TRANSFORMATION OF URBAN WATERFRONTS: A CRITICAL EVALUATION ON IZMIRDENIZ PROJECT

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ETHICAL DECLARATION

I hereby declare that I am the sole author of this thesis and that I have conducted my work in accordance with academic rules and ethical behaviour at every stage from the planning of the thesis to its defence. I confirm that I have cited all ideas, information and findings that are not specific to my study, as required by the code of ethical behaviour, and that all statements not cited are my own.

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ABSTRACT

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Master's Program in Architecture

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The versatile resource of urban waterfronts makes public spaces valuable, as the presence of water grants coastal cities a distinct spatiality. Harnessing the potential of urban coastal areas is an issue that administrations have been working on to revive their significance. Globally renowned researchers have developed the principles and dimensions of successful waterfront transformation, aiming to enhance the city's image, livability, and productivity. In this regard, the thesis initiates a discussion on waterfront transformation projects by conducting a comprehensive literature review to gain insights into the role of urban waterfronts. Based on the synthesis of globally recognized criteria developed by seminal scholars in the field, this research explores the social, cultural, economic, environmental, and political dimensions of waterfront transformation. By employing these dimensions, the study conducts a critical evaluation on the Izmirdeniz project, which seeks to transform the bay of Izmir city in Turkey, through a review of media and municipal sources, as well as on-site field observations. The results of this research suggest that the project made efforts to adhere to the criteria encompassed by the dimensions. The study also identified

progress in terms of accessibility, continuity, reference to historical values, green space, and participation within the project. Nevertheless, it has been revealed that inadequacies in the economic and political dimensions resulted in challenges during the project's planning, implementation, and operation stages. As a result, this thesis aims to offer a perspective on waterfront transformation and enhance the likelihood of success in all phases by analyzing the Izmirdeniz project.

Keywords: Urban Waterfront, Coastal City, Waterfront Transformation, Izmirdeniz Project.

ÖZET

KENTSEL KIYILARIN DÖNÜŞÜMÜ: İZMİRDENİZ PROJESİ ÜZERİNE ELEŞTİREL BİR DEĞERLENDİRME

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Suyun varlığı kıyı kentlerine farklı bir mekânsallık kazandırdığından, kentsel su kıyılarının çok yönlü kaynağı, kamusal alanları değerli kılmaktadır. Kentsel kıyı alanlarının potansiyelinden faydalanmak, yönetimlerin canlılığını yeniden sağlamak için üzerinde çalıştığı bir konudur. Dünya çapında bilinen araştırmacılar, kentin imajını, yaşanabilirliğini ve üretkenliğini artırmayı amaçlayan başarılı kıyı dönüşümünün ilke ve boyutlarını geliştirmiştir. Bu bağlamda tez, kentsel bağlamda su kenarının rolüne ilişkin görüş kazanmak için kapsamlı bir literatür taraması yaparak kıyı dönüşüm projeleri üzerine bir tartışma başlatmaktadır. Alanında öncü akademisyenler tarafından geliştirilen ve dünya çapında kabul gören kriterlerin sentezine dayanan bu araştırma, kıyı dönüşümünün sosyal, kültürel, ekonomik, çevresel ve politik boyutlarını incelemektedir. Çalışma, bu boyutları kullanarak, Türkiye'de İzmir kentinin körfezini dönüştürmeyi amaçlayan İzmirdeniz projesinin eleştirel bir değerlendirmesini, medya ve belediye kaynaklarının yanı sıra yerinde saha gözlemleri aracılığıyla yapmaktadır. Bu araştırmanın sonuçları, projenin, boyutlara ve içerdiği alt kriterlere uymaya çaba sarf ettiğini göstermektedir.

Çalışmada ayrıca erişilebilirlik, süreklilik, tarihi değerlere atıf, yeşil alan ve katılımcılık konularında ilerleme kaydedildiği tespit edilmiştir. Bununla birlikte, ekonomik ve siyasi boyutlardaki yetersizliklerin projenin planlama, uygulama ve işletme aşamalarında zorluklara yol açtığı ortaya çıkmıştır. Sonuç olarak bu tez, İzmirdeniz projesini analiz ederek, kıyı dönüşümüne bir bakış açısı sunmayı ve tüm aşamalarda başarı olasılığını artırmayı amaçlamaktadır.

Anahtar Kelimeler: Kentsel Kıyı, Kıyı Kenti, Kıyı Dönüşümü, Izmirdeniz Projesi.

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PPS: Project for Public Space

CHAPTER 1: INTRODUCTION

Water, which is an indispensable source of life for all creatures, has always prompted people to build cities around it. Throughout history, humanity has consistently favored waterfronts, as they offer a suitable environment for various human endeavors, including trade, manufacturing, the establishment of settlements, and the development of recreational amenities, all while benefiting from the abundance of resources provided by the sea. Waterfronts serve as a natural boundary, bridging the transition between land and sea, and facilitating the formation and progression of civilizations.

In line with this historical fact, urban planning theorists have reached a remarkable consensus that the waterfront is an extraordinary resource for a city and should therefore be strategically utilized for urban development (Bruttomesso, 2001). These prominent roles of waterfronts remain critical in the 21st century, as rapid urbanization and population growth have led to the use of them as important public spaces that build the social fabric of the city. The widespread use of the waterfront as a public sphere has led politicians to see it as a part of the city that enhances its image and provides social and cultural interaction (Breen and Rigby, 1996). Subsequently, administrators included development projects in their urban policies[1] for coastal areas, which they saw as diminishing in value and function. Given their visibility in cities, urban waterfront transformation projects as we know them today embody the historical development of land and water uses along the waterfronts of thousands of large and small cities around the world.

Building on this brief background, this research addresses the transformation of waterfronts, with a specific focus on the Izmirdeniz project in Izmir, a city renowned for its significant and alluring coastline. Izmir, Turkey's third largest metropolis and located on the western side of the country, has a very valuable public coastal area in proportion to the city's density, with the bay surrounding its center. In this regard, the first implementation works of the Izmirdeniz waterfront project, which was realized to improve the living standards of the city dwellers and strengthen their relationship

[1] Baltimore, Toronto, Barcelona, Bilbao, Hamburg, Istanbul, and Izmir cities can be considered instances.

with the sea, started in 2013. The project is not completely finished, as there are still some unfinished parts. However, it is an essential project as it covers a long coastline and follows innovative policies.

1.1. Problem Definition

An overview of the literature shows that in recent years, coastal areas of cities have emerged as values that include different uses, fulfill cultural and recreational functions, increase the quality of life, and provide urban integration due to being urban areas open to public use (Breen and Rigby, 1996; Marshall, 2001; Smith and Garcia Ferrari, 2012). As mentioned earlier, these areas, which have a very high urban potential, play a key role in urban development by having a large share in the continuous growth of cities and are subject to planning. Hence, spatial changes on the waterfronts occur faster than in other parts of the city due to the diversity of uses that can be created (Breen and Rigby, 1994).

Globally, waterfronts have been subjected to long-standing interest, with efforts in revitalization, planning, and development studies aimed at reclaiming and enhancing their worth, driven by the depletion of environmental resources and changes in lifestyle patterns. For this reason, considering that urban space is a transforming phenomenon, coastal areas, as being one of them, lose their intended use over time, become obsolete as their needs change and become the scene of transformation projects. Compatible with these facts, the emergence of the Izmirdeniz waterfront project, which serves as the central focus of this thesis, also stems from the limited accessibility and underutilization of coastal areas, resulting in their underutilization and gradual loss of their public characteristics (Izmir Metropolitan Municipality, 2018). With the Izmirdeniz project, increasing the spatial connections of coastal areas with the city is thought to solve this problem.

As a response to these issues, efforts have become globalized, with the implementation of numerous waterfront projects fostered by competition between urban geographies in different countries (Krieger, 2004). Urban waterfronts, often regulated and developed by city authorities, seek to serve multiple purposes, such as working, living, and public entertainment areas. However, these areas require a holistic and comprehensive approach in their planning due to their potential

advantages (Bruttomesso, 2001; Jones, 2013; Evans et al., 2022). Thereby, it should be aimed to provide visual and physical accessibility to the waterfront and create a strong visual field by integrating the new development on the waterfront with the existing texture.

However, cities cannot find the value they deserve because of poorly managed areas, non-user-priority planning decisions, unqualified design, and political reasons. As a result, cities cannot communicate effectively with the sea (Jones, 2013). Therefore, breaking the waterfront-user relationship weakens the dynamics of the urban environment. From this point of view, coastal areas that reveal their potential with the right strategies result in successful outcomes (Hoyle, 2000). Projects to date have yielded both positive and negative results, presenting valuable lessons and guidelines from which other cities can learn and follow. However, too often, the approaches and processes of projects that are perceived to have been successful have been copied without being fully learned or understood. Instead of utilizing the unique potentials of these areas, one city copies the approach of another, resulting in failure and out-of-context projects (Bruttomesso, 2001; Smith and Garcia Ferrari, 2012). Hence, it is essential to recognize that each coastal story has a diverse history, geographical features, heritage, community, timing, and political context. In this respect, it is important for the city's development that the municipalities implement and transform unique and effective strategies to the waterfronts. Therefore, the necessity, benefits, and successes of the implemented waterfront projects have been the subject of discussion on an urban scale (Bruttomesso, 2001). In this context, different principles of urban waterfront transformation emerge from the existing literature, considering the region's potential for each city to implement its specific approach.

Researchers have focused on this issue and identified several dimensions and principles for functioning urban waterfront transformation (Torre, 1989; Breen and Rigby, 1996; Urban 21, 2000; Bruttomesso, 2001; Krieger, 2004; PPS, 2009; Jones, 2013; Evans et al., 2022). These studies have concluded that an urban waterfront project should work in social, cultural, economic, environmental, and political dimensions with sub-criteria for successful advancement. As an example of these projects within the scope of this thesis, the Izmirdeniz project, which contains the designs of Izmir waterfront, has been selected. A research on this project will enable

the acquisition of valuable lessons and the transfer of knowledge from globally recognized waterfront projects, ultimately contributing to the success of future endeavours in this field.

1.2. Aim of the Research

During the thesis study, research and evaluations were made to achieve the objectives by determining a comprehensive approach. Today, the concepts of transformation, development, regeneration, and revitalization in the context of urban waterfronts have become frequently discussed topics both on a global and national scale, both in the academic environment and in the field of practice (Bruttomesso, 2001; Sairinen and Kumpulainen, 2006). From this fact, in many cities around the world, new projects are brought to their urban agendas under the umbrella term of waterfront transformation; and while these projects are discussed, references are made to significant projects and their models. To better understand the subject, it is essential to investigate how these projects are carried out and what kind of models they are based on.

Considering the discussions and recognizing the arguments generated around these global examples, this thesis aims to examine the transformation project on the waterfront of Izmir Bay regarding its social, cultural, economic, environmental, and political outcomes. This study intends to provide an analytical framework of the decision-making process in the planning, design, and implementation phases by builders and practitioners based on an approach that believes in the necessity of analysis to comprehend the context between the waterfront and the city, which can be usefully utilized for teaching and research purposes in this field. On the other hand, the thesis will look into the background, organizational model, design strategies, implementation, and running of the Izmirdeniz project. Consequently, the main purpose of this research can be summarized as a comprehensive examination of the dimensions in the context of urban coastal design and planning, with a specific focus on the changing uses of the coastline with the project designed in Izmir Bay.

In the context of the research, there are many reasons for choosing the Izmirdeniz project as a case study when examining urban waterfront transformations. First, Izmir, where many changes and transformations happened on its waterfront, has

strategic importance among Turkey's coastal areas and is one of the centers with a high potential for coastal-oriented development (Sözer, 1988; Koçman, 1993; Yılmaz and Yetkin, 2002; Akyüz Levi and Genç, 2018; Yılmaz, 2018; Alpaslan, 2020). Secondly, the Izmirdeniz project, which altered the waterfront of Izmir and also affected its usage, is the largest-scale design project applied to 40 kilometers of coastline in Turkey (Kocaoğlu, 2013). Finally, the project, which sets an example for large-scale design projects and aims to catch up with contemporary approaches, has differences in terms of content, participation, working method, and process (Izmir Metropolitan Municipality, 2018). At the same time, the project has also been the subject of other studies in the literature because of the fact that it was added to the list of globally recognized projects selected in the book "Design for Social Innovation Case Studies from Around the World" (Amatullo et al., 2021). From these perspectives, the project attracted attention at the scale of urban planning and was found acceptable for study.

Detailed examination of urban waterfront transformation projects is important in understanding the rich potential of these spaces in urban areas, revealing the interactions and situations created by different relations on the waterfronts, and raising awareness. In this study, the redesign of urban waterfront spaces has been examined toward these goals. Aligned with the stated main purpose in this section, the research comprises two sub-objectives as follows:

1. Conceptually exploring the waterfront areas and the relationship between the city and the coast,
2. Utilizing this conceptual framework as a guide, analyzing the transformation of waterfront areas, with a specific focus on Izmir, a prominent Mediterranean city, and conducting an in-depth analysis of the Izmirdeniz project.

1.3. Research Questions

Within the scope of this thesis, the research process is guided by the following questions, considering the importance of the coastline:

RQ 1. What are the established models and criteria for successful waterfront transformations globally?

RQ 2. How can the Izmirdeniz project be evaluated based on the dimensions and principles shared by these current global trends?

1.4. Significance of the Research

This research contributes to the existing literature by providing relevant and meaningful answers to the aforementioned questions. Articulating the details of these trends discussed earlier, it is deemed appropriate to analyze the Izmirdeniz project, which is characterized by its vision as a 'Mediterranean City of Culture, Art and Design' (Izmir Metropolitan Municipality, 2009). The emphasis of this study is to raise awareness about the spatial transformation taking place in a historically significant area. Additionally, it seeks to contribute valuable insights and vision guide current and future projects in terms of the development of design strategies, project management, and improved solutions.

Based on the literature review, it is seen that waterfront studies are generally focused on planning, participation processes, spatial quality, and the transformation of abandoned port areas (Turunç, 2008; Erkmen, 2015; Tanış, 2015; 2018; Karasu, 2019; Güder, 2019; Arslan, 2021). In comparison with these existing waterfront studies in literature, several points distinguish this thesis from other studies. Firstly, this research focuses on a framework that draws on a collection of several different principles guiding waterfront transformation projects. Secondly, it presents a holistic perspective, critically examining the coastal transformations experienced on the coasts. This approach addresses the changing nature of development strategies and conservation approaches.

Although numerous studies have been conducted on Izmir's waterfront areas, there is a limited number of studies that specifically analyze the transformation brought about by the Izmirdeniz project from this perspective. Thereby, this study hopes to fill this gap in the literature. As a result of this study, a refined framework will appear in the waterfront transformation literature which can turn into a model that can be consulted evaluate not only Izmirdeniz but also subsequent waterfront transformations. In this direction, it is expected that the research will contribute to the literature as a guide for the strategic development of waterfront cities.

1.5. Methodology

Driven by the different conceptual approaches discussed, the thesis begins with a literature review. During the literature review process, considering Torre (1989), Breen and Rigby (1996), Urban 21 (2000), Bruttomesso (2001), Krieger (2004), PPS (2009), Jones (2013), and Evans et al. (2022), a conceptual framework was first established, concepts that could shed light on the main theme of the thesis were explained, and some parameters and indicators related to waterfront transformation projects were identified. To understand how the principles in the developed framework have been applied on the ground, examples of waterfront transformation approaches implemented in cities worldwide and found successful in the existing literature were investigated. The literature was examined in a certain order to provide guidelines for the research. Within the scope of the literature review, relevant books, articles, conference papers, and design guides that focus on the relationship between the city and the waterfront, the use of waterfront areas, their design, and waterfront transformation projects were examined. Syntheses and findings from various theses, written reports, and books were used by indicating the sources. Images related to promoting the project areas, including world examples, were also used to enrich the visual narrative.

The data collected on literature about urban coastal areas formed the case study's basis. In line with the research, a case study (Izmirdeniz Project) method was determined to be suitable for the thesis, along with the adopted mixed-method approach. Documents consisting of texts (books, magazines, newspapers, web pages, web diaries), maps, plans, and photographs obtained from accessible written sources on the Izmirdeniz project were evaluated and used on-site observation and examination methods.

The area was analyzed with photographs, and maps describing the current land use for the waterfronts were prepared. An evaluation system has been created within the framework of parameters and indicators regarding waterfront transformation projects connected to concepts and examined through the examples determined in the field. The examination was conducted by analyzing the immediate environment's spatial and social change. The benefits and opportunities of urban waterfront transformation projects and the urban role and importance of waterfront use have been revealed

considering the data collected based on predominantly qualitative methods.

Nevertheless, the study has some limitations. First, although there are many researchers in the literature with approaches to waterfront development, several have been selected to establish a framework. These were chosen because they are the ones that stand out in the literature and are the most frequently cited individuals and organizations. In addition, the social, cultural, economic, environmental, and political dimensions derived from the researchers' approaches have some overlapping characteristics. However, the thesis tries to separate the principles to make a clear distinction between these dimensions. Lastly, the Izmirdeniz project selected for the research covers a long stretch of coastline. Therefore, there may be areas that have been overlooked in this thesis because the project is viewed as a whole rather than region by region.

1.6. Structure of the Dissertation

In the preceding paragraphs of this chapter, the definition of the problem, the research question, the purpose, significance, and methodology of the thesis are explained, and this chapter summarizes its structure. Chapter 2 illustrates a comprehensive overview of the concept of the waterfront and articulates a framework based on the renowned models of Torre (1989), Breen and Rigby (1996), Urban 21 (2000), Bruttomesso (2001), Krieger (2004), PPS (2009), Jones (2013) and Evans et al. (2022). Furthermore, the history of human settlements on the waterfront, the establishment of the relationship between the waterfront and the city, and the types of urban coastal uses are examined. It also discusses the background, criteria, and examples of coastal transformation projects. Chapter 3 presents research on the history and characteristics of Izmir's coastal development and culture. In addition, the background, planning, design strategies, and implementation of Izmirdeniz Project are investigated. Chapter 4 articulates the findings of the Izmirdeniz project as a waterfront transformation project. In this context, the project is discussed based on the waterfront transformation framework emerging from the literature and developed in Chapter 2. Findings and recommendations are indicated in Findings and recommendations are indicated in this section. Finally, Chapter 5 presents the conclusions drawn from this research.

CHAPTER 2: TRANSFORMATION OF URBAN WATERFRONTS

This chapter discusses the use and development of coastal areas concerning the emergence of contemporary waterfront transformation projects. This is because the range of research on coastal use and development from the past to the present is quite broad, and much research is available on this concept. Therefore, it is vital to approach the waterfront concept from different perspectives and understand historical and contemporary definitions of the waterfront. First, the waterfront in the context of urban is explained. At the same time, the emergence of the concept of waterfront transformation and approaches to projects are discussed. At the end of the chapter, a framework for waterfront transformation projects is refined based on the mentioned approaches. These different waterfront transformation approaches are then exemplified with projects from around the world.

2.1. Waterfronts in the Context of Urban

This section explains the definition of the waterfront and its value in the urban context. Firstly, the conception of the waterfront and different terms used in the same sense are discussed. Then, the relationship that the coast has established with the city over time since the settlement of people on the coast and the types of use are examined.

2.1.1. The Conception of Waterfront

The term '*Waterfront*' is generally understood as the place where land and water meet. Many words are used in this sense, including the coast, shore, and seaside. In this thesis, the terms 'Waterfront' and 'Coast' are used interchangeably, yet the term 'Waterfront' will be predominantly employed to describe this phenomenon throughout the dissertation. The meaning of waterfront is defined in the Cambridge Dictionary as a part of a town that is next to an area of water such as a river or the sea. In the Merriam-Webster Dictionary, the explained waterfront as land, land with buildings, or a section of a town fronting or abutting on a body of water.

