rest of the research.

Therefore during this moment, the main points of focus where identified and further researched. This second round of research through the academic literature put the grounds for the analytical framework of the thesis. Main topics of the literature review are, thus, related to the planning processes, the several waterfront development approaches and their concoction with the current era of crisis and uncertainty.

On the other hand, given the research limited amount of time, it was decided to execute only a single case study analysis in order to have an in depth exploration of a specific situation. In addition, by reviewing the first academic literature, regarding the development practice in Greece, it was rapidly underlined its particular and complicated character. This strengthened further the decision for a single case as it can give a better insight and understanding of the problem. To such degree the main ambition of the research was to learn through this case and try to use this knowledge to solve a wider range of problems.

11.3. Research process

As to discuss the whole process of this research, this paragraph is divided in several subparts that aim to reflect on the most important steps of the research.

11.3.1. Research proposal

Main goal of the research proposal was, from an initial stage, to study the waterfront development processes in a challenging context as the one of Greece. This willingness to explore, analyse and try to solve such a complex problem intrigued me to research how in such a difficult social, political and economic context an area (re)development project could be driver for radical changes and economic/social growth and prosperity. Although this first approach to the topic was well established the multiple possibilities that offered to analyse created a lot of difficulties while defining the research proposal. This broad scope related to the ambition of the research gave me the opportunity to analyse a lot of different topics within the urban development practice but at the same time generated a lot of complications since was difficult to establish a clear focus of the research. Setting the main pillars of the study and concentrating in particular fields was a very important step at this point of time in order to go ahead with the research.

The several discussions within the laboratory as well as the first graduation assessment (PI presentation) were fruitful in order to understand and go back again in the process of formulating the research proposal. During the several meetings with the two mentors, the several discussions regarding the research topic and the content of the thesis were extremely helpful to solve any doubts and sharpen more the main research theme. Right after the critical assessment of P2 presentation and by using wisely the several comments, the research proposal was further elaborated and established as to continue with the rest of the research.

Reflecting back on the research proposal, it is indeed a crucial step within the thesis process, as it sets the exact boundaries and limitations for the whole work. Although the early stages are full of uncertainty, it is necessary sometimes to think about the future steps to be taken as to predict somehow the evolution of the research. In this way it will be possible consider the several factors that influence the outcome and weight the best ones to further study, given the limited amount of time to dedicate during the graduation process. During the definition of the research proposal, a very helpful tool was the graduation plan, which explains in a concise way the main contents of the graduation research to be followed. Creating a more concrete and precise research plan from an earlier stage, by using it in a more efficient way, could have been beneficial in order to concentrate and not shift from the original research focus.

11.3.2. Literature study

As previously stated the master thesis process in by nature an iterative one. During the several stages of the research, going back and forth between the literature, the empirical research and the findings was useful to understand the evolution of the thesis and connect the different pieces of the research. This way of working helped me understand better the approach of conducting academic research and adjust my way of working. In several times, the proposal as well as the main research framework was restricted, based on the reflection of the literature review and empirical data derived from the case study analysis.

The literature study in academic research is an important first step. During this thesis project, studying and analysing the main literature in the filed was essential to gather the required knowledge in order to start writing but also understanding the methodology related to the chosen topic. Given the possibilities that the research regarding the waterfront development is giving, in terms of topics and content, academic literature was extremely broad. The initial unclear scope of the research resulted in an additional lack of focus within the literature study. A continuously increasing amount of literature was from one side beneficial in terms of acquired academic knowledge but on the other side created a lot of difficulties in identifying the main topics to analyze. The plethora of literature together with the uncertain research focus generated initially a loop in the research process, which resulted time consuming in some cases.

The process related to the literature review was again cyclical. Starting from the first literature study, then moving forward to the case study and then return to the theoretical background enhance me with different knowledge that helped to structure in a better way the research. This process of working in parallel the conceptual framework and the empirical research was a great opportunity to rethink the research in several moments.

11.3.3. Empirical research

The empirical research was another essential part of this thesis project. It started in an early stage right before the P2 assessment in order to support further the research proposal. This approach resulted beneficial since gaining knowledge based on the specific case study helped me to understand the main issues and try to find the research focus. This first approach to the case study drove me to narrow down the field of literature study and clear the possible doubts related to the rest of the thesis project. The empirical research was further elaborated in the period between P2 and P4. Once again going back and forth from the literature study to the case study analysis was important in order to review the several parts of the research and aligned them based on the main topics and the research questions.

In parallel with the literature study and in order to prepare the case study analysis it was important to collect the needed data to conduct the empirical part of the research. The main information needed for the research concerned the case study selected to explore. Data related to the specific area and its internal and external environment (market, plan or stakeholders etc.) was investigated, initially, by conducting a desk research. The main sources to collect such information interested, mainly, specific for the case literature and an internet-based research (online articles, archivist sources etc.). Additionally, more detailed material and information was offered me by an architectural studio, which has worked for a long time on design proposals for the (re)development of the specific case area.

A crucial moment for the empirical research and consequently the whole thesis was the field trip in Greece, realized before the P3 presentation. Main scope of this field trip was to collect further data, visit the area of the case study and conduct the required semi-structured interviews. This helped me elaborate further the case study, interpret the main findings and draw the first conclusions.

Talking with experts of different fields was very instructive for both my research and my future professional career. It gave me the opportunity to have an insight not only in the case study but also in the general field of practice. This made me re-evaluate my entire process and observe several critical points of my research, as new information were shared to me. The initial plan was to interview experts and important figures related to the case study, it was difficult to contact one of the key stakeholders, the municipal authorities of Piraeus. Although it was considered important to hear the opinion of this key actor for the case study, the rest of the interviewees gave me a lot of insight to complete the empirical research. This deviation could have lead to some extent to different findings, however this was not very critical to finalise the work and draw the final conclusions.

During the period of the field trip, I had also the opportunity to participate in a scientific conference organised by the "Hellenic Society for the Protection of Environment and the Cultural Heritage", which was very enlightening. Main topic of this conference was "The organization of uses and activities in the planning process" and gave me a lot of insight regarding several drawbacks in the Greek planning system unknown to me. Among the several topics discussed, were essential for the research those that analysed the impact of multiple laws and regulation in adopting changes in the current planning system and how the strict land use plan creates more uncertainty for the formation of urban development projects. This, unplanned, event brought a new perspective to my research and enhanced me with more knowledge deployed during the interviews and the meetings. All these information were also important considerations to reflect in the conclusion of the research and to draw some recommendations.

11.3.4. Findings and lessons drawing

Going towards the last part of the thesis, thus analysing the findings and drawing the conclusions it was once again chosen to use this cyclical method of working. After finalizing the case study research the first findings were discussed in order to create the first conclusions. Main components of this first round of writing the Synthesis of the thesis were the case study results and the interviews results combined with the academic literature on international waterfront development practice. After a second review of the whole research project the conclusions have been once again reformulated. The final conclusions were restructured this time by implementing further feedback from the experts that were interviewed and my personal knowledge in the way of developing urban projects in Greece. Moreover, it is worthy to underline the fact that the academic literature was used in the conclusions as driver to answer the main research questions but in some cases adaptations were made given the challenging Greek context. Concerning the creation of an effective development strategy for the "Lipasmata" area the toolkit of the community-led approach (Tallon, 2013) presented in literature was chosen as the more appropriate one, given the information collected during the case study exploration. Finally, the proposed strategy, in this stage of the thesis, is presented as an advice to contribute to academic knowledge as well as a policy debate on 'waterfront development management' in Greece and aims to set the basis towards a generalisation in large Mediterranean seaports.