Besides these meanings of waterfront addressed in dictionaries, similar definitions

have been also proposed in the literature. For instance, Karabey (1978) uses the term to describe an area that is next to the water and is in unity with it. Breen and Rigby (1994, p. 10), as two of the seminal scholars in this field, have determined a waterfront as the water's edge in every type of settlement, and this water can be a lake, river, bay, or ocean. From this point of view, the waterfront is in a crucial position and structure as the intersection of two different environments (Gülöksüz, 1976). It has an environmental structure at different scales in which plant and animal tissue, soil, air, water, and people are connected to each other continuously (Karabey, 1978, p.96). From an urban perspective, according to the definition provided by Bruttomesso (2001, p.40), the urban waterfront is the boundary type of the urban area that is both part of the city and in touch with a body of water. As such, it is possible to see many similar definitions in the literature.

2.1.2. Human Settlement on Waterfront

Water has a powerful and universal appeal that has a dynamic and symbolic impact on human settlement (Breen and Rigby, 1994). Speaking about this allure of water, the American anthropologist Loren Eiseley (1957, p.15) has a classic quote:

> "*If there is magic on this planet, it is contained in water*"

The role of water in the evolution of settlements is crucial not only for the continuity of life but also for living standards and levels of civilization. Accordingly, water has been an essential factor in the establishment of many settlements, and it has been observed that most of the trade centers that feed development to a great extent is located on or near waterways. When civilizations in different parts of the world are reviewed (Breen and Rigby, 1994; 1996; Marshall, 2001; Krieger, 2004; Smith and Garcia Ferrari, 2012), life has always been water-dependent.

The fact that the first civilizations were founded and developed in the valleys along the Nile, Euphrates, and Tigris rivers and the Aegean coast shows the influence of water on the choice of location. In parallel, the colonizers who founded London on the Thames River and Rome on the Tiber River, the colonists who founded Sydney on the shores of Botany Bay, and the pioneers who founded Chicago at the intersection of the river and Lake Michigan are proof that the waterfront city has

been a constant throughout history (Breen and Rigby, 1996, p.13). Breen and Rigby (1996) argue that a large part of the history of civilization includes events and developments on the world's coasts, rivers, bays, and lakes. In this respect, there are many reasons why people settle in coastal areas.

If coastal settlements examined since the foundation of the universe, human beings survived by hunting and gathering in the primitive period situated along the water due to:

- Meeting the need for freshwater (Hudson, 1996; Breen and Rigby, 1996),
- Water source hosting a variety of plant and animal species and having a rich ecosystem (Hudson, 1996; Breen and Rigby, 1996),
- Ease of defense against external attacks (Smith and Garcia Ferrari, 2012),
- Reaching other lands for conquest and colonization (Smith and Garcia Ferrari, 2012),
- Offering climatic characteristics that can sustain life (Bender, 1993).

People have gravitated towards the waterfront as its habitat for these and similar reasons. Accordingly, due to the many natural, aesthetic, economic, and geographical opportunities it offers, it has been one of the ideal living spaces where human beings can feed, settle, reproduce, and learn. It has hosted various historical and architectural heritages that have survived to the present day as the cradle of many civilizations. As noted above, the development of settlements along the waterfront suggests that a relationship between the water's edge and human settlements has been established over time.

2.1.3. The Relation Between Urban Areas and Waterfronts

As referred to in the previous section, the step of urbanization taken with the development of agriculture-based economies in eastern Mesopotamia, Tigris, Euphrates, and Nile valleys in 3000 BC, in the Indus valley in 2500 BC, and on the Aegean, Mediterranean, and Black Sea coasts between 600 AD and 400 AD, has led to today's settlement order with new and different dimensions and interventions in human-environment relations. From the foundation of cities to the present day, dynamics such as urban geography, economy, technology, and politics have influenced the development and shaping of cities (Karabey, 1978). In line with the

diversified functions, the relations between the city and the people have been affected by these dynamics.

Keleş (1998) defines a city as a settlement unit consisting of small community units with a denser population than villages, where needs such as settlement, shelter, work, rest, recreation, and entertainment are met. In addition, it is possible to classify cities by looking at specific characteristics of them, such as industrial, commercial, cultural, tourism, and countryside. They may also have more than one of these functions simultaneously. Settle types also fulfill their various functions through their geographical characteristics. One of these types is coastal cities. In this direction, the presence of water has played an essential role in forming coastal cities and created a favorable environment for human activities in the area defined as the "waterfront" (Keleş, 1998).

The waterfront, a vital resource for sustaining life, is also considered with its form and function. Keleş (1998) draws attention to the form and function relationship of the waterfront with the city in general and defines it as an image perceived as an integral part. Coastal areas are related to the transitions between stages that cause significant social and spatial structure changes and the relationship models between regions, cities, environment, economy, and society (Karabey, 1978). The shifting relationship of water to land influences the settlement of people along the waterfront, resulting in cities with different images and characters. Jane Jacobs, a prominent urbanist, put it in clear terms:

> *"The waterfront isn't just something unto itself. It's connected to everything else"* (Krieger, 2004, p.45).

The fabric of many cities worldwide is inextricably linked to bodies of water that contributed to their foundation and subsequent development. The water-city relationship has various appearances, depending on different disciplinary perspectives and geographical locations (Bruttomesso, 1993). In other words, water often determines the character and form of the city (Wrenn, 1983, p.34). The presence of the sea allows the city to be perceived as a whole, together with the geographical character of its surroundings. Many well-known European cities, such

as Florence, Venice, Paris, London, Amsterdam, and Prague, have been shaped by water and land.

On the other hand, Gülöksüz (1976) agreed that the diversity and richness revealed by the intertwining of sea and land life accumulate on the waterfront. Different functions have developed depending on the reciprocal relationship between water and land, and the identity and image of the city formed. In this context, the next section is about the uses of the functions formed on the waterfronts of cities.

2.1.4. Use of Urban Waterfronts

As aforementioned in the section above, the waterfront area covers the field formed at the junction of land and water. The urban waterfront is a strip of land and a network of sites and services connecting land and sea (Niemann and Werner, 2016). Breen and Rigby (1994, p.10) described the urban waterfront as the water's edge found in cities and towns of all sizes, and the body of water can be a river, lake, ocean, bay, stream, or canal. Hence, in cities situated along waterfronts, urban space consists of areas that connect with the sea and primary structural assets. Waterfronts form the edges of city, region, and country spaces. Gülöksüz (1976) suggested that with this feature, waterfront areas are as essential as the "centers" of spaces of various scales. In this direction, waterfront areas are the whole of urban spaces that are very suitable for meeting the personal needs of society as a reflection of urban life.

Coastal areas, in this regard, are connected to every element that concerns the city. Various systems diverge along this intersection, creating activities, products, and processes that can only be located on the waterfront. Waterfronts which we describe as natural resources have brought new forms of use to the agenda, firstly the utilization of fishery products and transportation, and then with the increase in population and technological developments, in parallel with the developments in the way of life in the society (Smith and Garcia Ferrari, 2012).

The shape of the relationship between water and land reveals countless landscapes. While these different landscapes, which are among the most important factors that give the city its formal identity, visually create differences between cities, they also

define the city's relationship with water and the use of water. The cross-section of the waterfront, for instance, whether it allows ships to dock or not, directly affects the functions that can take place on that waterfront. The cross-section of the coast that continues on land, for example, sandy, rocky, and cliffy., determines the settlement conditions to be created back from the coast (Craig-Smith and Fagence, 1995). Therefore, the waterfront structure also plays a significant role in use patterns.

On the other hand, waterfronts can be reclaimed by the accumulation of various natural materials and by natural and artificial interventions of humans. The desire to gain more space has brought the process of creating unnatural resources to the agenda, especially with the manmade landfills trying to gain land area from the marine environment (Akkaya and Müftüoğlu, 2001). Landfill works can take place for reclamation (marsh drying), transportation (port), green area arrangement and recreation, shelter and maintenance, commercial, and production and facility purposes.

The importance of waterfronts, whether natural or artificial, has increased day by day as they are the source of different functions. To understand urban waterfront areas, coastal uses and their relationship with water should be determined within the urban development framework. Wrenn (1983, p.28) categorized urban coastal uses according to their dependence on water:

- Water-dependent uses: Essential uses such as water transportation and fishing,
- Water-related uses: Uses that can operate effectively even if relocated, such as warehousing, industrial facilities, or some public services,
- Water-independent uses: Commercial uses such as residences, parks, hotels, and restaurants are classified.

Karabey (1976), meanwhile, categorized coastal uses into various classes as utilization of the sea such as transportation (sea lines, trade routes, and anchorage areas, defense, industry, source of foodstuffs (fishing and cultivation of marine plants), source of raw materials (sand, gravel, and salt extraction), energy, recreation, health, leisure, and tourist facilities. The location of the waterfront is a source of several actions by people. A further example, Tekeli (1976) examined what kind of

uses the location of the waterfront gives rise to and identified various uses. He stated that harbor uses, which provide the transition, are located on the waterfront; a harbor brings industrial uses and, thus, urban area uses. At the same time, he mentions that the waterfront includes uses such as tourism and recreation, both in production and consumer activities.

Lastly, Breen and Rigby (1994) divide the use of coastal areas into different classes. Concerning the way coastal areas are used:

- Working waterfront (commercial fishing, boat repair, heavy industry, port uses, and transportation)
- Residential waterfront (includes resorts)
- Mixed-use waterfront (some combination of housing, retail, office, restaurant, market)
- Recreational waterfront (includes parks, walkaways, and boating facilities)
- Environmental waterfront (shore stabilization, wetland preservation)
- Cultural waterfront (artistic, cultural, and educational installations, including public art, aquariums, and fountains)
- Historic waterfront (including maritime preservation, adaptive reuse, lighthouse and ferry preservation, and warehouse conversions)

In line with all these, it is clearly seen that different uses develop along the coastal area with the needs. These uses generally include settlement, transportation, industry, tourism, and recreation. All these uses depend on many factors, such as geographical location, urban context, and administrative boundaries (Wrenn, 1983, p.28). These uses are due to the various ecosystems coastal areas have as natural resources and their natural, economic, and social opportunities. They can change and develop with time needs, the environment, and factors such as competition.

2.2. Emergence and Development of Waterfront Transformation

Based on the previous section, cities with coastal areas have shown a different development than other cities. This difference stems from the potential of being on the waterfront. Accordingly, in the previous parts of the chapter, the definition of the waterfront, the coastal-city relationship, and the types of use have been mentioned. In this part, the history of the development of coastal cities is first discussed. Then,

transformation projects are applied to the coastal areas of cities, and the reasons for these projects are explained.

2.2.1. Historical Development of Coastal Cities

As stated previously, the acceptance of the waterfront as an "*opening to the outside*" greatly influenced the settlement of people on the waterfront. Over time, cities, which had no more efficient way of ferrying people and goods than water, settled on the waterfronts, making water an essential factor for transportation. Coastal areas have been known for their proximity to shipping and trade with this transportation feature. For this reason, they are often mentioned together with port areas in the literature (Hoyle, 2000; 2001). Historically, when looking at the cities with intensive maritime activities, it is seen that port areas were the first places and centers where cities were established. Coastal cities have advanced much faster than inland cities, with the advantage of having the dynamics of the development process (Hoyle, 2001). This evolution is directly correlated with the presence of the port.

Almost every major industrial city in the world has a close relationship with a river, an estuary, or an open sea. London, New York, Buenos Aires, Cape Town, and Sydney are notable examples (Craig-Smith and Fagence, 1995). Many port cities' coastal areas are characterized by a great deal of activity, hustle, bustle, and an unprecedented mix of people, activities, and functions. The earliest forms of coastal city growth emerged when various societies began to use waterborne transit (Davidson, 2012). From the Middle Ages to the 19th century, due to the development of shipping and maritime trade, it was discovered that canals, breakwaters, docks, and harbors were needed for ships to enter and exit quickly and accommodate them. The urban design formed in this direction focused more on filling the areas near the waterfronts. The trade-oriented waterfronts of the cities have also become rich focal and symbolic spaces in terms of urban design and have become a place where many people from different socio-cultural levels come together and economic activities occur. Accordingly, coastal cities have significantly improved as international trade has developed rapidly, and commercial activities have produced thriving urban economies (Davidson, 2012).

The scaling of production associated with industrialization had a proportional effect

on the expansion of city ports. As the demand for raw materials and new flows of export products brought about by industrialization increased, port facilities had to be expanded. In the late nineteenth and early twentieth centuries, many port cities experienced the expansion of dock areas along the coast as new space was needed due to increased international trade (Smith and Garcia Ferrari, 2012). Namely, processes of globalization and industrialization have driven the growth of the coastal industry and the construction of quays while also requiring the expansion of the surrounding supporting physical infrastructure. However, according to Hall (1991), this development fragmented the traditional water-city relationship in the 19th century. Bruttomesso (1993) also pointed out that the disintegration of the water-city relationship was mainly due to the transformation of ports into areas with their characteristics. The scale of trade activities, the need for space, passenger movements, service areas, and the progress of services and railways are the factors that have effectively fragmented the water-city relationship with the forming of ports into areas of specialization. With this growing port-based development, the landscape of the waterfronts began to change, and the waterfronts were transformed into places where industrial activities were carried out.

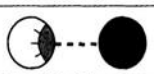
In many countries around the world, coastal port development is observed, such as Paris, France's capital; Budapest, Hungary's capital; Barcelona, Spain's capital; and Melbourne, Austria's capital. Istanbul, a focal point with its historical identity, is one of the port cities shaped by the industry's influence. As Craig-Smith and Fagence (1995) stated, in the last 200 years, the coasts have been primarily used for industrial and public service activities such as port facilities, manufacturing industry, boat building and maintenance, water supply, drainage, sewage treatment facilities, and electric power generation. In this sense, in the systematic process experienced by the waterfronts, industrial uses have brought many problems, such as the degradation of agricultural areas and natural landscapes and the destruction of local flora and fauna (Marshall, 2001).

In the twentieth century, ports have become just one of the sectors within cities due to the development of different business areas and sectors, increasing business volume, needs, and employees. As a result of the disconnection of cities from water, essential features in terms of urban design, such as city image, city silhouette,

symbolic elements, urban aesthetics, and being the focal point of the city, have also been damaged to a great extent (Hall, 1991). In this period, the coasts turned into parts of the city where the relationship with the city was partially severed and, as in the previous period, they became spaces where important changes based on technology and transportation were seen. By the 1950s, simultaneous growth in road, rail, and water transportation and the introduction of containers in maritime trade led to changes in ports' position. Containers necessitated the expansion of ports and their relocation to outlying waterfronts, leading to the abandonment of traditional trading ports and a period of decentralization (Hoyle, 1988; 2001). Logistical expansions in the shipping industry and the decreasing dependence on water for industrial activities have led to the evacuation of coastal areas in urban centers. The abandonment of traditional ports has led to undefined, empty, and depressed areas.

Wrenn (1983) has divided this historical waterfront development into four periods: the emergence of coastal cities; growth; degradation; and rediscovery. Hoyle (2000), meanwhile, summarized this change in the social organization and spatial structure of coastal areas in the context of urban-coastal-port relationship within the historical development of the waterfront in the consequent table.

Table 1. Stages in the evolution of port-city interrelationships (Source: Hoyle, 2000, p.405)

STAGE	SYMBOL ○ City ● Port	PERIOD	CHARACTERISTICS
I Primitive port/city		Ancient/medieval to 19th century	Close spatial and functional association between city and port.
II Expanding port/city		19th–early 20th century	Rapid commercial/industrial growth forces port to develop beyond city confines, with linear quays and break-bulk industries.
III Modern industrial port/city		Mid–20th century	Industrial growth (especially oil refining) and introduction of containers/ro-ro (roll-on, roll-off) require separation/space.
IV Retreat from the waterfront		1960s–1980s	Changes in maritime technology induce growth of separate maritime industrial development areas.
V Redevelopment of waterfront		1970s–1990s	Large-scale modern port consumes large areas of land/water space; urban renewal of original core.
VI Renewal of port/city links		1980s–2000+	Globalization and intermodalism transform port roles; port-city associations renewed; urban redevelopment enhances port-city integration.

As the development process of coastal cities is outlined in Hoyle's model, the

evolution of port-city adopts a chronological approach to port-city relations and, in the final stage, evokes renewed cooperation between the waterfront and the city as coastal areas revitalize. Hoyle (2000) argued that retreating ports from the coasts would create new attraction places in the water-city relationship. With the relocation of traditional ports from urban centers to the city's outskirts, coastal cities have an opportunity to restore and rebuild the fragmented water-city relationship. However, majority of coastal settlements initiated redevelopment in a context that had little or nothing to do with port activities (Wrenn, 1983; Hoyle, 2000; Bruttomesso, 1993, 2001; Breen and Rigby, 1994; Marshall, 2001; Smith and Garcia Ferrari, 2012). In this regard, the transformation of coastal areas emerged as one of the most critical issues in urban design and planning disciplines in the second half of the twentieth century.

2.2.2. The Phenomenon of Waterfront Transformation

The phenomenon of waterfront transformation has been referred in the literature under different names. Various policy concepts have been used to manage structural changes in urban waterfronts (Bruttomesso, 2001; Sairinen and Kumpulainen, 2006). At the heart of it all is a process that begins with a desire to improve the waterfront. There are several conceptions used to point out to waterfront transformation that vary depending on sites and cities, such as waterfront regeneration, to address the act of improving a place (e.g., in Sairinen and Kumpulainen, 2006; Smith and Garcia Ferrari, 2012; Jones, 2017); waterfront revitalization, meaning the act or process of giving new life or vitality (e.g., in Hoyle, 2000); waterfront rehabilitation, the process of returning something to a good condition (e.g., in Vallega, 2001); waterfront development, the process in which something changes and becomes more advanced (e.g., in Wrenn, 1983; Torre, 1989; Gordon, 1998; Krieger, 2004; Evans et al., 2022); and finally, waterfront redevelopment, the act or process of changing an area of a town (e.g., in Craigh-smith and Fagence; 1995; Gordon 1996; Marshall, 2001). Although these specific conceptions have emerged in the literature in the evolution of waterfront projects, and address various processes that waterfronts undertake, in the context of this research, waterfront transformation is adopted as an umbrella conception to embrace a comprehensive approach to the subject.

Acknowledging these various definitions developed in the context of waterfronts,

Bruttomesso (2001, p.40) identifies three types of activity that waterfronts typically require: 'recomposition', giving a common unitary sense to the different parts, both physical and functional of the waterfront; 'regeneration', revitalizing urban areas which can be of considerable size and often centrally located; and, 'recovery', the restructuring and restoration of existing buildings and structures. Also, Breen and Rigby (1994; 1996) use the terms revitalization, redevelopment, development, transformation, and regeneration in the same sense when discussing waterfront projects. Typically, the above concepts are linked to initiatives that aim to connect the city and the waterfront both physically and functionally (Smith and Garcia Ferrari, 2012). In this regard, and form a general point of view, these waterfront transformation terms serve essentially the same function. Consequently, in this research, "waterfront transformation" is adopted to represent all these terms. However, it should also be mentioned that several important factors can be identified that distinguish waterfront transformation from general urban regeneration. These include the use potential attached to waterfront locations, the political significance, the economic potential associated with uninvested waterfront areas, and the socio-cultural values associated with urban waterfront locations.

Waterfront projects encompass both the creation of new projects that transform the waterfront and the redevelopment of existing waterfronts in different locations. Smith and Garcia Ferrari (2012) described this waterfront transformation effort as focused on creating 'urban fragments' that are accessible to the community and often include a range of water-related spaces, from urban to domestic. Hoyle (2000) mentioned that the process of waterfront projects includes port cities and all other types of cities (with lakes, rivers, canals, and artificial bodies of water). Waterfront transformation focuses on industrialized uses such as industrial ports and recreational, leisure, and tourism-oriented purposes along the coast. It is about the variety of uses that can take place along a coast, bringing as much interest as possible (Ragheb and EL-Ashmawy, 2020). Breen and Rigby (1994, p.10) state that a waterfront "project" includes everything from a wildlife sanctuary to a container port and all uses. A "project" can be planned as a unified initiative or a serendipitous development occurring over time with multiple owners and participants (Breen and Rigby, 1994). In other words, defining a waterfront transformation project as policies or actions in areas adjacent to a water source is accurate. In summary, the

popularized phenomenon of the waterfront regeneration project encompasses all movements along the coastline, even though it predominantly encompasses port lands.