12. References

- Acevedo, J. D. R. (2016). Market-based Solutions for Social Challenges: A Collaborative Policy Making Strategy.
- Adams, D., & Tiesdell, S. (2010). Planners as Market Actors: Rethinking State—Market Relations in Land and Property. Planning Theory & Practice, 11(2), 187-207. doi:10.1080/14649351003759631
- Adams, D., & Tiesdell, S. (2012). Shaping Places: Urban Planing Design and Development. London: Routledge.
- Anastasopoulos, D., Kolios, S., & Stylios, C. (2011). How will Greek ports become green ports? Geo-Eco-Marina, 73-80.
- ASPA Design S.A. (2015). EI Δ IKO X Ω PIKO XXE Δ IO (E.X. Σ .) ΠΕΡΙΟΧΗΣ ΛΙΠΑΣΜΑΤ Ω Ν Δ . Δ PAΠΕΤΣ Ω NAΣ KEPATΣINIOY [SPECIAL SPATIAL DRAFT FOR THE AREA OF LIPASMATA of the Municipality DRAPETSONA KERATSINI].
- Banakos, G. (2014). Λιπάσματα Δραπετσώνας: ερημιά και εγκατάλειψη ["Lipasmata of Drapetsona: desolation and abandonment]. Retrieved from http://grekamag.gr/8937/
- Berta, M., Bottero, M., & Ferretti, V. (2016). A mixed methods approach for the integration of urban design and economic evaluation: Industrial heritage and urban regeneration in China. Environment and Planning B Planning and Design, 0(0), 1-25. doi:10.1177/0265813516669139
- Bitsakaki, A. (2017) Architect/Urban planner-ASPA SA/Interviewer: T. Papadopoulos.
- Bottero, M., Lami, I. M., & P., L. (2008). Analytic network process: la valutazione di scenari di trasformazione urbana e territorial [Analytic network process: evaluation of urban transformation and territorial scenarios]. Florence: Alinea.
- Bourne, L., & Walker, D. (2008). Project relationship management and the Stakeholder Circle. *International Journal of Managing Projects in Business*, *I*(1), 125-130. doi:DOI 10.1108/17538370810846450
- Brindley, T., Rydin, Y., & Stoker, G. (1996). Remaking Planning. The Politics of Urban Change. London: Routledge.
- Bruijning, S. (2016). Is temporary the new permanent: A research into the temporary use of vacant real estate. (Master of Science Master Thesis), TU Delft.
- Bryman, A. (2012). Social research methods. Oxford: Oxford University Press.
- Chang, T. C., Feng, H., & Peng, C. C. (2001). Design and Development of Urban Waterfront. Shanghai: Tong Ji University Press.
- Chen, C. H. (2015). The Analysis of Sustainable Waterfront Development Strategy The Case of Keelung Port City. *International Journal of Environmental Protection and Policy*, 3(3), 65-78. doi:10.11648/j.ijepp.20150303.12
- Daamen, T. (2010). Strategy as a Force: Towards Effective Strategies for Urban Development Projects: The Case of Rotterdam City Ports. Amsterdam, NL: IOS Press.

- Daamen, T., & Louw, E. (2016). The challenge of the Dutch port-city interface. *Tijdschrift voor economische en sociale geografie*, 107(5), 642–651. doi:10.1111/tesg.12219
- Daamen, T., & Sanchez, J. M. P. (2017). Governance reform, changing propery rights, and new planning appraches in the European port-city interface.
- Daamen, T., & Van Gils, M. (2006). Development Challenges in the Evolving Port-City Interface Defining Complex Development Problems in the European Main Seaport-City Interface: Rotterdam and Hamburg. Paper presented at the 10th International Conference Cities and Ports, Sydney.
- de Hoog, W. (2012). LEARNING within urban area development. The case of HafenCity Hamburg. TU Delft, Delft.
- De Rossi, A., & Durbiano, G. (2007). Turin 1980-2011: Its Transformation and Its Images Turin: Umberto Allemandi & Co.
- DeFilippis, J. (2007). City: Urbanism and Its End By Douglas Rae. *Growth and Change*, 38(2), 330-332. doi:10.1111/j.1468-2257.2007.00370.x
- Dente, B. (2014). Understanding Policy Decisions. New York: Springer.
- Denzin, N. K. (1970). The Research Act in Sociology. Chicago: Aldine.
- Dyson, R. G. (2004). Strategic development and SWOT analysis at the University of Warwick. European Journal of Operational Research,, 152(3), 631-640.
- European Commission. (2014). COHESION POLICY 2014-2020: COMMUNITY-LED LOCAL DEVELOPMENT.
- Expert A. (2017) Memebr of municipality of Glyfada (Expertise in the Public sector and local authorities)/Interviewer:T. Papadopoulos.
- Expert B. (2017) Parlamentary politician/Former Minister of Marine and Aegean/Interviewer: T. Papadopoulos.
- Ferdinand, A., & Yu, D. (2014). Sustainable Urban Redevelopment: Assessing the Impact of Third-Party Rating Systems. *Journal of Urban Planning and Development*, 142(1).
- Ferretti, V. (2016). From stakeholders analysis to cognitive mapping and Multi-Attribute Value Theory: An integrated approach for policy support. European Journal of Operational Research, 253(2), 524-541. doi:DOI: 10.1016/j.ejor.2016.02.054
- Galland, D., & Hansen, C. J. (2012). The Roles of Planning in Waterfront Redevelopment: From Plan-led and Market-driven Styles to Hybrid Planning? *Planning Practice & Research*, 27(2), 203-225. doi:10.1080/02697459.2012.661669
- Gibson, K. (2000). The Moral Basis of Stakeholder Theory. Journal of Business Ethics, 26, 245-257.
- Giovinazzi, O., & Moretti, M. (2009). Città portuali e waterfront urbani: transformazioni e opportunità. [Port cities and urban waterfronts: transformations and opportunities]. *Trimestrale del Laboratorio Territorio Mobilità* e *Ambiente TeMA Lab*, 2(3), 7-16.
- Girard, L. F., Kourtit, K., & Nijkamp, P. (2014). Waterfront Areas as Hotspots of Sustainable and

- Creative Development of Cities. Sustainability, 6, 4580-4586.
- Gospodini, A. (2001). Urban Waterfront Redevelopment in Greek Cities: A Framework for Redesigning Space. Cities, 18(5), 285-295.
- Grozopoulos, D. (2017) Architect/Urban designer-ASPA SA/Interviewer: T. Papadopoulos.
- Habermas, J. (1984). The theory of communicative action, volume I. Boston: Beacon.
- Hein, C. (2014). Port cities and urban wealth: between global networks and local transformations. International Journal of Global Environmental Issues, 13(2/3/4), 339-361.
- Heurkens, E. (2012). Private Sector-led Urban Development Projects. Management, Partnerships and Effects in the Netherlands and the UK. (Vol. 2): A+BE | Architecture And The Built Environment.
- Huang, W.-C., Chen, C.-H., Kao, S.-K., & Chen, K.-Y. (2011). The concept of diverse developments in port cities. *Ocean & Coastal Management*, 54(5), 381-390. doi:http://dx.doi.org/10.1016/j.ocecoaman.2010.11.004
- Karachalis, N., Kyriazopoulos, E., & Lourantos, N. (2004). The re-use of post-indistrial space and waterfront development: The use of Stone Loft (Maritime Tradition Museum) in Piraeus. Paper presented at the European City in Comparative Perspective: Seventh International Conference on Urban History Athens.
- Karlsen, J.T. (2002). Project stakeholder management. Engineering Management Journal, 14(4), 19-24.
- Koppenjan, J., & Klijn, E. H. (2004). Managing Ucertainties in Networks. London: Routledge.
- Lee, T. B. (2015). The euro was a big mistake, and Greece is paying the price. Retrieved from https://www.vox.com/2015/6/30/8868973/euro-greece-crisis-mistake
- Lovering, J. (2009). The Recession and the End of Planning as We have Known It. *International Planning Studies*, 14(1), 1-6. doi:10.1080/13563470902857504
- McLoughlin, J. B. (1969). Urban & Regional Planning: A Systems Approach. London: Faber and Faber.
- Mitchell, J. C. (1999). Case and situation analysis. Qualitative research / edited by Alan Bryman and Robert G. Burgess.
- Mobaraki, O. (2014). Strategic planning and urban development by using the SWOT analysis. The case of Urmia city. Romanian Review of Regional Studies, X(2), 47-54.
- Montgomery, J. (2007). Making a city: Urbanity, vitality and urban design. *Journal of Urban Design*, 3(1), 93-116.
- Nagy, E., Nagy, G., Timár, J., Mangels K., Schrader-Bölsche, N., & J., B. (2014). *Transnational comparison of national policies and planning systems*. Retrieved from www.southeast-europe.net/document.cmt?id=474
- Needham, B. (2006). Planning, Law and Economics: The Rules We Make for Using Land: Taylor & Francis.