2.2.3. Reasons for Waterfront Transformation

The popularity of waterfront development owes much to the fact that it offers almost every city a scale, a mix of uses, and an urban quality close to the center (Shaw, 2001). Urban waterfront transformation as we know it today embodies the historical change of land and water uses along the waterfronts of many cities of varying sizes around the world (Breen and Rigby, 1994). As a result of all these explanations, it is worthwhile to specify the reasons for understanding the desire of cities to transform these waterfronts. Other opportunities and attractions offered by the abandoned traditional ports and waterfront areas that have lost their meaning can be listed as follows:

- areas of highly tangible and intangible value at the heart of cities (Hall, 1993; Breen and Rigby, 1994),
- technological changes leading to the abandonment of large tracts of industrial land along the coastline (Breen and Rigby, 1994),
- new opportunities to stem large fluctuations in the service sectors of the economy (Hall, 1993),
- people's interest in water (Hall, 1993; Vallega, 2001),
- the importance of recreation and tourism sectors in today's urban economy, especially in terms of water activities and the potential for natural beauty (Hudson, 1996; Craig-Smith and Fagence, 1995),
- the need for green and open spaces where people tired of dense construction can breathe (Hudson, 1996),
- increased environmental awareness and making them a healthy part of the city (Breen and Rigby, 1994; Hudson, 1996; Sairinen and Kumpulainen, 2006),
- creating new income and employment opportunities in the city (Craig-Smith and Fagence, 1995),
- having the necessary space for the realization of facilities such as exhibitions, festivals, museums, and cultural centers that will increase the quality of life in the city (Breen and Rigby 1994),

- providing workspaces for different planning approaches that encourage participation, especially involving finance and organization (Sairinen and Kumpulainen, 2006),
- triggering by other successful coastal transformation programs (Vallega, 2001),
- awareness of historical and cultural preservation, the importance of critical spatial traces that link the present and the past, and the possibility of their utilization in new functions (Sairinen and Kumpulainen, 2006; Breen and Rigby, 1994).

Reasons such as these have brought about several changes that have altered the waterfront environment in recent decades. Based on the literature review, it can be said that most of the transformation projects worldwide have been chasing the same goals. Although each project has its objectives depending on local conditions, they share some common goals, such as redefining the coastal location in the urban context, rebuilding the urban image, and revitalizing the economy. The definition of the new role of the waterfront in the urban context is the primary concern of all projects (Smith and Garcia Ferrari, 2012; Bütüner, 2006). Together, these factors have influenced urban waterfronts and formed the basis of the contemporary phenomenon of transformation. Coastal studies began in the 1960s, came to the forefront in the 1970s, and continue at full speed today.

Hoyle (2000, p.397) noted that as projects become popular, most cities with any form of water frontage are doing something to revitalize their waterfronts if they feel they can afford such regeneration and if the basic political impetus is there. Accordingly, between globalization and preserving individual identities, cities have had to create strategic visions for the continuation of their urban heritage. With the projects developed, the waterfronts have also become sites of urban experimentation close to the city center (Niemann and Werner, 2016). Hall (1993) identified waterfront transformations as the most important event in urban planning and development that marked that decade, similar to the highway constructions and new city building characterizations in the 1950s and 1960s. This expansion and evolution of waterfront projects have provided a rich experience reflecting different contexts in specific cities, leading researchers to strategize and work toward the success of future

projects.

2.3. Principles of Waterfront Transformation

Building on the section above, the coastal-city context has received increasing attention over time as a study of urban space. Since coastal projects have been around, the topic of waterfront development and recharacterization has become one of the most intensively debated questions at international conferences, and seminars and has been recognized as one of the critical issues in the world of planning theory (Gordon, 1998; Bruttomesso, 2006). Waterfront development seems to have developed a specialized field of study. As the previous sections tried to point out, there is a vast literature in fields as wide-ranging as geography, environmental sciences, architecture, urban planning, and politics (Hall 1993). This vast literature has many branches, including organizations, associations, planners, and academics. The most visible is the Waterfront Center, an independent, non-profit organization based in the United States, run by prominent physical planners Ann Breen and Dick Rigby. In addition, their books Waterfronts: Cities Reclaim their Edge (1994) and The New Waterfront: A Worldwide Urban Success Story (1996), a popular resource in the field, are a compendium of detailed case studies and different theme examples about regeneration. Other known models of major organizations established for waterfront transformation:

- The Waterfront Cities Council by Urban Land Institute
- Centro Internazionale Città d'Acqua (International Centre Cities on Water) in Venice led by Rinio Bruttomesso and Marta Moretti

Each of these organizations develop a specific focus. Together, they provide valuable and complementary information and ideas and strive to welcome diverse perspectives and expertise in various ways. Along with these organizations, several scholars have also discussed the revitalization of port areas and related waterfront development areas at great length. These scholars, such as Wrenn (1983), Torre (1989), Hall (1993), Craig-Smith and Fagence (1995), Hudson (1996), Gordon (1996) (1998), Bruttomesso (1993) (2001), Marshall (2001) and Vallega (2001) have assessed the characteristics of early project initiation and development, providing a framework for some of the positive outcomes outlining the advantages that waterfront transformation can offer the region.

Craig-Smith and Fagence (1995) point out some ways of waterfront transformation in developed countries and the impact of recreation and tourism on change. Adalberto Vallega (2001) examines existing models of urban port evolution and port industrial zones and reassessed them regarding environmental change and sustainable development. More recently, Krieger (2004), Sairinen and Kumpulainen (2006), Moretti and Giovinazzi (2010), Smith and Garcia Ferrari (2012), Jones (2013) (2017) and Evans et al. (2022) study the logic of waterfront transformation and forms of intervention. Furthermore, one of the most well-known current books on the subject 'Waterfront Regeneration: Experiences in City-Building' (2012), edited by Smith and Garcia Ferrari, analyzes the experiences of recent developments in coastal cities around the North Sea, focusing on globalization and locational determinants. The book explores innovative solutions and sustainable spatial strategies to create socially inclusive, economically productive, high-quality environments.

These various studies in literature provide case studies, categorizing waterfronts according to their size, geographical location, architectural types, service functions or sectors, dependence on water, and their relationship to urban development. They extensively document coastal projects and highlight opportunities for regeneration and the resulting challenges. As mentioned in the sections above, from these and other current academic resources, it can be concluded that waterfront transformation is an important topic in planning and is included on urban redevelopment policy agendas (Jones, 2013). The once scant literature on the subject has evolved from individual case studies to a comparative, cross-city, and cross-country critique of different perspectives, geographies, and physical structures. How cities can use the waterfront as a resource throughout this long-standing coastal development is a key issue that helps to understand the past experiences and future potential of waterfront development (Smith and Garcia Ferrari, 2012).

To create a conceptual framework based on analysis and action plans, the researchers discussed strategies and regenerative practices applied in urban coastal spaces and focused on uncovering the city's vision underlying these practices (Torre, 1989; Breen and Rigby, 1996; Urban 21, 2000; Bruttomesso, 2001; Krieger, 2004; PPS, 2009; Jones, 2013; Evans et al., 2022). Accordingly, they have developed a variety

of approaches to ensure that waterfront transformation can benefit the city. Among the most prominent of these, researchers such as Breen and Rigby (1996), Jones (2013), and Evans et al. (2022) have conducted extensive studies on the essential dimensions that should be encompassed in a waterfront transformation. Firstly, Breen and Rigby (1994; 1996) investigated and commented on many projects that have been realized or planned around the world and made detailed analyses of the phenomenon of coastal transformation. They stated that there are expectations for every waterfront project and that successes rather than failures feed the projects. Following the case studies, they mentioned that a waterfront transformation must include various economic, social, environmental, and cultural issues (Breen and Rigby, 1996). In this regard, the researchers acknowledged that each city and town possesses its unique history, politics, and economic role, thus, emphasizing this generalization applying to every region.

Similarly, Jones (2013;2017) has explored the opportunities and challenges of regeneration in many of his articles and has argued for a broader development strategy that embraces economic, environmental, cultural, and social objectives to achieve integrated policies. In recent years, Jones has noted that cities are trending towards a more social and environmentally sensitive development model, with policy aspects adding cultural capital, innovation, and creativity. Evans et al. (2022) have also confirmed that sustainable waterfront development would achieve success and that these projects should operate in cultural, social, economic, ecological, and political dimensions. Based on these three similar perspectives approached by Breen and Rigby (1996), Jones (2013) and Evans et al. (2022), this study concludes that a waterfront development project, regardless of the central theme of integration or sustainability, needs to consider *social*, *cultural*, *economic*, *environmental*, and *political* dimensions to be successful.

Besides these perspectives, researchers and organizations have also tried to establish a set of criteria for the success of waterfront development. As a result, Torre (1989), Urban 21 (2000), Bruttomesso (2001), Krieger (2004), PPS (2009) and Evans et al. (2022) have identified key principles that a waterfront transformation project should fulfill. These people and institutions have an important place in coastal project literature. Initially, Torre, who wrote Waterfront Development (1989), one of the

first books in the literature, argued that transformation is only successful when it can function at all levels and benefit all stakeholders. He expressed his opinion on successful waterfront development in the following words:

> *"No matter how unique or exciting is a riverfront development, it can only be successful if it functions on all levels. From regional access and circulation to adequate parking capacity to ease and comfort of pedestrian movement to the visitors' overall experience, all levels must sequence successfully as well as meeting the capacities on peak activity days"* (Torre, 1989, p. 38).

Torre (1989) has determined several elements that must be considered to achieve a successful waterfront project. His criteria generally include preserving authentic value, a common theme, environmental approvals, diverse functions, effective management, and public participation. Torre emphasized that such elements are success factors, and that the development of coastal areas should enhance the uniqueness and characteristics of the waterfront.

Another researcher, Bruttomesso (2001), who has devoted years to waterfront development, writing books, and leading the establishment of associations, has tried to define a model on this subject. He analyzed successful projects and pointed out the various factors considered essential components of the coastal operation and contribute significantly to achieving urban complexity (Bruttomesso, 2001). He also emphasized several elements to produce better results for the process. Overall, the criteria he established noted the mix of functions, public open spaces, accessibility, public transportation, preservation of historical identity, water quality, and governing actors. Bruttomesso (2001) predicts that the best-known and successful examples of coastal projects that incorporate these elements are expected to multiply and consolidate interest in this part of the city. However, he discussed that projects in many countries have become indispensable in which path to follow and which example to choose as a winning strategy. Bruttomesso (2001, p.47) underlined that careful observation leads to the conclusion that the waterfront has become a kind of new "category" in the table of elements that express and define the urban structure in the modern city, characterized by a significant presence of water.

Alex Krieger, whose article is included in the book 'Remaking The Urban Waterfront' (2004), published by the Urban Land Institute, was also one of the names that considered the principles for waterfront transformation. He had set ten criteria to take advantage of urban waterfront opportunities and ensure new development. In his measures, he highlighted preserving the city's aura, long-term commitment, access to water, environmental quality, and distinctive physical environments. Krieger (2004) pointed out that city politicians need to address these factors in order to capture the attractiveness of the coast and successfully exploit its potential. He suggested that a specific urban development model would facilitate the goal of competing globally.

Furthermore, The Project for Public Spaces (2009), an American non-profit organization supported by UN-Habitat, has set out principles for making waterfronts vibrant, public places that keep people coming back. They have studied how to should transform the waterfront and what the steps are to create a great location, and the resulting principles are not rigid and unchangeable rules, but practical guidelines derived from 32 years of experience working to improve urban waterfronts. They maintained that these qualities would be a framework for any waterfront project to create functional spaces and a vibrant city. In their criteria for creating a 'Great Waterfront Destination', they addressed public access, multiple modes of transportation, pedestrian connections, activities, community visions, public participation, environmental benefits, and iconic structures.

From a different perspective, some researchers and organizations pay particular attention to sustainability, which has come to the forefront in urban development in recent years when setting criteria. Accordingly, strategic planning, economic improvement, social inclusion, and long-term sustainable development have been identified as goals for coastal projects. Among the most well-known examples of this is in the context of the initiatives of the Global Conference on Urban Futures (URBAN 21), held in Berlin in July 2000, and during the EXPO 2000 World Exhibition, a kind of general guidelines for waterfront interventions have been established. These principles, based on various disciplinary contributions at the international level and from different perspectives, underlined the most significant elements in the transformation process. These include water and environmental quality, historical identity, mixed-use, access, private sector partnership, public

participation, and a long-term approach. With the slogan, 'Ten Principles for a Sustainable Development of Urban Waterfront Areas', they aimed to make new projects more efficient and sensitive to quality improvement criteria.

Finally, Evans et al. (2022) have also worked on setting principles for sustainability for the functioning of coasts. The study focused on urban waterfront transitions and presented a framework with a working group linked to the Sustainable Cities and Landscapes Hub of the Association of Pacific Rim Universities and with contributions from the University of Washington, the University of New South Wales, and the University of Melbourne (Evans et al., 2022). In this direction, they explained waterfront development projects' dimensions and performance criteria. For each dimension mentioned above, Evans et al. (2022) specified criteria to question how redeveloped urban coastal areas can "function" better to serve their local and regional populations and ecosystems. These performance criteria refer to public ownership, access, community care, unique physical environment, cultural heritage, financing structure, employment, environmental quality, and management models. Their criteria for the five dimensions provide a more comprehensive framework for planning and assessing how well a coastal transformation is performing sustainably. In this respect, they asserted a more coherent and holistic approach to evaluating coastal changes.

In light of all these elements in the literature, it is clear that in order to maintain public interest in the waterfront area and protect the waterfront itself, in parallel with its growing popularity, several principles must be fully respected. As mentioned in this chapter earlier, prominent researchers and organizations in the literature have approached waterfront development by formulating specific criteria. Each of these has a different lens through which to view the transformation of waterfronts, yet they share many commonalities. Although these criteria are developed under various headings, such as sustainability, they have similar approaches as they aim to achieve the success of coastal development. Accordingly, a framework was refined with overlapping elements of the dimensions and principles proposed by these organizations and researchers (Table 2). This table is a compilation of approaches to achieve a successful waterfront transformation.

Table 2. A Framework of Waterfront Transformation

DIMENSIONS*	SOCIAL	CULTURAL	ECONOMIC	ENVIRONMENTAL	POLITICAL
PRINCIPLES**	An continuous walking and cycling promenade (PPS, 2009)	Cultural heritage approach from both a past and future perspective (Krieger, 2004; Evans et al., 2022)	A realistic and comprehensive cost and benefit assessment for the project (Evans et al., 2022)	The benefits of the coastal zone maximize and conflicts and negative impacts of activities minimize (PPS, 2009; Evans et al., 2022)	An inclusive and shared vision of the city (Evans et al., 2022)
	Physical accessibility to the coastline and proximity to public transportation (Torre, 1989; Urban 21, 2000; Bruttomesso, 2001; Krieger, 2004; PPS, 2009; Evans et al., 2022)	The city's collective heritage, events, signs, and nature use (Torre, 1989; Bruttomesso, 2001; Urban 21, 2000; Krieger, 2004; PPS, 2009; Evans et al., 2022)	Well-thought-out financing models in planning, construction and operation (Torre, 1989; Evans et al., 2022)	The environmental quality of both the water and the waterfront (Bruttomesso, 2001; Urban 21, 2000; Krieger, 2004; PPS, 2009; Evans et al., 2022)	Effective communication between governments, professionals, and communities (Torre, 1989; PPS, 2009; Evans et al., 2022)
	Limited vehicular traffic and waterfront one of the main pedestrian zones (Bruttomesso, 2001; PPS, 2009)	Restoration of historic and industrial buildings along the coastline (Bruttomesso, 2001; Urban 21, 2000; Krieger, 2004; PPS, 2009)	Partnerships between the public and private sectors (Urban 21, 2000; Evans et al., 2022)	Green spaces develop and the surrounding flora and fauna explore (Krieger, 2004; PPS, 2009; Evans et al., 2022)	A participatory planning approach (Torre, 1989; Urban 21, 2000; PPS, 2009; Evans et al., 2022)
	The coastline continuously walkable with various activities (PPS, 2009)	A significant number of activities linked to their original historical uses and embrace their natural uses (Bruttomesso, 2001; PPS, 2009; Evans et al., 2022)	Effective planning, promoting, managing and operating (Torre, 1989)	Infrastructure improves for drainage and flooding conditions (Evans et al., 2022)	People involve to increase interest and generate marketing (Torre, 1989; PPS, 2009)

Table 2 (Continued). A Framework of Waterfront Transformation

	Public spaces that dominate the waterfront (Bruttomesso, 2001; PPS, 2009; Evans et al., 2022)	Iconic and symbolic structures along the coastline to create a unique sense of place (Urban 21, 2000; Krieger, 2004; PPS, 2009)	Appropriate activities and areas for climatic characteristics (PPS, 2009)	Environmentally friendly materials that are resistant to water and intensive use (Torre, 1989)	Long-term vision approach (Urban 21, 2000; Krieger, 2004; Evans et al., 2022)
	Waterfront fully open to public ownership (Bruttomesso, 2001; Krieger, 2004; PPS, 2009; Evans et al., 2022)	Protection of the natural values of the region and use of plant species found in its ecology (Urban 21, 2000; Bruttomesso, 2001; Evans et al., 2022)	The potentials specific to the region reveal, not copying (Bruttomesso, 2001)	Coastal furniture designs that do not compromise on environmental benefits (PPS, 2009)	Transparent and reflective approach and flexibility in the process (Urban 21, 2000; PPS, 2009; Evans et al., 2022)
	Waterfronts accessible to people of all ages and income groups (Urban 21, 2000; Bruttomesso, 2001; Krieger, 2004; PPS, 2009; Evans et al., 2022)	Incorporation of historical features in the design of waterfront furniture (Bruttomesso, 2001; Urban 21, 2000; Krieger, 2004; Evans et al., 2022)	Distinctive physical environments and high-quality urban space to attract investment and competitiveness of the city (Bruttomesso, 2001; Urban 21, 2000; Krieger, 2004)	Sustainable transportation systems, safe transportation, and sustainable buildings (Evans et al., 2022)	An agreement between central and local government (Torre, 1989; Evans et al., 2022)
	Places for physical and mental activity and leisure activities (Bruttomesso, 2001; PPS, 2009; Evans et al., 2022)	Local art and organizing events for cultural and historical attractions (Bruttomesso, 2001; PPS, 2009; Evans et al., 2022)	Waterfront as a promotional and marketing tool (Krieger, 2004; Evans et al., 2022)	Environmental controls at every stage of the project (Evans et al., 2022)	The actors that will sustain, manage and operate coastal services after project completion (Urban 21, 2000; Bruttomesso; 2001; PPS, 2009)
	Comfortable and good quality urban furniture for people (Urban 21, 2000; PPS, 2009)		Commercial vitality and employment growth (Bruttomesso, 2001; Evans et al., 2022)		Lessons learned from past exemplary projects (Urban 21, 2000; Evans et al., 2022)

Table 2 (Continued). A Framework of Waterfront Transformation

	Incorporation of mixed functions and multiple activities (Torre, 1989; Urban 21, 2000; Bruttomesso, 2001; PPS, 2009)				
*** The Dimensions are based on the study by seminal scholarsBreen and Rigby (1996), Jones (2013), and Evans et al. (2022).**					
****The Principles is based on the work by Torre (1989), Urban 21 (2000), Bruttomesso (2001), Krieger (2004), PPS (2009), and Evans et al. (2022). The details of principles can be found in the Appendix A of the this thesis.**					

2.4. Dimensions of Waterfront Transformation

As explained above, Breen and Rigby (1996), Jones (2013) and Evans et al. (2022) point out several dimensions (social, cultural, economic, environmental, and political) that a coastal project should include. In the literature, it is seen that these dimensions also include principles. Moreover, Torre (1989), Urban 21 (2000), Bruttomesso (2001), Krieger (2004), PPS (2009) and Evans et al. (2022) have indicated the principles to be considered in a waterfront project. Even though these criteria are diverse and have different degrees of detail, they overlap with each other. At the same time, each mentioned principle refers explicitly or implicitly to one of the social, cultural, economic, environmental, and political dimensions. In this research, distilling the criteria from all this literature, a comprehensive framework emerges. For a waterfront project to be successful, it would be correct to evaluate the listed performance criteria under these dimensions. In the rest of the chapter, the main headings of the above criteria are examined in more detail by giving references.