- Newman, P., & Thornley, A. (1996). *Urban Planning in Europe: International Competition, National Systems, and Planning Projects:* Routledge.
- OECD. (2016). OECD Regional Outlook 2016: Productive Regions for Inclusive Societies.
- Olander, S., & Landin, A. (2005). Evaluation of stakeholder influence in the implementation of construction projects. *International Journal of Project Management*, 23, 321-328.
- Papadopoulos, T. (2014). Valutare la trasformazione_Studio di fattibilità e scenari per il recupero dell'ex cartiera di Aigio in Grecia[Assessing urban transformations_Feasibility study and scenarios for the reuse of the former paper mill of Aegion in Greece.]. (Masters), Polytechnic University of Turin, Turin.
- Pestoff, V. A. (1992). Third sector and co-operative services An alternative to privatization. Journal of Consumer Policy, 15(1), 21-45. doi:10.1007/bf01016352
- Strategic Plan of the Municipality of Piraeus and Development Priorities 2015-2020, (2014).
- O.X.E. Piraeus- Complete approach for the strategic Spatial Development., (2016).
- Piraeus Municipality. (2017). Piraeus 2021: European Capital of culture Cndidate city. Retrieved from
- Pugalis, L., & McGuinness, D. (2013). From a framework to a toolkit: Urban regeneration in an age of austerity. *Journal of Urban Regeneration & Renewal*, 6(15), 339-353.
- R.S.A. (2011). Strategic Plan for Athens/Attica 2021. Athens Retrieved from http://www.organismo-sathinas.gr/Default.aspx?id=16.
- Roberts, P., & Sykes, H. (2002). Urban regeneration: a handbook. London: SAGE publications Ltd.
- Rosa, M. L., & Weiland, U. E. (2013). Handmade Urbanism: From Community Initiatives to Participatory Models Jovis.
- Ryser, J., & Franchini, T. (2015). *International Manual of Planning Practice*. The Hague: International Society of City and Regional Planners, ISOCARP.
- Saaty, T. L., & Sagir, M. (2012). Global awareness, future city design and decision making. *Journal of Systems Science and Systems Engineering*, 21(3), 337-355.
- SADAS-PEA. (2017). Announcement for the results of the Architectural Competition for the development of the 640 ha of Lipasmata. Retrieved from www.sadas-pea.gr
- Sairinen, R., & Kumpulainen, S. (2006). Assessing social impacts in urban waterfront regeneration. EIR Environmental Impact Assessment Review, 26(1), 120-135.
- Sanyal, B. (2005). Comparative Planning Cultures: Routledge.
- Shamsuddin, S., Abdul Latip, N. S., & Sulaiman, A. B. (2008). Waterfront regeneration as a sustainable approach to city development in Malaysia. In C. A. B. A. Gospodini, E. Teiezzi (Ed.), The Sustainable City V: Urban Regeneration and Sustainability (Vol.V, pp. 45-54). Southampton, Boston: WIT Press.
- Shamsuddin, S., Latip, N. S. A., & Sulaiman, A. B. (2008). Waterfront regeneration as a sustainable approach to city development in Malaysia. In A. Gospodini, C.A. Brebbia, & E.Tiezzi (Eds.),