2.4.1. Social

In the context of urban, social refers to the relationship between society and space. A socially functioning urban waterfront will perform well in attracting people to the waterfront. Since coastal areas are one of the urban spaces that directly reflect the way of life of a society, they are also the most favorable spaces for social communication. Firstly, the physical characteristics of a waterfront form the basis of its performance in social dimensions (Evans et al., 2022). Accordingly, continuous walking and cycling promenades are an excellent way to connect the city with the waterfront. The physical accessibility of shoreline areas, proximity to public transportation, pedestrian access, and accessibility to the waterway and connecting pathways are all important (Torre, 1989; Urban 21 (2000); Bruttomesso, 2001; Krieger, 2004; PPS, 2009; Evans et al., 2022).

Likewise, waterfronts can significantly enhance the character and experience of the area if they are easily accessible by means other than private vehicles (PPS, 2009). In particular, connection roads from the city center and surrounding areas should be considered, cleared of obstacles, and the coast should be turned into one of the main pedestrian zones by limiting vehicle traffic and avoiding being blocked by large parking lots (Breen and Rigby, 1994; Bruttomesso, 2001; PPS, 2009). Roads and

spaces should be safer and more pleasant for people to use. Hence, said accessibility creates a social environment that encourages total coastal activity so that people overwhelmed by traffic and parking lots feel more comfortable (PPS, 2009).

On another note, making the shoreline continuously walkable with various activities along the way and successfully linking destinations will strengthen the coastal space as a whole, allowing the attractiveness of each to enhance the other (PPS, 2009). Parks can be used as a connective tissue to create destination linkages between these mixed uses (housing, parks, entertainment, and retail) and varied partners (such as public institutions and local business owners). To create social interaction and an enjoyable environment, objects such as benches can help people understand how they prefer to use a place, lighting can draw attention to specific activities, pathways, or entrances, and public art can act as a magnet to attract people (PPS, 2009). Urban furniture should be comfortable for people to socialize and spend time with. Similarly, the design quality is important as a physical feature of the waterfront to provide a good user experience. Public spaces should also be visually accessible and built to a high quality for intensive use (Urban 21, 2000).

Fully opening the waterfront to the public is another significant issue. At the same time, to ensure continuity along the waterfront, all unowned, privately owned, or underutilized coastal land must be acquired, expropriated, and made publicly available (Bruttomesso, 2001; Krieger, 2004; Evans et al., 2022). Waterfronts should be accessible to people of all ages and income groups (Urban 21, 2000; Bruttomesso, 2001; Krieger, 2004; PPS, 2009; Evans et al., 2022). Development projects work best when they support ongoing relationships that sustain social ties and communities in coastal environments by preventing gentrification. Waterfronts should, as far as possible, be open for people to use and have continuous public access, thereby enhancing the experience (PPS, 2009). Increasing access allows people to interact in many ways.

On the waterfront, as a public open space, a person can fish, stroll, swim, sunbathe, read, nap, or just be there. It should include places for physical and mental activity (recreation areas) and provide a space that encourages leisure activities (Bruttomesso, 2001; PPS, 2009; Evans et al., 2022). In this direction, the fact that

waterfronts are spaces formed around water and that they can establish a direct relationship with water allows for many activity opportunities. Fishing, swimming, feeding birds/ducks, water sports, and even touching the water are attractions. If direct access to a natural water source is not possible, people should have access to some other type of water (a fountain, spray playground, ornamental pools, or a swimming pool) around the coast (PPS, 2009). In addition, other recreational activities such as urban art events, open-air markets, beaches, picnic areas, squares, playgrounds, sports fields, viewing areas, and pavilions, where people can interact with water, also create an indirect relationship with water.

Consequently, waterfronts should have many possibilities to appeal to everyone and respond to their needs. A careful mix of functions referring to different roles and sectors (museums, entertainment venues, shops, restaurants, clubs, playgrounds, parks, hotels, and housing) often represents the cornerstone of a waterfront development success in terms of its potential to attract visitors and tourists (Torre, 1989; Breen and Rigby, 1996; Urban 21, 2000; Bruttomesso, 2001; PPS, 2009). Thus, any building on the coast should enhance the activity of the surrounding public spaces, creating an ideal combination of commercial and public uses. Public spaces should dominate the waterfront, as a high density of residential development will inhibit the diversity of waterfront uses and the growth of 24-hour activity (Bruttomesso, 2001; PPS, 2009; Evans et al., 2022). At the same time, high-rise residential developments along rivers, lakes, and seafronts tend to create a wall that physically and psychologically separates the coast from the surrounding neighborhoods. Based on all this, it is crucial to consider whether the seaside is understood as a socially common space and shared spatial resource, and it is clear that projects need to take steps to preserve and enhance human interaction to provide a good experience for users.

2.4.2. Cultural

In a waterfront project, the shared heritage, historical and cultural value of the water, and the city must be evaluated to preserve the site's character. Therefore, the collective heritage of the city, events, landmarks, and nature should be used to give texture and meaning to the waterfront transformation (Torre, 1989; Breen and Rigby, 1994; Bruttomesso, 2001; Urban 21, 2000; Krieger, 2004; PPS, 2009; Evans et al.,

2022). Since every city has a history and culture, its coastal area has a unique character, theme, and image. Breen and Rigby (1996) stated that one of the failures of waterfront projects was the need for more interpretation of both the sites and the city's natural and historical features.

Restoring and reusing historic buildings on the shoreline is a crucial opportunity to respect the context and maintain some industrial, maritime, and cultural heritage (Breen and Rigby, 1994; Shaw, 2001; Bruttomesso, 2001). This promotes a positive approach to conservation, encouraging the preservation of valuable buildings for appropriate new uses. At the same time, existing industrial uses can be preserved in their historical form and function when compatible with human activities on the waterfront (PPS, 2009). In order to keep the urban coastal memory alive, it is necessary to protect meaningful traces of the identity of these areas with a significant number of activities linked to their original historical use (Bruttomesso, 2001).

With embrace the natural uses of a waterfront, adding activities and thematic programs such as water taxis, boat tours, kayaking, boat festivals, restaurants/bars on moored boats, floating pools, and performances on floating stages attract and engage users to the waterfront (Bruttomesso, 2001; PPS, 2009). In this sense, such development encompasses both the tangible features of architecture, buildings, piers, environment, and ships and the intangible features of culture, behaviors, events, values, and livelihoods that define and support the spatial form and identity of the waterfront (Evans et al., 2022). In addition, iconic, symbolic, eye-catching, and environmentally sound buildings on the coastline help to create a unique sense of place. (Urban 21, 2000; Krieger, 2004; Smith and Garcia Ferrari, 2012; PPS, 2009). Sculptures that relate to historical connections also contribute this sense of place.

Another opportunity is to protect the natural values of the region. Using and protecting the plant species found in the city's ecology and the coastline is important. In the physical structure of waterfronts and in the urban design, there should be shown some striving to preserve these features. For the urban landscape as a natural heritage, subtle elements that bear witness to the past should be rescued, and the design of waterfront furniture should include details that, together with historical features, rediscover symbolic values that refer to the presence of water and its

decisive (Bruttomesso, 2001; Urban 21, 2000; Krieger, 2004). Landscapes that are compatible with historical patterns of activity bring cultural vitality to coastal areas, as they support the city's ongoing functions and human activity and enhance and provide the capacity to adapt to new uses (Evans et al., 2022).

On the other hand, it is significant to create cultural and historical attractions using the designed areas and to organize events that make their mark. Cultural and educational spaces include museums (maritime, art, science, and others), event facilities, aquariums, ecological parks, open-air workshops, public and local art, coastal venues (marinas, water sports clubs, football, volleyball, basketball, and tennis) that appeal to all age groups and instill in people an awareness of nature and a love of art (Breen and Rigby, 1994; Bruttomesso, 2001). Designing spaces dedicated to contemporary activity such as exhibitions, shows, festivals, festivities, theater, concerts, and debates is also essential for providing an experience and encouraging repeat visits (Breen and Rigby, 1994; PPS, 2009; Jones, 2017). These activities will strengthen the community's sense of place and identity and develop tourism with cultural and historical attachments. Considering all this, it is clear that for an urban waterfront to function culturally, the design and planning processes need to considers past and future perspectives, preserving traces of the past and maintaining meaningful physical connections between cities and their waterfronts.

2.4.3. Economic

Waterfronts, as limited and non-renewable assets, are one of the most valuable resources for the country. It is paramount that coastal areas are used strategically to ensure their long-term growth by preserving their economic value and enhancing their specific features or landscapes (Bruttomesso, 2006). Thus, a realistic and comprehensive assessment of costs and benefits is required to make a coastal project economically viable. Due to their location, urban waterfronts are highly visible and often close to the central business district, thus making redevelopment costly and high profile (Evans et al., 2022). Hence, if the city authorities are facing funding problems, partnerships and combined efforts between the public and private sectors will help both in the planning process and financing issues, as well as in providing information on markets and accelerating development (Breen and Rigby, 1994; Urban 21, 2000; Evans et al., 2022). Conversions of this magnitude require long time

horizons, and the financing models adopted often play an essential role in shaping redevelopment outcomes and determining what economic activity will emerge after the change (Torre, 1989; Evans et al., 2022).

A waterfront project can be successful when it is effectively planned, designed, promoted, managed, and operated (Torre, 1989). Therefore, projects must carefully evaluate financial factors during development, construction, and after completion. It includes establishing and securing adequate financial resources for ongoing operation and maintenance (parking, security, and cleaning) once the coastal area is in use. In addition, given their popularity, increased environmental impact (e.g., flooding), and symbolic significance, public spaces and facilities with high utilization rates may incur high maintenance costs and require significant resources (Evans et al., 2022). From another perspective, regional weather conditions influence coastal use and urban coastal patterns. In relatively temperate geographies with low seasonal variations, coastal use is balanced throughout the year. The distribution of annual use is one of the main factors determining the economic life of the waterfront. Waterfronts that can thrive in year-round conditions, plan their amenities seasonally, and have weather-appropriate activities will see the benefits of more economic activity (PPS, 2009).

At the same time, because the waterfront is a visible place in cities, a transformation there can rebuild the urban image and revitalize the waterfront, generating economic growth. Integrating different functions that come with change will also help increase the number of visitors. With the right strategies, coastal areas that unleash their region-specific potential are successful. The quality of urban space and distinctive physical environments compatible with the regenerated context are seen as another factor in attracting investment and thus affecting the city's competitiveness (Urban 21, 2000; Bruttomesso, 2001; Krieger, 2004; Smith and Garcia Ferrari, 2012). The logic of copying the successes of others can result in economic failure or projects that are not appropriate to their context (Breen and Rigby, 1994;1996; Bruttomesso, 2001; Smith and Garcia Ferrari, 2012).

In addition, to rebuild the urban image, revitalizing urban waterfronts is also essential for the economic growth of cities (Evans et al., 2022). In developing social

and national image, authorities use coastal areas as promotional and marketing tools. As an example, it can be given significant investments are made in coastal areas on both local and national scales. In all kinds of visual communication sources and publications, cities are emphasized with their coastal areas and natural richness. Thus, as underlined above, coastal areas offer essential opportunities for economic development (Krieger, 2004).

Successful coastal areas bring more users together, creating commercial vitality, employment growth, and new places of opportunity in and around them (Bruttomesso, 2001; Krieger, 2004; Evans et al., 2022). These developments, in turn, bring more investment to the city. Tourism is also seen as a highly profitable economic use for coastal areas. As mentioned above, the renewal and development of cultural and historical values attract tourists as well as locals to the coastal region. However, as the Covid-19 pandemic has shown, relying on tourism as a force for a long-term sustainable economy is also risky (Evans et al., 2022). As a result, comprehensive, controlled, and planned development is gaining importance in coastal areas.

2.4.4. Environmental

Environmental awareness is an issue that needs to be developed in waterfront projects. Coasts have an environmental structure in which plants, animals, soil, air, water, and humans are continuously interconnected at different scales (Karabey, 1978). Especially after industrial wastes, environmental problems such as air and sea pollution appeared on the shoreline (Smith and Garcia Ferrari, 2012). Accordingly, a planning approach is required to maximize the water zone's benefits and minimize the activities' conflicts and negative impacts. The successful functioning of waterfront transformation practices depends on the environmental quality of both the water and the waterfront (Breen and Rigby, 1994; Bruttomesso, 2001; Urban 21, 2000; Krieger, 2004; PPS, 2009; Evans et al., 2022). The cleanliness of water bodies and the protection of biodiversity and ecosystems are fundamental for a healthier environment. Monitoring and controlling existing and ongoing sources of pollution, both in water and on land, is essential to keep environmental problems to a minimum (Evans et al., 2022).

Within a significantly enhanced awareness of environmental features and sensitivities, strategies include protecting and sensitively developing green space such as trees and scrub, exploring shoreline ecology and surrounding flora and fauna, and protecting coastal landscapes and city-specific natural heritage features (Breen and Rigby, 1994; Hoyle, 2000; Krieger, 2004; PPS, 2009; Evans et al., 2022). In this context, wrong decisions and investments can lead to the destruction of the natural environment and the breakdown of environmental relationships. It is essential to pay increasing attention to environmental issues such as global climate change, excess rainfall, and sea level rise and to use the drainage system as infrastructure to drain the land of excess and unused water such as rainwater, wastewater, and seawater (Breen and Rigby, 1994; Evans et al., 2022). For instance, cities have started to increase and develop coastal parks and recreational areas to maintain the natural balance of the coastline, improve drainage and flooding conditions, and increase urban recreational opportunities.

Moreover, providing sheltered places to improve the bioclimatic behavior of the public space, using environmentally friendly materials resistant to water and intensive use, and renewable energy sources assist to enhance coastal quality (Torre, 1989; Breen and Rigby, 1994). Coastal furniture should be incorporated into the design without compromising environmental benefits (PPS, 2009). At the same time, emphasis should be placed on providing sustainable transportation systems, safe transportation, and sustainable buildings for a healthy coastal zone (Evans et al., 2022).

Since the waterfront is a habitat shared by living creatures, light, noise, and air pollution and the sensitivity of different species should be considered. In coastal regions, over-exploitation of resources by more tourists and the public can lead to environmental problems specific to coastal areas and the degradation of the local natural environment, that is, changes in physical characteristics. Environmental controls are therefore critical at every stage of the project, as well as after the start of use (Evans et al., 2022). All this is necessary to reduce both the negative impacts on the environment resulting from human activities and the adverse effects of environmental changes on human populations. Primarily, waterfront transformation strategies aim to improve human well-being and create better places for people to

visit, spend time, stay, work, and provide for future residents. Accordingly, the use and environmental conditions in these areas should be well planned and implemented.

2.4.5. Political

Waterfront projects result from policies aimed at strengthening coastal and urban connections. The planning of these areas is driven by policies incorporating coastal characteristics, demand for use, and resources (Shaw, 2001). A transforming waterfront typically involves multiple levels of government, local authorities, landowners, investors, the private sector, institutions, and communities (PPS, 2009; Evans et al., 2022). For an urban waterfront to function politically, there needs to be effective communication between governments, professionals, and communities about their developing waterfront, including its successes and failures (Torre, 1989; Evans et al., 2022). Therefore, mutual communication between all private and public actors and organizations in the region is important for professional planning expertise and sensible political decisions.

Additionally, the participation of all responsible groups, including the public, is significant for the project's planning, design, and development processes (Torre, 1989; Breen and Rigby, 1994; Urban 21, 2000; Evans, 2022). The community should be informed and involved at every stage, and an active and participatory planning approach should be adopted (PPS, 2009). At this point, organizing workshops and meetings with cooperation between different institutions and subjects and with expanded participation contributes to the processes. Involving people in the process is also crucial in increasing interest, creating marketing, and maintaining enthusiasm until the project is completed (Torre, 1989; PPS, 2009).

Another point, waterfront projects are also long-term projects as planning and transformation works are completed after long periods (Urban 21, 2000; Krieger, 2004). Short-term approaches of cities that see the coast as a tool for economic development to make a 'quick start' will lead to rapid resource depletion (Krieger, 2004; Evans, 2022). It should be aimed to approach and plan with a strategic and long-term vision, to consider long-term needs, to follow changing trends, to have a certain flexibility, and develop step by step.

Furthermore, the importance of these projects for the city's development may cause a clash of interests, deficiencies in legal regulations, and political conflicts. For projects to run smoothly in planning, design, and implementation, it will work to consider profits and political agreements at different levels of government, such as central and local administration (Torre, 1989; Evans et al., 2022). Since the transformation process will take a long time, it may cross the political cycle and witness policy, local government, and government changes. In order to ensure project continuity and to deal with unforeseen problems, it is necessary to have governance structures that are flexible, transparent, and accountable, that are not seen to be manipulated by any political leader, and that is adaptable to change, with clear public interest objectives (Urban 21, 2000; Evans et al., 2022).

Waterfront transformation is an ongoing process and should include the actors and strategies to continue, manage and operate the coastal services after the project is completed (Urban 21, 2000; Bruttomesso, 2001; PPS, 2009). This transformation is a repetitive action for urban life and will need to redevelop and regenerated as time passes (Krieger, 2004). It means that the development of the coastal area will occur in the cities' policies every period. What is important here is the development of planning approaches that include lessons learned from past projects (Evans et al., 2022).

Moreover, important international projects completed or in progress provide information to cities about the policies of waterfront transformation (Urban 21, 2000). Although it is advantageous to benefit from the international connection and learn from good practices around the world, it would be more accurate to analyze and evaluate the specific conditions of each development region. Since each coastal region's characteristics differ, efforts to replicate, apart from authenticity, can also be considered a political failure (Breen and Rigby, 1994; Bruttomesso, 2001; Smith and Garcia Ferrari, 2012).

As a result, the success of the policies to be followed depends on a strategy, planning, and applicability of development proposals that reflect original, innovative, more focused, and specialized development criteria and encourage inclusiveness. A

more holistic approach to the issues, as mentioned earlier, related to the waterfront project is essential for more accurate guidance of policies and plans.

2.5. Global Waterfront Transformation Experiences

In the previous section, the dimensions and criteria that a coastal development should include have been explained in detail based on the literature. Accordingly, in this section, waterfront projects that have some of these criteria are investigated. Firstly, economic and technological developments in the world have led to the determination of new identities of cities, the competition to become a 'global city' where the services sector is predominant from the industrial city, and as a result, the need for a suitable urban environment (Breen and Rigby, 1994). These and other forces have combined to bring about dramatic changes over the last 50+ years that have altered the urban waterfront environment and its meaning for past, present and future generations. As many countries embark on initiatives for waterfront development, choosing a winning strategy for planned projects and what kind of example to use is a key issue on the agenda (Bruttomesso, 2001). In this sense, the completed models, which experiment with the development strategy, provide a tried and helpful table of approaches, ideas, and specific solutions.

In the 1960s and 1970s, the revitalization of urban waterfronts began first in Baltimore, USA, and then spread to Boston and San Francisco, and from there to the rest of America and Europe (Niemann and Werner, 2016). This urban concept, which has existed since the 1960s and has even been revisited in some cities, is still frequently discussed and evaluated in cities bordering any body of water. At this stage, planning strategies have adopted an experiential approach, and waterfront formations have been seen as a symbol of the transition to a modern transformation (Şenlier et al., 2015). Breen and Rigby (1994) noted that projects in Baltimore, Boston, and Toronto are considered the most notable of the waterfront development movements. The fact that these projects were the most publicized and studied by scholars and practitioners may be because they were among the first examples of transformation and were located near major media centers. Accordingly, the cases of Baltimore and Boston marked the beginning of a new and influential phase of urban restructuring for many cities worldwide that would later branch out and have ramifications of various kinds (Bruttomesso, 2001).

In the case of Baltimore, the inner harbor was planned for commercial and tourism use (Figure 1). The decisions in Baltimore were to demolish some of the buildings in the port, reuse some of the old buildings, and set aside for housing, recreation, and activities after restoration. Capital and economics have played a significant role in this coastal development, leading to a new tourism industry and job creation (Bütüner, 2006). On the other hand, despite its success in attracting corporations, hotels, and museums, the Baltimore waterfront project has received significant social criticism. Some of these criticisms include the fact that the job opportunities created by the project favored upper-income people rather than lower-income groups, that the costs of existing working-class life increased as a result of the prosperity brought by tourism, and that it faced large-scale gentrification pressure (Senlier et al., 2015).

Figure 1. The Baltimore Inner Harbour (source: pinterest)

In the mid-1970s, waterfront operations around the world developed with the idea of enabling new urban activities and were integrated into many functional projects. During this period, other American waterfronts also initiated transformation projects on land that seemed to have potential, again aiming to develop such public spaces, where new uses likewise emerged as tourist facilities, hotels, and office uses. Cities such as Boston, San Francisco, Oakland, Seattle, and New York are examples of these developments (Şenlier et al., 2015). As waterfront development has grown in popularity, it has expanded beyond the United States, and large-scale regeneration projects have become commonplace around the world. In coastal areas with the same objectives as other projects, mixed uses, including office and leisure activities, have

been the central theme. The projects of this period, which spread to world cities such as Toronto, London, Copenhagen, Hamburg, Rotterdam, Liverpool, Birmingham, Barcelona, Sydney, Singapore, and Cape Town, brought new approaches to the creation of public-private partnerships and the use of private investments (Shaw, 2001; Jones, 2013; Şenlier et al., 2015).

Toronto is one of the first prominent examples of projects that utilized its waterfront for mixed uses (Breen and Rigby, 1994). After the waterfront project phenomenon emerged, the city of Toronto, where several projects have come to life, put out to tender for revitalizing its entire urban waterfront in 1999 and established a revitalization commission called "Waterfront Toronto" in 2001. This organization plays a leading role in all projects related to Toronto's waterfront. In projects that aim to focus on the shore, public open spaces that bring the city and the waterfront together are specially designed (Figure 2). A wide variety of public open spaces such as squares, plazas, green spaces, and beaches have opened the entire city to the sea and become a common meeting place for urbanites. However, the project has been criticized for transforming the coast into parkland, offering one-dimensional public open spaces, and having limited destinations (PPS, 2009). Despite these criticisms, the City of Toronto has advocated for a community, economy, and environmental vision on the city's waterfront (Krieger, 2004). At the same time, Niemann and Werner (2016) argue that these developments in Toronto emphasize the long-term nature of coastal projects, as they ensure continuity with additional projects.

Figure 2. Simcoe Wavedeck in Waterfront of Toronto (Source: archdaily, 2011)

Another Canadian city, Vancouver, is also notable for its innovative and environmentally friendly efforts. The city is a model for the planning process, reflecting a comprehensive collaboration process between the public and private sectors and the community through phased planning (Marshall, 2001). Examples of Vancouver waterfront developments include Waterfront Park, Granville Island, False Creek, and Convention Centre (Figure 3) It stands out with its mixed-use growth targets, sustainable policies, and emphasis on maritime transportation (Bruttomesso, 2001; Marshall, 2001).

Figure 3. The Waterfront park in Vancouver (Source: visitvancouverwa.com, 2022)

Another example characterized by an energy-efficient approach is the coastal projects in Copenhagen (Niemann and Werner, 2016). In particular, the North Harbour development is intended to reduce negative environmental impacts and provide health and productivity benefits to residents throughout their entire life cycle (Evans et al., 2022). To this end, it seeks to provide sustainable mobility, whether walking, cycling, or public transportation. In this context, Copenhagen has tried to demonstrate the qualities of being a city with a long waterfront by making the harborfront open to the public. They have also emphasized water sports, seeing water as a cultural element, and created recreational parks for all citizens, such as the harbour bath (Smith and Garcia Ferrari, 2012) (Figure 4). The city has witnessed a fragmented planning process between the public and private sectors and, for many years, has undertaken different development projects along the coastline. At the same time, it has also worked on the appearance of the shoreline with different façade works in renovation projects dominated by residential and commercial units. This 'variation on a theme' with street facades can also be found in cities other than

Copenhagen, such as Amsterdam and Venice, where historically, individual buildings have developed more (Smith and Garcia Ferrari, 2012).

Figure 4. The Harbour Bath (left) and kalvebod waves (right) (Source: archdaily)

As a matter of another approach, there are several differences when we look at the reasons for initiating waterfront projects. In many cities around the world, developing projects are sometimes associated with specific events such as the Olympic Games, world exhibitions, or cultural events, as in the case of London Docklands, the Olympic Marina in Barcelona, Battery Park in New York, La Defense in Paris or Darling Harbour in Sydney (Smith and Garcia Ferrari, 2012). Darling Harbour, one of Sydney's famous regeneration sites, is an example of a project with a political impulse to satisfy political agendas (Marshall, 2001). Jones (2013) stated that Sydney reflects the festival-type market/entertainment district approach. In Sydney, the Olympics is one of the reasons for these developments. However, Sydney's highway divide between the water and the city has shown that access to the urban waterfront needs to be more carefully considered (Marshall, 2001). At the same time, there are waterfront park projects in Sydney that provide a positive example of the relationship with water. Pirrama Park in Sydney's Pyrmont neighborhood is one of them. It is an excellent example of creating an urban open space with a design that reflects and reinforces the relationship with the water (steps, platforms) and jetties that refer to its past use (Figure 5).

Figure 5. Pirrama Park in Sydney, Australia (Source: archdaily)

As projects continue to spread worldwide, different approaches have been adopted for waterfront development. Participatory planning methods have started to be used, and local communities have been included in the planning process (Şenlier et al., 2015). A step-by-step approach to planning and design, urban design competitions, and master plans have been instrumental in waterfront regeneration. In subsequent years, the growth and success associated with tourism development have continued to increase and have become common as the basis for regeneration initiatives (Jones, 2017).

Barcelona is an example of reclaiming important coastal areas for public open spaces and other leisure activities and encouraging public participation. The Barcelona model evolves through shifting relationships between urban regeneration, culture, and governance (a coalition of public institutions and civil society organizations) (Angelidou, 2014). Although the Barcelona waterfront transformation project was previously planned, the city took the 1992 Olympic Games in the city as an important opportunity to initiate development. In this direction, the project aims to give the city a new identity and dynamism and create a unique European coastal city by attracting attention with its design elements (Figure 6). Their creation of La Rambla Del Mar (The Street of the Sea), a significant new waterfront walkway and recreational space for the city, integrated with flood defense/climate change mitigation measures by providing a green line of pedestrian space, is both an innovative, visionary step (Jones, 2017). In this context, it can be interpreted as

aligning with the policy of future regeneration strategies.

Figure 6. Port Vell’s bridge in Barcelona (Source: hotels.com)

The physical revitalization of the coast in the public spirit aims to strengthen the urban image and reshape its cultural significance. Another example of this aim is the projects undertaken in Bilbao (Giovinazzi and Moretti, 2009). On Bilbao remaking the city's image, Marshall (2001) said that a waterfront represents a case study of how a waterfront can provide opportunities to create a new identity and expression of what the city is and wants to be. In Bilbao, star architects were used to revitalizing both the waterfront and the city, creating new symbols through innovative design and iconic architecture (the Guggenheim Museum and other waterfront buildings) (Smith and Garcia Ferrari, 2012) (Figure 7). In this direction, these iconic architectures on the city's edge significantly impact the local economy by attracting people (Bütüner, 2006). With Bilbao's success, cities have turned to the realization of iconic landmarks by famous architects to compete globally.

Figure 7. The Guggenheim Museum (Source: guggenheim-bilbao.eus)

Krieger (2004) has mentioned that these icons transform the image of cities and that the Sydney Opera House, the Guggenheim Museum in Bilbao, London's magnificent Ferris wheel, the London Eye, and Cleveland's Rock and Roll Hall of Fame and Museum are entirely identified with their location (Figure 8-9).

Figure 8. The London Eye (Source: wikipedia.com)

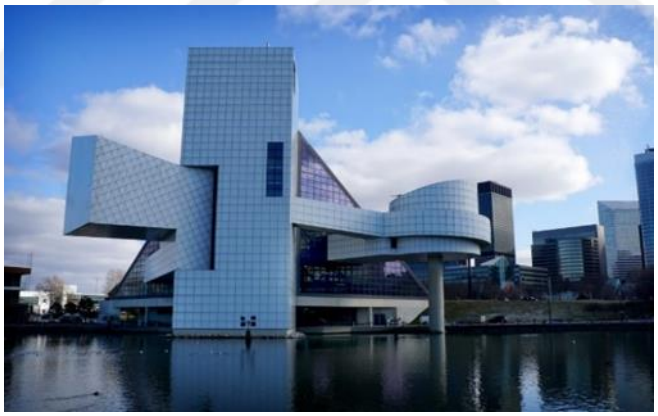


Figure 9. Cleveland's Rock and Roll Hall of Fame and Museum (Source: Catlett, 2019)

Another notable example is Hafencity, one of Hamburg's recent major waterfront development projects (Figure 10). Located close to Hamburg's city center, the Hafencity waterfront development aims to create economically and physically attractive spaces, mixed land use, and contribute to the city's international image (Smith and Garcia Ferrari, 2012). Throughout the development process, a participatory approach involving the public was adopted and shared with the public through various announcements and meetings (Şenlier et al., 2015). The evolution of

the area has taken many years, during which time the flexibility of the master plan has facilitated change and adaptability (Niemann and Werner, 2016). In this way, a flexible framework has guided development and allowed for adaptive evolution. At the same time, HafenCity is an excellent example of the principle of the mix of uses, divided into specific categories of use (Niemann and Werner, 2016). This transformation includes the harbor, mixed-use public spaces, public buildings, commercial services, cultural and historic sites, promenades, and housing. Architectural quality and a sustainable urban use structure using a range of renewable energy sources are other factors that characterize the project (Smith and Garcia Ferrari, 2012). These features are a perfect example of the approaches of recent widespread waterfront development projects.

Figure 10. Waterfront parks in Hafencity (Source: Landezine, 2021)

Lastly, Turkey has only some coastal projects other than piecemeal transformations. An example of a change from an industrial zone to a public space is the Izmit Sekapark project (Figure 11). Due to the closure of the Seka Paper Factory in 2004, the Izmit Metropolitan Municipality created the Sekapark Transformation Project. The project is evaluated as a great success in transforming the docks into an intensive green space use, taking into account the current public interest, sustainable development, meeting the social, cultural, and recreational needs of the city, and increasing interaction with the environment (Şenlier et al., 2015).

Figure 11. Sekapark in Izmit (Source: haber7.com, 2021)

Meanwhile, there are the Galataport, Haydarpaşa Port, Küçükçekmece, and Kartal urban transformation projects carried out within the scope of Istanbul's global city vision. Galataport, one of the finalized projects, transformed the 1.2-kilometer coastline stretching from Karaköy Dock to Mimar Sinan University Fındıklı Campus (Figure 12). The project provided tourism, trade, cultural facilities, and terminals. Bringing tourists to Istanbul and providing employment and new spaces are positive features of the project. However, the project has been criticized for its dense construction, lack of public open space, and insufficient public outreach during the planning period (Şenlier et al., 2015).

Figure 12. Galataport in Istanbul (Source: galataport.com)

In addition, there are projects involving coastal developments in other cities in Turkey. One example is the Konyaaltı coastal project. In 2014, Antalya Metropolitan

Municipality organized the 'Konyaaltı Architectural and Coastal Arrangement Idea Project' and started to implement the designs of the selected project in stages. The project includes recreational, cultural, and sportive activity areas with multiple and mixed uses along the coast to strengthen the relationship between the residential area and the coastline (Çimen, 2020) (Figure 13). Furthermore, the Izmirdeniz project, which is the main focus of this thesis, is another example of a coastal project in Turkey. The project differs from other projects by covering a large area in length on the coastline.

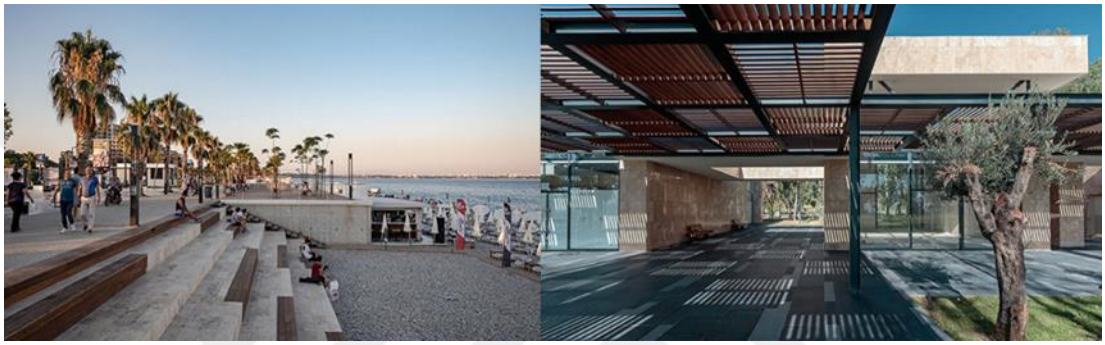


Figure 13. The seating area and trade space with shade in Konyaaltı (Source: Çimen, 2020)

Although the concepts and approaches that are prominent in each of the above-mentioned coastal transformation projects are different, it is seen that they differ according to the location of the area, the existing structures, the natural form, and the quality of the coast. For example, some projects may prioritize designs for leisure, while others may highlight preserving historic buildings or industrial and commercial structures. At the same time, there are examples where the design emphasizes the unique characteristics of the place or presents different themes for an entirely different image. In many coastal designs, recreation, and tourism are the design's supporting elements. In waterfront development, areas are divided into several sections according to their uses. In some arrangements, tourism-oriented services are separated from commercial uses. In another strategy, tourism uses are kept in the background and integrated with commercial uses and cultural activities (Craig-Smith and Fagance 1995).

In this section, a review of the most frequently cited examples from around the world

reveals that urban coasts are mostly revitalized through mixed-use development; however, there are also examples of projects that serve only one public purpose (recreation, resting, sitting, and viewing). Each has been realized with different degrees of emphasis on social, cultural, economic, environmental, and political dimensions. The only unchanging phenomenon is that in all examples around the world, a coastal area that has lost its function in the city center is revitalized in line with public interests. The exemplary projects all share the common goals of providing features and enhancing and increasing activities unavailable in other areas. In transforming waterfronts, ideas and recommendations are often drawn from the most famous and successful experiences, with each completed project serving as a lesson for the next (Bruttomesso, 2001). On the other hand, many examples of successes and failures and changing trends have led to switching approaches to projects over the years. In this respect, in recent years, there has been a shift towards designing urban coastal areas that are contemporary, user-targeted, respectful of nature, and provide opportunities for public use (Jones, 2017).

CHAPTER 3: WATERFRONT DEVELOPMENT IN IZMIR

Before moving on to the evaluation chapter, it would be appropriate to look at the waterfront historical development of Izmir, which has been the site of the Izmirdeniz project. This chapter mentions the location, urban characteristics, historical development of the waterfront, and coastal culture of the city of Izmir, which is determined as the study area. In the thesis, the importance of the waterfront for Izmir has been explained in line with the reasons for choosing it as a field study, and the infrastructure elements that will support this thesis have been determined. Then, the Izmirdeniz project, which is the subject of this thesis and which has brought about a sweeping change in the waterfront development of Izmir in recent years, will be described.

3.1. Overview, Location and Characteristics Izmir

Izmir is located in the western part of Turkey in the Aegean Region (Figure 14). It has a geography surrounded by Madra Mountains and Balıkesir provincial border in the north, Kuşadası Bay and Aydın provincial border in the south, Çeşme Peninsula and the Izmir Bay, which is named after itself in the west, and the Manisa province border in the east (Izmir Metropolitan Municipality, 2020). Thanks to its excellent geographical location providing sufficient natural environment opportunities, the city has attracted people since the early ages of history, leading to the establishment of advanced civilizations there. Throughout its history, Izmir has been the scene of commercial, cultural, political, demographic, and spatial developments (Tekeli, 2018). The "waterfront", which makes it distinctive, has a special place in the identity of Izmir, which has always preserved its value with its unique geographical location (Akyüz Levi and Genç, 2018). Izmir, Turkey's third largest metropolis and port city, stretches along a long coastline, including the city center. Therefore, Izmir's urban identity as a coastal, port, and trade city has always been dominant. The coastline has interacted with public life since the early stages of the city's development, except for the Izmir port.

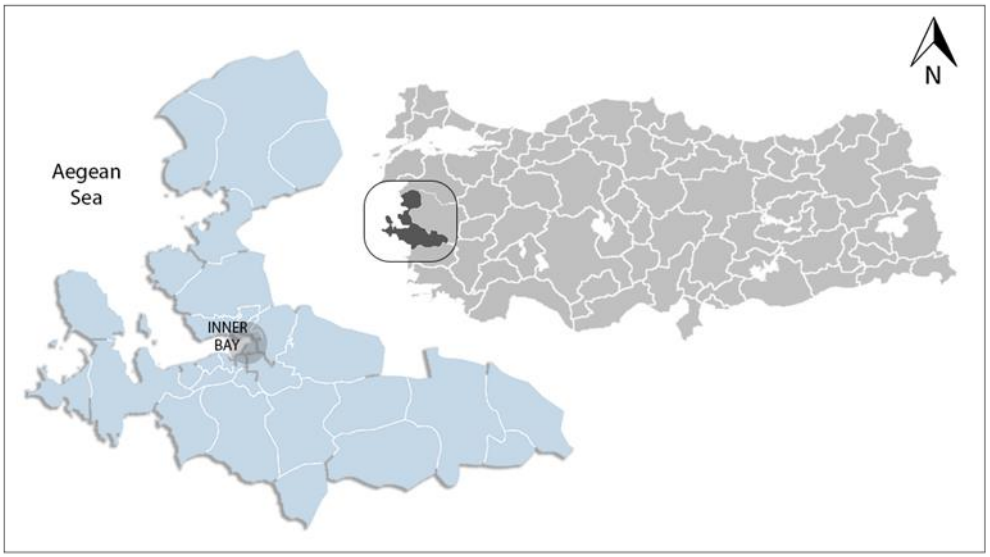


Figure 14. The geographical location of the city of Izmir (created by author)

Remarkable features of Izmir such as being a waterfront city and becoming the intersection of significant routes, having suitable climate conditions and fertile lands played a major role in the enhancement of the popularity of the city over the ages. For instance, its climate involving in Mediterranean climate zone drew people by having favorable effects on public life and activities, agriculture, and natural vegetation (Koçman, 1993). In terms of location, the areas where today's Izmir city is densely settled are the coastal band surrounding the inner bay. Surrounding the bay like a horseshoe today, the city expanded towards Çiğli, Karşıyaka, Bornova, Balçova, and Narlıdere districts.