- The Sustainable City V: Urban Regeneration and Sustainability (pp. 45-54). Southampton, Boston: WIT Press.
- Stakeholder Management. (2017). Stakeholder Engagement Analytics. Retrieved from http://www.stakeholdermapping.com/
- Tallon, A. (2013). Urban Regeneration in the UK (2 ed.): Taylor and Francis.
- Tiesdell, S., & Adams, D. (2011). *Urban Design in the Real Estate Development Process*: Blackwell Publishing Ltd. .
- Tolis, C. (2017) Project Manager Arketipo- Construction Company/Interviewer: T. Papadopoulos.
- Tosics, I., Szemző, H., Illés, D., Gertheis, A., Lalenis, K., & Kalergis, D. (2010). *National spatial planning policies and governance typology*. Retrieved from http://www.plurel.net/images/D221.pdf
- van 't Verlaat, J. (2008). Stedelijke gebiedsontwikkeling in hoofdlijnen: Erasmus Universiteit Rotterdam.
- Vavaletskos, K. (2017) Project Manager TERNA S.A.- Construction Company/Interviewer: T. Papadopoulos.
- Vayona, A. (2011). Investigating the preferences of individuals in redeveloping waterfronts: The case of the port of Thessaloniki Greece. *Cities* (28), 424-432.
- Walker, D. H.T., Bourne, L. M., & Shelley, A. (2008). Influence, stakeholder mapping and visualization. Construction Management and Economics, 26(6), 645-658. doi:10.1080/01446190701882390
- Yin, R. K. (2009). Case study research: design and methods (4th ed.). Los Angeles: Sage.
- Zazzara, L., D'Amico, F., & Vrotsou, M. (2012). Changing port-city interface at Corinth (Greece): transformations and opportunities. *Social and Behavioral Sciences*, 48, 3134-3142.
- ΑΠΟΣΤΟΛΟΥ, Μ. (2014). Τα επτά έργα «κόμβοι» για τη δημιουργία της Αθηναϊκής Ριβιέρας. [The seven projects «nodes» for the creation of the Athenian Riviera.]. Έθνος. Retrieved from http://www.ethnos.gr/oikonomia/arthro/trexei_to_sxedio_athinaiki_ribiera_ta_prota_20_akinita-64064865/
- Γιαννακούρου, Γ., & Καυκαλάς, Γ. (2014). Επανεξετάζοντας τη χωροταξία σε περίοδο κρίσης: αναγκαιότητα, περιεχόμενο και προϋποθέσεις της μεταρρύθμισης. [Rethinking spatial planning in times of crisis: on the necessity, the content and the requirements of a planning reform] Ανταγωνιστικότητα για ανάπτυξη. Προτάσεις πολιτικής [Competitiveness for Growth: Policy Proposals] (pp. 511-522): Hellenic Bank Association.
- IOBE. (2014). The Greek Economy. Retrieved from http://iobe.gr/greek economy.asp?PD=2017
- IOBE. (2017). The Greek Economy Retrieved from http://iobe.gr/greek economy.asp?PD=2017
- Καρολεμέας, Χ. (2012). Πολεοδομική Διερεύνηση και Προοπτικές του Δήμου Κερατσινίου Δραπετσώνας. [Urban Exploration and Prospects of the Municipality of Keratsini Drapetsona]. National Technical University of Athens Athens.
- Κλουτσινιώτη, Ο., & Μεσαρέ, Σ. Σ. (2006). Χωροταξική πολεοδομική μελέτη ανάπλασης

- της βιομηχανικής περιοχής στα όρια του Δήμου Δραπετσώνας, στοιχεία για την τροποποίηση του ΓΠΣ. [Spatial urban redevelopment study of the industrial area in the limits of the Municipality of Drapetsona, details for the modification of the General Urban Plan].
- Αρχιτεκτονικός διαγωνισμός ιδεών για τη μελέτη ανάπλασης 640 στρεμμάτων της πρώην λιμεωο/βιομηχανικής περιοχής Λιπασμάτων. [Architectural competition of ideas for the redevelopment study 640 acres of the former industrial-port area «Lipasmata»], 22186/2012 ΦΕΚ 1494Β/2012 C.F.R. (2016).
- Τσάδαρη, Σ. (2016). Μεταλλαγές του αστικού χώρου της Αθήνας Η Δραπετσώνα ως μελέτη περίπτωσης. [Mutations of the urban area of Athens Drapetsona as a case study]. Retrieved from https://akea2011.com/2016/05/09/idrapetsonaosmeletiperiptosis/

List of figures

- Figure 1: Greek internal migration of the youth population aged 15-34. (elaboration from Hellenic Statistic Authority, 2014) 26
- Figure 2: Greece's workforce and unemployment rates by sectors. (Hellenic Statistic Authority, 2014) 26
- **Figure 3:** Position of the area "Lipasmata" in the Greater area of the Attica Region and proximity to Athens-Piraeus. 29
- Figure 4: Position of the area "Lipasmata" in relation to the port of Piraeus. 29
- Figure 5: The emerging framework of policy and physical redesign of space in Greek urban waterfronts (Gospodini, 2001) 32
- Figure 6: Scheme of the hierarchy of the Greek Spatial Planning System. (Ryser & Franchini, 2015) 34
- Figure 7: Conceptual institutional planning framework (based on Buitelaar, 2011) 34
- Figure 8: Geography of European welfare systems (Heurkens, 2012, from: Nadin, 2011) 43
- Figure 9: Geography of European legal-administrative systems (Heurkens, 2012, from: Nadin, 2011) 43
- Figure 10: Planning styles and their contextual determinants: an analytical framework to examine waterfront redevelopment practices and the roles of planning (Galland & Hansen, 2012) 46
- Figure 11: Research Design Strategy 49
- Figure 12: Regional differences in GDP per capita levels in 2013. (OECD, 2016) 64
- Figure 13: Unemployment rates within Europe (February 2015 or later). (Lee, 2015) 64
- Figure 14: Spatial planning, development poles and axes of New R.S.A. /SPA 2021. (R.S.A., 2011) 67
- Figure 15: Strategic Planning of the New R.S.A. /SPA 2021. (R.S.A., 2011) 69
- Figure 16: Planning and protection of the coastal zones and river areas and indication of the strategic brownfield areas to be developed. (R.S.A., 2011) 71
- Figure 17: Photographic reporting of "Lipasmata" 77
- **Figure 18:** Scheme of ownership status in the area. 80

- Figure 19: Percentages of Ownership by sector and actors. 82
- Figure 20: Stakeholder Circle Diagram based on (Walker et al., 2008) 86
- Figure 21: Land Use plan and design of the Papagiannis' proposal, commissioned by NBG. (Τσάδαρη, 2016) 90
- **Figure 22:** Land Use Plan and design of the Kloutsinioti & Mesare plan proposal, committed by the municipal authorities. (Τσάδαρη, 2016) 91
- Figure 23: The general structure of the Greek planning system and its legislative framework (Bitsakaki, 2017) 100
- Figure 24: Stavros Niarchos Cultural Center, Development of the new National Library and Opera in the Faliron bay 104
- Figure 25: Example of SWOT Analysis Matrix 106
- Figure 26: SWOT analysis Matrix outcome 112
- Figure 27: Steps toward a successful area development 126
- Figure 28: Schematic illustration of local initiatives in community-led approaches (Rosa & Weiland, 2013) 128
- Figure 29: Guiding principles of temporary development (Bruijning, 2016) 128
- Figure 30: Possibilities for community-led developements in "Lipasmata" in several development stages 129

List of tables

- Table 1:List of tables
- Table 2: Sub-research questions definition 52
- Table 3: Overview of the methods used for the several research parts 57
- Table 4: Ownership status of the "Lipasmata" area 82
- Table 5: Stakeholder analysis based on Dente (2014) 85
- Table 6: Comparative table of the several plans and design proposals for the (re)development of the area 95
- Table 7: Internal factors of the (re)development project, Strengths and Weaknesses 108
- Table 8: External factors of the (re)development project, Opportunities and Threats 110

13. Appendices

Appendix I - Semi-structured Qualitative Interviews Protocol

-Interview schedule-

Waterfront development management in Greece.

The case of "Lipasmata" in Piraeus.

Opening

First of all, I would like to thank you for participating in this research. The research is part of my graduation project for the masters in Management in the Built Environment of TU Delft's Faculty of Architecture and the Built Environment.