3.2. History of Izmir Waterfront

As mentioned in the previous section, Izmir opens to the Aegean Sea with a wide coastal belt in the west and has always existed as a big city thanks to its geographical and strategic location very suitable for development. When we look at the history of Izmir, although it has been devastated repeatedly with disasters such as earthquakes, fires, and wars, its location has made its importance permanent (Sözer, 1988). Izmir city center, developed in a relatively compact structure and low density around Izmir Bay, has shown a severe urban expansion over time, especially along the gulf coasts and by following the transportation lines. Indeed, along the coastal belt, economic, agriculture, trade (maritime), culture (art and architecture), and functional developments have occurred, especially in the settlement (Koçman, 1993).

When the coastal line of Izmir is examined historically, frequent changes could be seen for various reasons. These alterations, affecting both the spatial structure and life, are mostly related to the filling of the coastline in order to gain area. In other words, the filling of the coastline has caused a change in the spaces, a diversification in the urban perception and silhouette, and as a result, a difference in coastal life. (Akyüz Levi and Genç, 2018). In this direction, in the ancient period when the movements on the coastline began, the historical bazaar known as Kemeraltı in today's Konak region was an inner harbor, and the part we call Anafartalar Street was a coastline by the sea (Yılmaz and Yetkin, 2002).

The area where the city was located was between a high hill, that is, where Kadifekale is located, and a natural harbor consisting of a small bay. In this respect, it is a predictable fact that the city's existence is closely related to maritime trade. In the following periods, the city was mainly a settlement created by this natural harbor, and its future was shaped according to the vitality of this port (Yılmaz and Yetkin, 2002). However, earthquakes, wars, and invasions during these periods did not allow the city to develop a whole coastal life. Incidents like these have unfortunately affected the economic and social life of the city as well as the destruction of the city. In the 14th century, in Izmir, under Byzantine rule, the Venetians and Genoese settled in the region that would later become the Frankish neighborhood around the inner harbor and established their neighborhoods. (Yılmaz and Yetkin, 2002).

After joining the lands of Ottomans in the 15th century, there have been shown enormous attempts to improve the agricultural function of the city, and at the end of the 16th century, the town began to develop in the coastal area related to agricultural trade activities. Thereby, due to economic growth, the number of foreigners coming with the aim of commerce and being residents began to rise sharply. Thus, it is observed that the city's quality has started to change; it has started to enrich and develop as a region where sea and land trade meet and new places and structures (consulate and inn) have begun to form (Sözer, 1988). During this period, the coastal area where foreigners concentrated was called the Frenk region, and even Evliya Çelebi and Katip Çelebi described the Frankish bazaars and markets as eye-catching (Aydoğan, 2001). From such resources, it can be assumed that the social life of the

city's waterfront began to revitalize.

The change in the coastline, known today as Anafartalar Street, occurred when foreigners disrupted the coastline to trade on the waterfront. They built their piers in front of their structures that descended perpendicular to the sea and made their trade from here. As a result, the first artificial change was observed in the shoreline (Bilsel, 2016). In the 17th century, the city's booming economy attracted people and caused rapid population growth, resulting in social development along the coast. The French traveler Robert De Dreux, known to have visited Izmir in 1668, mentioned that emphasizing the importance of its coast:

> *"The city of Izmir is the most suitable city for commerce in the entire East due to the ease of making piers for ships. It is set on a pleasant plain stretching along the seashore, and a large beach stretches along the shore. All kinds of ships can anchor here, but the shore can be reached by passing just below a castle that closes the entrance"* (Zorlusoy, 2013, Özbey, 2020, p.63).

From these words, it can be deduced that trade and social life, like the beach, developed in the coastal line. In the 18th century, the density on the coast increased, new areas were needed, and filling works were carried out on the coastline. Construction was started on the filled areas recovered from the sea, and public spaces such as commercial houses and coffee houses were started to be built (Aydogan, 2001). Gaining land by filling the sea, a trend in the 19th century, caused the shoreline to grow as everyone filled the sea when needed. Although it is debatable how healthy this landfill process is, it is an undeniable fact that it has an impact on development along the waterfront. Following the development of the waterfront, many works, such as new ports, infrastructure works, and transportation routes, were carried out, and the city's growth continued (Bilsel, 2016).

The most significant factor shaping the urban space in this period was the commercial structure of the city and its being a port city. However, as an expected development, the population continued to increase, and concentration in the city's center occurred. These factors pushed the wealthy to live in Bornova and Buca for

residential areas and Karşıyaka and Bayraklı coast for summer resort use (Beyru, 2011). At the same time, the propertied class of the city expanded on the Southwest axis and started to settle towards Göztepe as summer resorts along the waterfront. On the other hand, the Karantina region, located on the same axis, was built outside the city to isolate disease-causing ships (Özbey, 2020).

As a result of all these, it is seen that the city has expanded its settlement along the waterfront. However, the port area has always maintained its importance in density. When the waterfront where the city center is located during these periods is examined, it is seen that there are shops under the houses by the sea and piers extending to the sea. As mentioned above, the coastline has deteriorated, and the coastal parcels have gradually lengthened due to the continuous filling of the sea (Akyüz Levi and Genç, 2018). It has been on the city's agenda since the 18th century that this coastal line was arranged with a quay, and many travelers talked about the fact that the quay would both beautify the city and provide commercial conveniences. However, despite such requests, making a comprehensive initiative would not be possible until the second half of the 19th century because the state did not have sufficient economic resources, and the wealthy people prevented it (Alpaslan, 2020). As the state had the necessary means and agreed with the merchants, the dock was completed in 1876 by filling the sea. Rauf Beyru (2011), on the expansion of the land with the fillings made to the sea frequently in this city, stated that this repeated situation had caused the formation of an urban texture that may not be seen anywhere else in the world. Direct contact with the sea, previously a privilege for wealthy merchants and consulates who lived or worked in buildings along the waterfront, has changed to "a public street along the waterfront" " with the construction of a quay (Yılmaz, 2018).

After that, with the tram line laid on the quay, valuable land from the sea was sold, and areas were acquired to create wealthy and western neighborhoods and social life (mansions, consulates, hotels, clubs, and theaters) in the city's settlement. This tram line was used to transport freight between the port and the station at night; during the daytime, it continued to carry passengers along the quay (Yılmaz and Yetkin, 2002). To speak more precisely, the construction of the quay resulted in the filling of the inner harbor, pushing the busy Frenk Street behind the shoreline and giving the shore

a very different appearance. In this direction, along with the continuation of port activities, the quay saw the meaning of public space and developed the city socially and culturally, and this coastal road created was named "Kordon" (Özbey, 2020) (Figure 15). In this way, it can be said that the city's seafront has been renovated to a large extent in terms of space, and people's relationship with the sea has changed. Following the emergence of new spaces on the quay, casinos and coffee houses were built on wooden poles on the sea. (Akyüz Levi and Genç, 2018). After this time, the city's social, economic, and cultural heart began to beat in the Kordon. At the same time, starting from the end of the 19th century, the voyages made toward the ferry piers surrounding the bay increased the interaction and brought other opportunities for people to benefit from the sea (Yılmaz, 2017). In the 20th century, the Kordon, which formed the appearance of the waterfront, continued to be the most distinguished place in the city with its social facilities at that time.

Figure 15. Izmir Port in 1880 (Source: Izmir Metropolitan Municipality)

Although the fire in 1922 affected a large part of the city (Figure 16), suffered severe physical, cultural, and economic destruction, and had negative consequences on coastal life, immediately after the proclamation of the Republic in 1923, new zoning activities were initiated, and urban planning studies were carried out to erase the traces of the fire in the city (Yılmaz and Yetkin, 2002; Akyüz Levi and Genç, 2018). With the re-planning of Izmir, piers were built for ferry services, and the coastal settlement developed with the changes in the horse-drawn tramway, railway, and seaway. Therefore, Karşıyaka and Bayraklı turned into a region where structural and functional transformations were experienced, especially in the coastal region, and

this settlement expanded towards Bostanlı. In addition, all these changes have provided an intense relationship between housing and sea life along the entire Göztepe-Üçkuyular line. Recreational coastal uses (such as water sports and swimming) continued to exist in these regions.

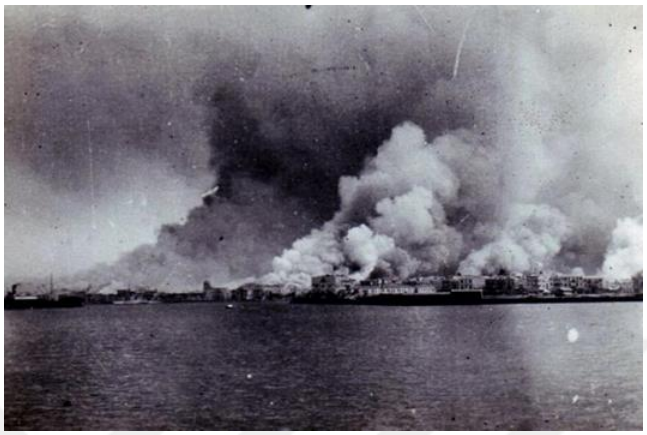


Figure 16. View from the sea of the fire in Izmir in 1922 (Source: Çelik, 2019)

In the aftermath of World War II, great changes appeared all over the world. In particular, challenges of rapid urbanization and urban sprawl due to population growth also occurred in metropolitan areas in Turkey, including Istanbul, Ankara, and Izmir (Hepcan et al., 2013). As a result of the increase in population, the change in agriculture, and the economy in general, Izmir grew rapidly with migration from rural to urban areas, expanded its borders like other metropolitan cities in Turkey, and added new polycenters to the roads and coastline. These expansions in the settlement of the city include various types of land use, such as residential, commercial, and industrial. It is seen that tourism started to develop in this period depending on the development of highways and airlines. Reformation in tourism policies have brought about an increase in the number and quality of accommodation structures (Kayın, 2000). Besides tourism, Izmir Kulturpark fairgrounds has become one of the symbols of opening up (Figure 17). Meanwhile, there was also a development in maritime transportation, and in 1959, Izmir Alsancak port was established and the existing port works were moved here (Figure 18).

Figure 17. Izmir Kültürpark Fair (Source: izmirinrenkleri.com)

Figure 18. Izmir Alsancak Port (Source: Izmir Metropolitan Municipality)

After this period, the coastal view of the city completely changed. For example, the fact that buses became more popular with the onset of urbanization led to the abolition of trams representing the Izmir coastline. At the same time, when we look at how the view of the waterfront has completely changed, and when the coast of the city is examined towards the middle of the 19th and 20th centuries, it is seen that there are two-storey structures (Figure 19). However, as a result of law amendments and rent pressures caused by urbanization, eight-storey construction has emerged in shoreline. The scale and silhouette of the city have changed a lot with the buildings on Mithatpaşa Street that started in the 1960s and spread rapidly and today reflect the appearance of a reinforced concrete set, and the apartments in Karşıyaka, which spread over a large part of the parcel area (Akyüz Levi and Genç, 2018). In addition, as the city grows in the urbanization process, landfill works continue. In this direction, it can be said that the improvement of the coastline is in direct relation with the growth of the city in the urbanization process. Nevertheless, it can be stated

that the lands recovered from the sea, which continues still today, are mostly allocated for coastal parks and roads along Izmir Bay (Hepcan et al., 2013).

Figure 19. In the 19th century, two-story houses on the Izmir coast (Source: Izmir Metropolitan Municipality)

Important regulations have been made along the coastline, especially in the last 30 years. These arrangements started with the fillings in the coastal part as usual, and as an example, adjustment of Mustafa Kemal Beach Boulevard, Alsancak Promenade, Konak Square, and Karşıyaka-Mavişehir shore can be given as a result of the fillings. In fact, Kordon, which is one of the important elements of the waterfront in Izmir, started to be used by the users of the city as a green public space today, in the zoning process based in the 1990s (Ozbey, 2020). At first, the Kordon started to be filled in 1997 with the idea of building a fast multi-lane vehicle road to the waterfront, the first traces of which were found in the zoning plan prepared for Izmir in 1955 (Figure 20). With this process, the historical Kordon has moved several meters ahead and moved away from the city. However, as a result of the government reshuffle and the objections of the people, road construction was abandoned (Yılmaz, 2018). Afterward, the municipality designed the filling area in Kordon to transform it into an urban green area, and the works for the recreation areas that are still used today gained their current appearance in 2004 (Akyüz Levi and Genç, 2018) (Figure 21).

Figure 20. The land reclamation operations on the Kordon (Source: Izmirmag, 2016)

Figure 21. View of Kordon as a green space (Source: Izmirmag, 2016)

At the same time, the municipality was also interested in waterfront developments outside the Kordon. They started to work on creating a new city center between Turan and Alsancak in the port area (Izmir Metropolitan Municipality, 2001). In this context, an International Urban Design Project Competition was organized in 2001 (Figure 22). Although the selected project was announced in the 2003 Master Plan, the project could not be implemented.

Figure 22. Competition Winner Jochen Brandi's Project (Source: Izmir Metropolitan Municipality, 2001)

Between 1999 and 2004, significant developments took place in terms of discovering the natural and cultural potential of the city, such as the efforts to transform the waterfront into a green area, and the arrangement of the coastal lines of Inciraltı, Sahilevleri, Güzelbahçe, and Bostanlı (Kayın, 2016). With these developments, place definitions such as sitting on the shoreline, walking, cycling, celebration, concert, and beach were made. As another example of change, the usage of coastal areas as bus stops and parking areas can be given. Apart from this, the coastal areas created by landfills are mainly designed as parks and pedestrian paths throughout the bay. Thus, this recreation area arrangement process, particularly in Karşıyaka, Kordon, and Göztepe districts, has created some changes in the coastal space and its use (Akyüz Levi and Genç, 2018). Until 2009, as mentioned above, there were fragmented changes to the shoreline. Since then, the municipality has embarked on a more comprehensive development policy for the Izmir Bay waterfront.

3.2.1. Coastal Culture

So far, the coastal history of Izmir has been discussed. In this direction, we can understand that the waterfront shaped the history of Izmir. In the case of Izmir, it can be said that the most important phenomenon that determines the quality of life is the sea and the relationship established with the sea, in other words, the "coastal culture" (Gier, 2016). It is a phenomenon that affects the architecture, the city, and the life in the city, the macro-organism and design of the city, which seems abstract but includes a thousand and one concrete data (Idil, 2017). Since its establishment, Izmir has been a city that has built its entire existence, appearance, and urban culture on the state of being on the shore. In addition, it has maintained its existence as an ancient city without losing its importance from ancient times to the present primarily due to its excellent location and viable natural environmental factors (Koçman, 1991). In this direction, Izmir's current urban structure organization, as well as its skills and cultural landscape, have been shaped in harmony with its environmental characteristics.

The waterfront is the most important factor shaping the city, and its role in establishing daily life in the city has continued actively. At the same time, the Mediterranean climate region has an outstanding share in this, and it shows favorable conditions for human life and activities (Koçman, 1991). In the historical process, Izmir's identity as a coastal, port, and commercial city has shaped and formed its culture (Akyüz Levi and Genç, 2018). In this respect, the sea has not only been the area that gave life to Izmir and made the city famous as one of the most outstanding port cities but also occupied an important place in city life with its inseparable elements of social life such as piers, excursion boats, and sea baths (Figure 23) In this direction, it can be said that Izmir Bay gave birth to the lifestyle and activities of the coastal culture.

Figure 23. Karşıyaka's sea baths in 1900s (Source: eskiturkiye.net)

First of all, for example, since the establishment of Izmir, buildings adapted regarding to specific technical needs such as coastal and marine activities, ports, shipyards, and fishing, as well as representative buildings describing the physical relationship between land and sea, have been constructed. In particular, the piers lined up along the waterfront, connecting the city and the fisherman, the land and the sea, and have become a part of the maritime culture (Gier, 2016). In addition, "mansions and cottages", which have been found on the waterfront of Izmir throughout its history, which are scarce in number today, are the heritage and examples of this culture (Figure 24). The tram line along the waterfront is also a memorable sight (Figure 25). Travelling by boat between the piers is also an indispensable part of Izmir. The boats moored to land or sailing in the sea are characterized by the coastal history of Izmir (Akyüz Levi and Genç, 2018).

Figure 24. Historical mansions of Izmir in the 1900s (Source: Izmir Metropolitan Municipality)

Figure 25. Tram line along Kordon in the 1900s (Source: Izmir Metropolitan Municipality)

At the same time, the city has always been a center of attraction, especially after Ottoman rule, due to the high trade volume and mobility provided on the waterfront. Therefore, in the coastal part of the city (especially the promenade), the nature of the public space is the place where various shows such as pubs, coffee houses and clubs are held. It is understood that social life has always existed on the waterfront (Akyüz Levi and Genç, 2018). This is an example of how the sea shapes human life by spending time and socializing on the waterfront. Shows, concerts, and events are an indispensable part of coastal culture. Looking at the history of Izmir, it is seen that competitions such as dinghy, sailing, and swimming were organized (Figure 26). In the news article titled 'Izmir's first sea competitions', it was mentioned that Turks organized the first sea competitions in 1924 (Cumhurdoğu, 2021). It was stated that these competitions and entertainments were about revitalizing the neglected sea sports.

Figure 26. A view of boating races in Izmir Bay in the 1900s (Source: karsiyakali.com)

In addition, social activity areas such as sea baths, beaches, piers, open-air cinemas, and tea gardens have been present on the waterfront (Figure 27). As can be seen, the citizens of Izmir have experienced life in line with the change of the waterfront and the opportunities it offers. However, some landmarks on the coastline in history have been lost because of devastating events such as earthquakes, fires, and wars. Although these incidents had a negative impact on the coastal culture, the most damaging impact was the transition from two-storey buildings to multi-storey structures due to the increase in industry, water pollution, and population increase, along with urbanization (Hepcan et al., 2012).

Figure 27. A tea house in Konak in the 1960s (Source: eskiturkiye.net)

Today, examples such as civil architecture, commercial buildings, religious buildings, and water structures in the coastal culture in history, as mentioned above, could not be preserved due to fires and wars that frequently affected the city, road construction and expansion works, and multi-storey construction permits in historical environments (Akyüz Levi and Genç, 2018). The multi-storey buildings lined up along Izmir Bay are quite different from the two-storey buildings on the waterfront in history (Figure 28-29).

Figure 28. Today's view of the buildings in Kordon (Source: Izmirmag, 2016)

Figure 29. A view of buildings in Kordon in the 1920s (Source: Izmir Metropolitan Municipality)

At the same time, the expansion of the coastal space with these interventions caused the loss of the original qualities and function of the waterfront (Yılmaz, 2018). On the other hand, sea pollution has caused sea-related activities such as swimming and sailing not to be done in the center. However, despite all these negative effects, the coastal public space has continued to increase its quality even today. Social mobility can be continued thanks to the recreational areas created on the city's waterfront. In addition, structures for leisure, artistic, and cultural purposes, such as Ahmed Adnan Saygun Art Center and Konak Pier, appear along the coastline occasionally. Although the activities and structures on the waterfront have been lost, the waterfront always maintains its importance for the life of the citizens.

Finally, in light of the aforementioned history of Izmir's coastal development and culture, in the last ten years, projects for reorganizing the coastal part of the city have been carried out under the guidance and management of the Izmir Metropolitan

Municipality. In this context, the Izmirdeniz Waterfront Project has been implemented by the Izmir Metropolitan Municipality to reorganize the areas on the waterfront of Izmir Bay. Studies seek to strengthen further the relationship of the people of Izmir with the sea; that is, it aims to increase the sea/water-human relationship in the urban dimension through space design (Izmir Metropolitan Municipality, 2012). Thanks to these projects throughout history, it is possible to say that the local authorities have finally realized the value of the waterfront for the city, which can be noticed by looking at their efforts emphasizing the usage of the waterfront. In this regard, the Izmirdeniz project will be detailed in the next section.

3.3. Izmirdeniz Waterfront Project

The Izmirdeniz project is one of the steps taken to ensure the waterfront, as mentioned earlier, development of Izmir. In this context, Izmir Metropolitan Municipality's planning units have worked on a project to design the inner bay and add several facilities for many years. Following this, Izmirdeniz is a waterfront transformation project implemented by the Izmir metropolitan municipality to strengthen Izmir residents' relationship with the sea (Izmir Metropolitan Municipality, 2012). This vision of Izmir's local government is essential in improving quality of life and promoting design awareness. Within the scope of the project, it is envisioned that the coastal area extending from Mavişehir to Inciraltı, which is not subject to private ownership, will be reorganized following the coastal usage patterns of Izmir residents. Accordingly, detailed information on the project is provided under the following headings.

3.3.1. Background of the Project

The inspiration for the Izmirdeniz project is the outcome of strategies that emerged from the Culture Workshop and Design Forums organized by the Izmir metropolitan municipality. To achieve high-quality participatory governance, the Municipality organized the Izmir Culture Workshop on October 24, 2009, with the participation of Izmir residents and Izmir devotees of science, art, and culture, and the Izmir Design Forums, which convened on May 31, 2011, and have continued to meet on for a while (Izmir Metropolitan Municipality, 2012, p.7) (Figure 30).

Figure 30. October 24, 2009 Izmir Culture Workshop (left) and May 31 Design Forums (right) (Source: Izmir Metropolitan Municipality)

As a result of these efforts, the municipality's governance vision and the strategies to be pursued were clarified, including the coastal project. The vision of Izmir as "the culture, art, and design city of the Mediterranean" in the Culture Workshop and the goal of "transforming Izmir into a design city" in the design forums were among the prominent topics. At the same time, studies have shown that the vision for urban governance in Izmir can be built on four axes (Izmir Metropolitan Municipality, 2009):

1. To be a local government that fulfills its responsibilities and leads the way in making Izmir a city that continuously improves its place in the division of labor of the world economy,
2. To recognize that Izmir's low-tension lifestyle, which is formed by the life preferences of Izmiris, is a superiority of Izmir that development preferences with imposed projects should not destroy, and to try to improve the quality of life of Izmir residents within this consciousness,
3. To ensure that the economic development of the city, the life preferences of the citizens, and the physical structuring of the city are formed in a way that fulfills the condition of ecological sustainability to meet its universal responsibility and to ensure the realization of urban rights,
4. To realize intensive and high-quality participatory governance in the urban project development and decision-making processes of the citizens with the awareness of respecting people's right to live in dignity.

Izmir Metropolitan Municipality started to take the first steps to fulfill these visions

that emerged from the Culture Workshop by contacting relevant stakeholders. In this respect, the first step was establishing the Izmir Mediterranean Academy, ensuring this vision is realized in all its richness. While working with its stakeholders to bring this vision to life, the Academy has set goals such as contributing to the development of Izmir's strategy for opening up to the world and trying to broaden the horizons of Izmir in this way (Izmir Metropolitan Municipality, 2012, p.10). As mentioned above, different strategies were developed and implemented to realize each of the different dimensions of the vision of urban governance determined in various platforms in Izmir.

The second dimension of the vision, the operational aspect of improving quality of life, is closely linked to Izmir's status as a city of design and innovation. In the strategy report published by Izmir Metropolitan Municipality (2012, p.8), it is stated that research worldwide shows that groups with high innovation and design capacity choose places to live where there is peace of mind and quality of life. At the same time, it is argued that this peace and quality of life will be the most critical advantage that Izmir, which wants to become a city of design and innovation, can benefit from. Accordingly, urban design, object design, fashion, and communication design have been prioritized to develop the city.

Furthermore, to improve the design in the city, it has been emphasized that it is crucial to increase design capacity, awareness, and demand for design (Izmir Metropolitan Municipality, 2011). In this direction, the municipality has developed new projects to improve the quality of urban life, emphasizing urban design. Tekeli (2010) has said about this vision of the municipality that there is much to be done to improve the quality of life in the city, but what is central to the peaceful quality of life in Izmir is the relationship Izmiris have with the sea, and that the sea makes the city unique. In line with strategies to improve the quality of life by protecting the peaceful life of Izmir, the municipality has worked on a strategic plan that includes the inner gulf, coasts, and urban terraces. The "Design Strategy Plan for Strengthening the Relation of the Denizens of Izmir to the Sea", which includes the Izmirdeniz project, which is the subject of this thesis, emerged as a result of this orientation (Izmir Metropolitan Municipality, 2012). The reason for this initiative is:

- To stimulate the demand for design and innovation in Izmir to become a city

of design and innovation,

- To lead the way in developing the existing design capacity in Izmir,
- To improve the relationship of Izmir residents with the sea in their daily lives in a multidimensional way,
- To protect, diversify and enrich the peaceful non-residential life, which has a special place in forming the quality of life in Izmir.

The need to develop a strategy for strengthening Izmir's relationship with the sea arises when steps are taken to realize a comprehensive vision for the city. The local government decided that the relationship with the sea needed to be intensified in order to ground both the means and the ends of improving the quality of life. The mayor of the time, Aziz Kocaoğlu, formed an advisory board for this project that would contribute to the life and aesthetics of the city (Arslan, 2021). This ensured the planning, design strategy implementation, and monitoring of the Izmirdeniz project. The mayor, his advisors, urban planner Ilhan Tekeli, designers, faculty members from design faculties of universities in Izmir, and municipal employees participated in this board, which worked on the city's vision, and then the project process began. Negotiations started between the advisory board and the mayor on how the coastline would be planned and how projects would be developed (Arslan, 2021). Discussions on planning the shoreline and creating the projects continued in recurring meetings with the relevant managers, designers, and technicians. Representatives of the mayor's office, researchers of universities, and freelance architects participated in these idea-generating settings. In these meetings, it was envisaged that urban design projects would be designed by different designers, from small to large areas, and that they should be developed as an ongoing system and open to new proposals.

3.3.2. Formation of Data Collection and Design Teams

In line with the planning processes mentioned in the paragraph above, the idea of being open to public suggestions while developing coastal proposals has come to the fore. Following this idea of being open to public suggestions, it was concluded that to benefit from the design activities to improve the quality of life, it was first necessary to determine the usage patterns of the coast and the users' satisfaction levels. For this purpose, Ege University conducted a study to evaluate the existing coastal use, which constitutes the primary data of the project (Izmir Metropolitan

Municipality, 2012, p.18). In this direction, it conducted surveys in 11 different coastal areas from Mavişehir to Yenikale, which were determined by the municipality. The objectives of the surveys were,

- to receive the opinions, demands, and suggestions of the citizens regarding the design works,
- to collect data to support design work,
- to determine the socio-economic and demographic characteristics of Izmir residents who use the coasts,
- to determine the usage characteristics of coastal spaces and the spatial behaviors of Izmir residents,
- to reveal how the users evaluate the physical characteristics of the coasts,
- to investigate the satisfaction of coastal users in terms of the psychological effects of space,
- to determine users' consumption and expenditure trends in coastal spaces and coastal hinterlands.

The studies in the regions determined within the framework of the objectives mentioned above were conducted by face-to-face interviews and surveys with 4896 people using the coast and observation techniques by visiting the areas (Izmir Metropolitan Municipality, 2012, p.18). Accordingly, the results of these surveys, user profiles, and user demands were evaluated at the waterfront project meetings, and a report of the collected data was prepared. The designs were based on the needs and wishes identified in these surveys. Following this, the design strategy report for the Izmirians' Relationship with the Sea Project was worked on under the leadership of Ilhan Tekeli (Arslan, 2021). Design teams were also formed in conjunction with these meetings. The waterfront project was described as a design task requiring the participation of many designers, covering an extensive area and different subjects.

The projects identified in the design strategy plan dealing with the inner bay, waterfronts, and urban terraces were handled by designers from different disciplines, trying to create unity in diversity. The project groups divided the 40 km coastline stretching between Mavişehir and Inciraltı into 4 regions according to their physical characteristics and intended uses (Izmirdeniz, no date) (Figure 31). Within the project, the coastline was divided into four design zones: Karşıyaka, Bayraklı,

Konak-Alsancak, and Güzelyalı. In addition to the 4 zones, a 5th group was allocated to organize the design process as an activity and performance phase and to provide the coasts and the sea with activities. Accordingly, coordinators were assigned to the design zones, and these coordinators formed design teams and started to develop their projects together with the relevant units of the municipality (Izmir Metropolitan Municipality, 2018). More than 100 expert project teams, including urban planners, architects, industrial designers, landscape architects, engineers, and academics, developed their projects based on the priorities and sensitivities outlined by the strategic plan.

Figure 31. Areas of the project divided into sections (Source: izmirdeniz.com)

At the same time, these designers conducted field observations and interviews with the public to identify problems on the ground and support their designs (Arslan, 2021). Designers visited the areas they would design one by one, made on-site observations, and identified needs by contacting the public. At this point, the local government and the project authorities paid attention to establishing a team of designers from Izmir. The idea was that it is possible to do something for Izmir with people who know Izmir and have ideas and thoughts about Izmir (Arslan, 2021). During the project development process, short, medium, and long-term processes were defined in cooperation with the municipality and work started in January-February 2012.

3.3.3. Design Strategies

As mentioned above, design strategies have been identified for the emerging waterfront project intending to strengthen the quality of life of the city dwellers and their relationship with the sea. The strategic choices to be applied in the design projects to be developed to strengthen Izmir's coastal uses, which will be discussed in this section, emerged from the design forums and meetings (Velibeyoğlu, 2017). It was emphasized that the relationship with the sea should be carefully designed to increase the contribution to Izmir's quality of life from how it relates to the sea. Tekeli (2010) stated that the urban settlement of Izmir, with the size city had reached today, surrounds the bay and is positioned to form an amphitheater facing the sea. Three design subjects and projects have emerged in line with the settlement around the bay. The design projects to be developed to strengthen Izmir residents' relationship with the sea were created on three different phases (Izmir Metropolitan Municipality, 2012, p.16):

- The first phase of the project will involve arrangements that will transform the inner bay and enable it to be used as a place of spectacle.
- The second phase of the project will be design projects that aim to give meaning to defined coastal zones as a place and improve the quality of the environment.
- The third phase of the project will involve the creation of urban terraces or balconies that will enable urban dwellers to visually connect with the sea without going down to the shore.

On the other hand, there was a consensus that the design of a city's coastline should be based on the tension between scenarios or stories that are developed from a vision of the transformation of existing uses. Simultaneously, the general characteristics of the design strategies to be pursued were identified (Izmir Metropolitan Municipality, 2012, pp.33-36):

- Developing designs in line with the vision of "Izmir as a Mediterranean city" and the historical identity of the city
- Providing users with language integrity that ensures commonality of use in coastal design
- Making arrangements to complete the physical infrastructure deficiencies by considering different age groups and social segments to increase the use of

the waterfront (shades, resting areas, activity pockets, telephone-internet access points, fountains, kiosks, etc.),

- Reconstructing and strengthening the sea-human relationship (e.g., perception from the sea, uninterrupted pedestrian areas, and vantage points to the sea),
- Developing multifunctional and programmable spatial solutions for activity proposals that will enable the coast to take part in the social and cultural life of the city in different ways,
- Providing spaces to display public art objects that enhance urban aesthetics (e.g., showcasing well-chosen sculptures and installations, developing platforms for art events, and creating neighborhood-specific symbols as part of the design, etc.)
- Proposing suggestions that will enrich the visual image of Izmir, which is a sea city day and night along the coast (e.g., public viewing terraces),
- Supporting coastal design with activities that will strengthen the sea-human relationship (sailing activities, diving, boat races, etc.),
- Increasing opportunities to connect the waterfronts by sea (boats, ferry piers, etc.) and using the sea more effectively by creating floating cultural barges on the sea (libraries, movies, etc.),
- Creating spaces where the public can encounter quality design objects (original, functional, modern, and durable) in line with Izmir's vision of becoming a design city,
- Establishing and harmonizing the visual/functional relationship between the waterfront and inland areas, and if necessary, developing new proposals for the facades of existing buildings facing the coastal zone,
- Increasing the sports, entertainment, and play value of the waterfront (e.g., water sports center), building a space-activity integrity that can be experienced on a live-play-learn basis,
- Repurposing the existing usable building stock on the waterfront, preserving historical and natural values, and developing proposals for the reuse of redundant areas (e.g., viaducts),
- Developing proposals to facilitate practical and comfortable access to the waterfront (pedestrian and public transportation) and alternative transportation proposals (funicular, tram, cable car, etc.),
- Designing public transportation stops and transfer stations (e.g., bicycle

parking spaces, bus stops) by integrating transportation modes that will increase the practical and comfortable access of the public to the waterfront,

- Developing infrastructure details that will make the waterfront livable in the reorganization of the coast, taking into account ecological principles (e.g., systems to collect rainwater, natural ventilation, clean energy, energy efficiency) by evaluating the use of the coast and the quality of the physical environment on the waterfront,
- Creating details and safe circulation spaces for coastal lighting (created environment, energy efficiency, positioning-light pollution),
- Considering public relations strategies in the design process and developing tools that will enable the public to participate in the design process,
- Adapting to the conditions and provisions brought by the coastal legislation (excavation-fillings, canals, etc.).

The principles above can be counted as the ones that should be included in the scope of each design project. In this regard, it is clear that these design approaches reflect the worldwide trends mentioned in Chapter 2 of thesis. At the same time, surveys and observations were the most significant aid in developing coastal design strategies. One of the questions addressed in the survey, how people spend their time on the waterfront, revealed that the activity alternatives are limited. As a result of these questions and observations, it has been determined that the most common reasons people use the beach are to have a picnic with their friends or spend time relaxing by watching the sea alone. For this reason, based on such limited activities, it has been concluded that the public space offers limited activity options to people (Izmir Metropolitan Municipality, 2012). In this direction, the research results influenced the design strategies for different coastal uses and ensured that the coastal public space was designed to offer alternatives to spend time.

In addition, another conclusion that determines the design strategy emerging from the research is that options should be provided for both individual users and groups. Other findings from the survey and observations are that the benches on the beach, sports equipment, picnic tables, road pavements, walking paths, bicycle paths, and children's playgrounds are not very useful, green areas, sports and recreation facilities, culture, and art activities are insufficient, maintenance and cleaning of the

area is poor. Examples can be given, such as the lighting and security of the facilities are problematic, and the facilities are not suitable for the use of the disabled. As a result of all these, designers have examined widespread behaviors and preferences and developed design strategies for the needs of the local people (Arslan, 2021).

3.3.4. Implementation Phase

The above paragraphs describe the planning and design processes of the project. The project's transition to the implementation phase started with the delivery of the designs by the municipality's coastal design development team. At this point, the implementation process continued with the municipality's comments on the delivered projects (Arslan, 2021). Implementation projects were prepared to start construction. The realization of the project started quickly at the request of the mayor. After discussions, it was decided where to start the implementation. After preparing the design and implementation projects for this purpose, construction work started in November 2013 in Pasaport. Since then, the project has been tried to be completed in stages. However, over the last few years, no changes in the bay waterfront related to the project have occurred.

Moreover, it is seen that many of the designs in the coastal design booklet published by the municipality could not be realized. Kocaoğlu (2020) stated that the parts of the project that would challenge the system were not implemented and postponed, while the designs that were within the municipality's authority were realized at a level that could be implemented. At the same time, the project has received several awards. One of these is the Raci Bademli Good Practice Award, organized by the TMMOB Chamber of City Planners in 2015 in memory of Prof. Dr. Raci Bademli. The other one is the award it won in the "Sustainable City" field at the "ISBS2019 Sustainability Award - Best Sustainable Practices Competition".

CHAPTER 4: EVALUATION OF IZMIRDENIZ PROJECT ACCORDING TO THE DIMENSIONS OF WATERFRONT TRANSFORMATION

In the previous chapters, concepts such as the coastal city and the waterfront transformation project were examined, and Izmir's coastal history, culture, and processes to develop the waterfronts were mentioned. A review of the literature on the waterfront reveals that there are some prominent dimensions and principles for coastal transformation projects. This chapter of the study is based on the conceptual terms of the thesis and the references of the previous chapter through a specific project study. In this part of the thesis, the research questions on urban waterfront projects and the purpose of the study are analyzed and evaluated through the example of the Izmirdeniz project. As mentioned in the previous chapter, the coastal region of Izmir Bay is of great importance due to its geographical and physical location, historical process, and cultural values. Within the scope of this thesis, the Izmirdeniz project implemented by the Izmir metropolitan municipality along the bay was selected as a case study. The chosen project was examined with reports, booklets, photographs, and drawings published by the municipality, articles published in magazines, journals, and thesis information from news sources and data collected as a result of intermittent field observations.

The previous section on Izmir's waterfront development explained the project's description, planning process, formation and development of teams, design strategies, plans, and construction. Consequently in this chapter, in light of the findings, observations, and research conducted in the field, the current status of Izmir's waterfront project, which is of strategic importance in the urban context, is evaluated within the framework of the waterfront transformation project measures discussed in the second chapter. In this thesis, the framework described in the fourth 'Dimensions of Waterfront Transformation' section of the second chapter is evaluated through the planning, design, implementation, and operation processes of the Izmirdeniz project. Although the project was designed by dividing the coast into four regions, the dimensions and principles for each region could not be individually considered due to its extensive coverage along the coast. In this context, while

investigating the project, a general view of the waterfront is evaluated for each criterion. According to the approach derived from the literature, Izmir's waterfront project has been assessed under five-dimensional concepts: social, cultural, economic, environmental, and political, and has been analyzed in a way to include the prominent principles of each dimension.

4.1. Social

In line with the framework obtained from Chapter 2, in this section, the data on the social dimension of the Izmirdeniz project is analyzed. In this context, the criteria determined within the framework of the social dimension will be examined within the project's scope. The Izmirdeniz project aims to improve social policies by increasing the quality of life in the city, eliminating the lack of social facilities, and ensuring social integration by contributing to the solutions to problems (Izmir Metropolitan Municipality, 2018). As stated in the literature, coastal areas, which directly reflect the lifestyle of a society, are the most favorable areas for social communication, and the physical characteristics of the waterfront form the basis of its performance in social dimensions. Accordingly, the project aims to connect the waterfront with the city by providing continuity of circulation for pedestrians and cyclists. Designing a promenade in the form of a pedestrian and bicycle path was tried to ensure that the continuity of movement is "uninterrupted" (Izmir Metropolitan Municipality, 2012, p.90). Before the project, it was observed that some areas prevented continuity in some parts of the waterfront. Obstacles were considered and discussed to make a promenade from Mavişehir to Inciraltına and ensure the waterfront is not interrupted.

One of the critical studies carried out in this context is the Pasaport area (Izmirdeniz, no date). Before the project, it was observed that the coffee tables and chairs of the workplaces in the Pasaport area caused the pedestrian and bicycle path to be interrupted and occupy the sidewalks (Figure 32). As a solution, it was suggested that the tables and chairs be moved from there to the front of the businesses, and interviews were held with the business owners. The project was explained to the tradesmen, and an agreement was reached to remove the tables and chairs occupying the pedestrian path (Arslan. 2021). This way, an uninterrupted walking path was provided in the Pasaport area (Figure 33).