The research is focusing on the topic of waterfront development management in Greece and takes into consideration the area of "Lipasmata" in the port of Piraeus as main case study. The main goal is to understand and analyse the barriers and drivers of managing waterfront development projects in the Greek practice given the current socio-economic conditions. Additionally, the research intents to create a step-by-step plan of an alternative development approach, as a strategy towards the reactivation of such brownfield areas. This is a small recap of the main concepts of this research in addition to the abstract already provided in my first mail, when I firstly contacted you to arrange this interview.

As an expert in the fields of architecture and construction, urban planning and design or as a part of the public domain, I would like to know your opinion based on few questions related to the case study in analysis. Any additional remark of yours is welcome, as it will give further information to support the outcome of the case study analysis and to finalize the research.

Furthermore, I would like to inform that the interview is going to be recorded in order to create a valid transcript if you agree. In any case your answers will remain anonymous if this is requested. Therefore, you are welcome to express your opinion in this interview based on your experience. Finally, I will, also, ask you for some personal information in a contact summary sheet in order to have a statistical record of our interviewees.

This was my introduction. Do you have any questions or is there anything you would like to know before we start?

Let's proceed with the interview then!

Questionnaire for Interview to experts - Case study "Lipasmata"

-General outline-

In some cases the outline is slightly deviated based on the field of expertise of each interviewee.

Questions

- I. Based on your experience on the project of "Lipasmata" and expertise on the Greek urban planning and design practice, what are the main reasons why proj¬ects such as the one related to this specific waterfront area remain undevel¬oped for so many years?
- 2. Do you believe that such ambitious projects are considered as strategic for municipalities or the regions? To what extent such projects are feasible in the current society of crisis?

3. What are, in your opinion, the main reasons why the project of "Lipasmata" has not been implemented despite the plethora of existing plans and studies?

In the specific case of "Lipasmata" there is a particular ownership status where several private parties have state on the land. Such parties have expressed their interest to create a development project in order to create new opportunities for their business as well as for the society. However there are several public parties and local authorities opposing to such initiative and creating delays to the project for many years.

4. Why, in your opinion, there these public parties opposing to such initiatives and how this situation could be overcome?

5. In your opinion is it possible for public and private parties to collaborate, in relation to "Lipasmara" case, and in what conditions? To what extent do you believe that a more collaborative approach can be implemented in such projects? How the parties involved can collaborate towards this diraction?

6. One of the goals of this research is to create the conditions for implementing strategies for the development of the waterfront area of Drapetsona. What are in your opinion the key elements that need to be considered in order to create a more effective strategy?

Closing

Is there anything else you would like to add to the discussed topics?

This was the final question and therefore the end of the interview. I think that our discussion covers what I would like to know for my research. The information you provided are very useful and gives a lots of insight to proceed with the rest of the research.

I would like at this moment to thank you for our discussion, your time and your cooperation! It has been great talking with you.

Appendix II – Interviewee Schedule and Details

Interviewee	Company/ Organisation	Position	Description	State of Anonymity	Date of interview	Interview type
A. Bitsakaki	Architect/Urban planner	Architect/Urban planner	Expertise in the specific project	Non anonymous	21/03/2017	In person interview
G. Papanikolaou (Expert A)	Municipality of Glyfada	Mayor	Expertise in the Public sector and local authorities	Anonymous	23/03/2017	In person interview
K. Vavaletskos	GEK TERNA SA.	Project Manager	Expertise in the field of development projects	Non anonymous	24/03/2017	In person interview
M. Varvitsiotis (Expert B)	Greek Parliament	Lawyer and parliamentary politician	Former Minister of Marine and Aegean-Responsible Minister for port of Piraeus	Anonymous	28/03/2017	In person interview
C. Tolis	Arketypo LTD	Project Manager	Expertise in the field of development projects	Non anonymous	10/04/2017	Skype interview
D. Grozopoulos	ASPA SA.	Architect/Urban planner	Expertise in the specific project	Non anonymous	17/04/2017	Skype interview

WHAT IS THE CITY BUT THE PEOPLE?

Shakespeare W., Coriolanus, 1608