Figure 32. View of the Pasaport coastline before the Izmirdeniz project (left) (Source: mapio.net)

Figure 33. View of the Pasaport coastline after the project (right) (Source: Agüloğlu, 2020)

Another point where the pedestrian path is interrupted is the harbor area. The harbor was seen as one of the uses that would disrupt the continuity around the bay, but the harbor was considered a crucial and demonstrable part of the city in terms of its economy and competitiveness (Izmir Metropolitan Municipality, 2012, p.54). Therefore, the pedestrian and bicycle route is proposed to pass above the harbor using viaduct piers. Another example is the Bayraklı area. In order to overcome the physical barrier created by the Altinyol and Izban line, pedestrian bridges connecting the shore have been implemented at appropriate points (Izmir Metropolitan Municipality, 2022). At the same time, it aims to ensure integrity in the course, which is interrupted at places where structures on the coastline, such as Karşıyaka

sports club sailing facilities and piers. The above-mentioned bicycle and pedestrian paths aim to transform Izmir into a pedestrian-prioritized urban space and ensure Izmir residents' effective coastline use. However, pedestrian and bicycle paths have not been constructed in the areas along the coastline connected to the harbor and in the Meles Delta (Figure 34). Although a bicycle path is provided between Turan and Alaybey, pedestrians cannot walk easily. In other words, continuity along the coastline has not been achieved.

Figure 34. Port area where pedestrian and bicycle path integrity is not ensured (Source: created by author)

Moreover, steps have been taken for the physical accessibility of the waterfront, transportation, and public transportation in the Izmirdeniz project. The most important point here is the issue of being accessible and providing safe access to the coastline, which is a crucial design problem (Izmir Metropolitan Municipality, 2012, p.91). One of the steps to facilitate transportation to and along the waterfront is the rental bicycle application. For Izmir residents to gain the habit of "bicycles" and to expand the use of bicycles in the city, they have extended the bicycle lanes in the city and ensured that they are preferred for sports or alternative transportation. Along with the project, the BİSİM application was implemented, and rental bicycles and parking spaces were placed on the waterfront, such as renting bikes with a city card (Izmir Metropolitan Municipality, 2018, p.317) (Figure 35). At the same time, the municipality provided "free bicycle and helmet" service to bicycle lovers every day

of the week for a while with the slogan "The bicycle is on us, the ride is on you" along the bicycle track on the waterfront to encourage cycling (Izmirdeniz, no date).

Figure 35. A parking lot for bicycles in the BISIM application offered by the municipality and people walking around the waterfront with rented bikes (Source: Izmir Metropolitan Municipality, 2021)

Another transportation project is the Tramway project (Figure 36). The aim is to implement a high-capacity and modern street Tramway project to decongest the routes heavily used by Eshot buses (Izmir Metropolitan Municipality, 2012, p.40). Although the Tramway project was included in the municipality's 2009 transportation master plan, it could not be prioritized due to a lack of funding (Arslan, 2021). Implementing the Izmirdeniz project coincided with the launch of the Tramway project. The Izmirdeniz project was carefully considered, and the designs were revised accordingly, as the tram project could disturb some coastal uses (Izmir Metropolitan Municipality, 2012, p.101). The tram project was changed to be adjusted to benefit the coastal project.

Figure 36. Images of the tram moving along Izmir’s coastline (Source: Izmir

Metropolitan Municipality, 2021)

The tramway, which was initially designed to be fast, surrounded by wire fences and a continuous barrier for pedestrians, has been modified to be slower moving, with more miniature trains and not covered by wire fences due to the impact of the Izmirdeniz project (Arslan, 2021). Tram stops have been upgraded over the years to the current route, which runs parallel to the sea from Ataşehir to Alaybey, and from Halkapınar to Fahrettin Altay (Figure 37). This way, private cars are not encouraged, passenger traffic is carried by tramway, and public transportation to and along the coast is made more accessible, thus reducing vehicle density.

Figure 37. Karşıyaka (left) and Konak (right) tram line maps (Source: tramizmir.com)

Encouraging maritime transportation, which is another issue in the project, is one of the priorities. Based on the idea that the sea should be navigable for Izmir residents, it is aimed to increase its possibilities. It has been stated that the sea allows the city dweller to get out of the intensity of urban life, breathe fresh air, and rest while traveling from one place to another (Tekeli, 2010). Within the project's scope, necessary arrangements have been made for ferry services to operate until midnight, and new ferry piers have been built (Izmir Metropolitan Municipality, 2012, p.101). The Karantina ferry pier is an example of one of the works carried out in this direction (Figure 38). There are other places where other ferry piers are desired in the project designs.

Figure 38. Karantina Pier and Izdeniz ferry in Izmir (Source: Izmir Metropolitan Municipality, 2018)

Additionally, limiting vehicular traffic and making the waterfront one of the main pedestrian zones of the city is also a focus of the Izmirdeniz project. One of the steps to increase pedestrian use is Karantina Square. Firstly, It was noted that pedestrian priority is fundamental to all projects, but the bay is surrounded by high-speed roads (Izmir Metropolitan Municipality, 2012, p.101). Especially the part of the project in the Konak-Üçkuyular area was too narrow in terms of shoreline so limited change could be realized, such as the renewal of public spaces. Accordingly, the designers focused on bringing the Karantina Square on this axis to the seaside by building an underpass. Later, permits were obtained to widen the coastline between Konak and Uckuyular by 10 meters and to construct a tunnel at Karantina Square to increase pedestrian use. Mustafa Kemal Sahil Boulevard is a 6-kilometer long, embankment-shaped area with dense construction and high traffic flow and speed (Arslan, 2021). Hence, in front of Mithatpaşa Industrial Vocational High School and Hamidiye Mosque, it is aimed to create an uninterrupted pedestrian continuity that meets with the shore, as in Konak Square, and the vehicle road of Mustafa Kemal Coastal Boulevard is considered as an underpass. Thus, the square created above it with the undergrounding of the road within the scope of the project moves away from the intense traffic noise, expands towards the sea in front of Mithatpaşa Industrial Vocational High School, and creates a public space where the citizens meet with the sea after Konak Square (Figure 39).

Figure 39. Top view of Karantina Square (Source: izmirdeniz.com)

The Izmirdeniz project has worked to make the waterfront walkable and successfully connect destinations. Regarding coastal planning, efforts were made to create focal points at certain intervals on the waterfront. Along the coast, parks, playgrounds, sports equipment, picnic areas, and seating areas have been designed to create connections to the promenade. In this way, the coastal area has been strengthened by allowing the attractiveness of each of the different facilities added to the waterfront to enhance the other (Izmir Metropolitan Municipality, 2012).

The urban facilities designed to create a more suitable physical environment within the project's scope were designed with a "user-oriented design" approach. Ergonomic, ideal for disabled people, and developed based on the shared memory elements of the city, the urban facilities focus on becoming a part of the city's daily life by creating a social attraction center as well as their functionality (Izmirdeniz, no date). In the proposals within the design project, it was stated that it should be noted that the coast may lead to intensive and excessive use in some cases. Therefore, it was decided that the proposed solutions and materials should be tested for resilience (Izmir Metropolitan Municipality, 2012, p.98). It was mentioned that quality design objects would be used. However, when it came to implementation, the faults in material selection became visible. The faulty applications, which started with sloppy and poor-quality manufacturing, were photographed by the citizens and shared on social media (Arslan, 2021). It was also observed that no intervention was made in the old and deformed areas (Figure 40).

Figure 40. Some images of worn and deformed areas along the coastline (Source: photographed by author)

Another critical issue for social interaction is the usability of the waterfront for everyone. The Izmirdeniz project has prioritized the usability of the waterfront for everyone. The surveys mentioned in the previous sections are essential in this regard. During the project design phase, people of all ages and income groups were surveyed and interviewed (Izmir Metropolitan Municipality, 2012, p.18). After the survey, the protection of the environment, maintenance of the area, security, lighting, children's playgrounds, picnic tables, toilets, and equipment were deemed insufficient and unsuitable for people with disabilities. The waterfront, which was planned to consider people's lifestyles, wishes, tastes, and dreams, has been tried to be made more useful and attractive for the young, the elderly, children, the disabled, and cyclists; in short, for everyone. For example, in the Pasaport area, ramps and guidelines with tangible texture have enabled disabled people to move around the waterfront independently (Izmirdeniz, No date). With these researches, it was aimed to create preliminary awareness about the sensitivities that may arise in society. In the design project, additions were made in line with the demands.

In addition, strengthening relations with civil society was an important starting point for the project (Izmir Metropolitan Municipality, 2012, p.98). The ownership of projects by civil society will increase the likelihood of their realization and positively impact the formation of consensus among public authorities. Attention was paid to whether the requests of the community were met. In this respect, Izmirdeniz Project was selected for the book "Design for Social Innovation: Case Studies from Around the World" (Amatullo et al., 2021). The Leap Dialogues team included 45 projects

from 6 continents in the book, which contains examples of "design for social innovation" from around the world in public health, urban planning, economic development, education, humanitarian intervention, cultural heritage, and human rights. The book, published by Routledge, evaluates the design and implementation of new solutions that represent organizational change aimed at improving the well-being of individuals and communities.

At the same time, the survey included questions regarding the preferred activities on the waterfront: picnicking with family or friends, watching the sea, fishing, strolling, and taking photographs. From the actions identified in the survey, places for movement and physical and mental activity (recreation areas) have been developed and given new functions. Instead of ignoring the popular picnic activity with a top-down decision, they tried to turn it into a more controlled urban activity that would positively impact the lives of those living in and visiting the area (Izmir Metropolitan Municipality, 2012). Since the Karşıyaka and Bostanlı regions, where the shoreline is more expansive, offer more potential in terms of design, they have been able to create a sunset terrace, a viewing platform (papilio), a floating platform in the stream, shading structures, a designed pedestrian bridge, special seating units, landing ramps, sea stairs, artificial water elements, squares, cafes, groceries and canoe storage area for sailors, sports fields, chess tables, sports equipment, children's playgrounds, remote controlled car tracks, skate parks, and recreation areas were designed and implemented (Izmirdeniz, no date) (Figure 41). Along the entire waterfront, it is designed with facilities to meet the daily life needs of its users.

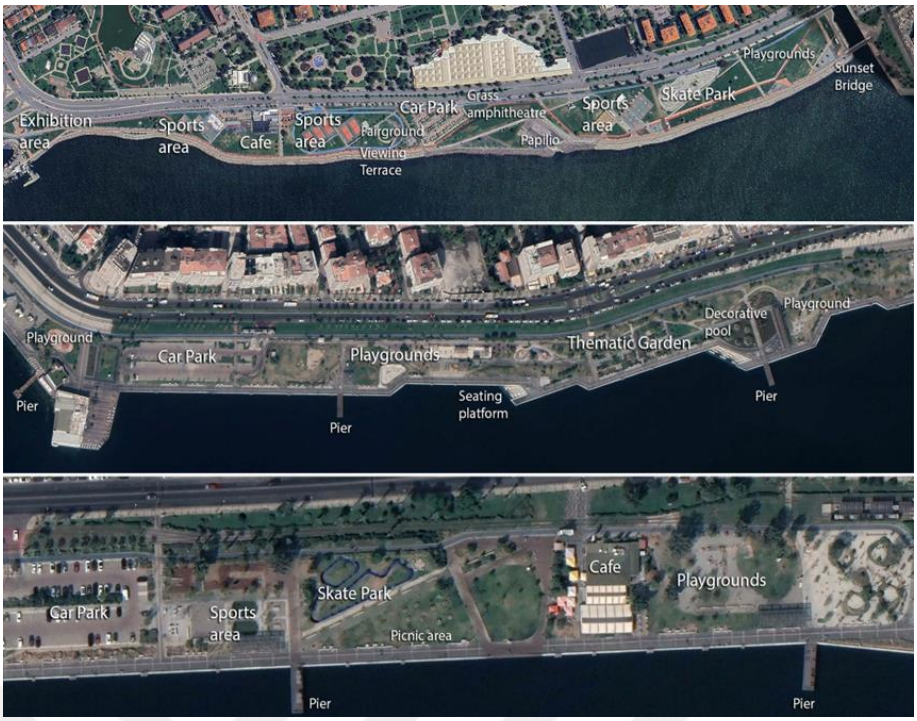


Figure 41. Facilities on Bostanlı-Karşıyaka waterfront (Source: Google Earth)

In Bayraklı, new spaces and functions such as picnic areas, beach areas, cafes, sports fields, parking lots, event areas, promotion and exhibition areas, social media areas and healthy living sports areas, tribunes meeting the sea, pedestrian bridges, stairs to the sea and wooden sun terraces were added by improving the limited communication with the sea (Izmirdeniz, no date) (Figure 42).

Figure 42. Facilities on Bayraklı waterfront (Source: Google Earth)

In the Alsancak-Konak area, seating units, lighting elements, pedestrian priority routes, information boards, directional poles, and signage were added to improve spatial quality. On the Konak waterfront, surrounded by cultural venues and transportation facilities, grass amphitheater design elements, areas with wooden pergolas, palm park, lighting features, and designed landscape areas were used (Figure 43). In the Göztepe section, water elements (fountains, etc.), shade and seating areas, viewing amphitheaters, unique coastal furniture, new wooden piers, plant terraces, and lighting elements were provided to increase the spatial quality of the waterfront.

Figure 43. Facilities on Konak waterfront (Source: Google Earth)

As noted above, as part of the Izmirdeniz project, new activities have been introduced to the waterfront, and existing activities have been strengthened (Izmir Metropolitan Municipality, 2012). Thus, it was aimed to attract more people to the shore and provide interaction. However, design projects include more possibilities than implementation projects. To appeal to everyone and meet the needs of everyone, spaces with different options were proposed in the design plans, and design studies were carried out. As a result, the Izmirdeniz project has taken steps toward strengthening the relationship between the waterfront and the city. A waterfront of mostly open public spaces has been created.

4.2. Cultural

In line with the framework obtained from Chapter 2, in this section, the data on the cultural dimension of the Izmirdeniz project are analyzed. In this context, the criteria

identified within the framework of the cultural dimension will be examined within the scope of the project. In the planning phase of the Izmirdeniz project, attention was paid to the historical and cultural values of the region to preserve the character of the region. Hence, the Cultural Workshop is shown as the project's origin (Izmir Metropolitan Municipality, 2012, p.7). The Izmir Metropolitan Municipality summarized the primary rationale for the Culture Workshop as seeking ways to transform Izmir, one of the cultural capitals of the Aegean, Mediterranean, and Anatolian civilizations throughout its history, into a city of culture and an international 'metropolis of culture, art and design' to become a 'world city' and a Mediterranean identity (Izmir Metropolitan Municipality, 2009).

Izmir's shortcomings and problems in the field of culture and arts were identified, and the Izmirdeniz project was born as a solution to these problems. In this context, region-specific qualities were identified during the design process, and common themes were tried to be identified. Although each region has its context, it was necessary to work on a main idea that would unify the designs. The main concepts to be emphasized in the design process were sea use, coastal use, transportation, festivity, and landscape (Izmir Metropolitan Municipality, 2012, pp.99-102). These themes were considered for each region, and ideas were developed. In addition, to create unity on the waterfront, the designers tried to determine a common identity and identified features in coastal equipment such as seating units, garbage units, etc. (Arslan, 2021).

The waterfront's culture and history were considered in the design work, and studies were carried out accordingly. Piers can be given as an example. The project aims to revitalize the wooden piers that have a place in the city's historical memory on Mustafa Kemal Coastal Boulevard. In this context, the wooden piers that were historically located on the shores of Izmir were built on Güzelyalı and Karşıyaka waterfronts (Figure 44). The wooden piers are also intended to contribute to the fishing activity, which is a part of the sea culture. At the same time, fishing rod units were built between certain piers on the coastline to support angling (Izmirdeniz, no date).

Figure 44. Pier on the shoreline (Source: Izmir Metropolitan Municipality, 2021)

The starting point for the Izmirdeniz project was to try to revitalize historical references wherever possible (Izmir Metropolitan Municipality, 2012). The use of Izmir boats was considered as one of the ways of addressing the issue. Izmir boats became a city symbol from the 1800s to the 1900s. At that time, they carried freight and passengers between the offshore ships and the Bay of Izmir piers. In 2005, new boats built following the 1880 shipyard drawings were brought to the sea. A total of 9 boats belonging to different institutions are used in various activities in the gulf, and maritime training is provided to interested Izmirites with the contributions of the Dokuz Eylül University Sailing Club (Izmir Metropolitan Municipality, 2012, p.34) (Figure 45). Boats that bring people together with the sea are exhibited at different points in the city. In this direction, the Izmirdeniz project has also tried to increase the number of boats in the bay.

Figure 45. A photo of then mayor Aziz Kocaoğlu on the historic boats (Source: Izmir Metropolitan Municipality, 2005)

Another way of addressing historical references has been to increase the image of sailing in Izmir and using the bay. Attention was also paid to sailing in the planning phase of the project. The most colorful aspect of Karşıyaka is seen as the sailing club and the activities of sailboats on the sea. The design and performance and activities working group focused on this issue and held meetings with representatives of Göztepe Sailing Club and Karşıyaka Sailing Club (Arslan, 2021). Based on the sailing races in Izmir's coastal culture mentioned in Chapter 3, the activities planned by the Izmirdeniz project for water sports were also realized. The Izmir Bay Festival was scheduled and announced that it would create a festive atmosphere in Izmir Bay and its shores with the canoe, sailing, and yacht races, concerts, shows, and different events (Figure 46). In an interview in 2017, the mayor at the time, Aziz Kocaoğlu, stated that the Izmir Bay Festival would be an important opportunity for Izmir residents to get closer to the bay and that he believed it would make a significant contribution to the city in terms of promotion, income and sporting activities. Subsequently, the municipality organized yacht, sailing, canoe, and rowing races for the Bay Festival in 2017, 2018, 2019, 2021, and 2022.

Figure 46. Sailing and canoe races from Izmir Bay Festival (Source: Trthaber, 2018)

As another issue, the sense of place has been given considerable thought in the project. Regardless of the approach taken in the project area, it is aimed to gain and develop the quality of 'place-ness' that is ultimately desired to be achieved in each project area (Izmir Metropolitan Municipality, 2012, p.9). The principles guiding the designs are to build the identity of "being a place", to improve the existing environment and increase its possibilities, to re-disclose the traces of the city's memory, and to locate new ideas that can be proposed within the current options.

The Izmirdeniz project also emphasized utilizing cultural and natural heritage in the urban landscape (Izmir Metropolitan Municipality, no date). In this context, the texture of each region was analyzed, and appropriate suggestions were made.

For example, in the Karşıyaka region, people, plants, animals, urban patterns, programs, and events were examined to provide diversity in the landscape. On the Karşıyaka side of the project, details that make the city dwellers feel the unique beauty and natural life of the Gediz Delta, one of the world's few bird sanctuaries, consisting of birds and reeds, have been considered. For this purpose, rocky and reedy areas were included in the landscape arrangements (Izmir Metropolitan Municipality, no date) (Figure 47). In the project, landscape arrangements that make you feel a natural life were studied, and applications were made. Shades, trees, and grass areas were also implemented, and the continuity of the landscape on the entire waterfront was desired. Also, about the Gediz delta being a bird sanctuary, the Flamingo Nature Park exhibition area was created on the Bostanlı coastline (Figure 47).

Figure 47. Reeds used as plant elements on the coastline (left) and Flamingo Nature Park exhibition (right) (Source: photographed by author)

At the same time, symbolic elements that draw attention with their historical references and designs were also included along the waterfront. An example is the

pedestrian bridge at Bayraklı Beach (Figure 48). The pedestrian and bicycle bridge over Bornova Creek on the Bayraklı waterfront was designed by Not Architecture to make the waterfront more accessible for pedestrians, cyclists, and service vehicles. The bridge, basically a transportation structure, aims to integrate pedestrians and other users who are on the move with the project and create a moving appearance that reflects its function (Itez, 2020). The fragmented and undulating façade of the design offers users various light and shadow plays at different times of the day. The bridge, which is seen as a symbol of the coastline by the public with its striking design, was awarded in the BigSEE Public and Commercial Buildings category within the framework of the Big Architecture Festival, one of the annual design month events based in Slovenia (Karakoç, 2021).

Figure 48. Bayraklı Pedestrian bridge (Source: Itez, 2020)

In addition, the Bostanlı pedestrian bridge and sunset terrace have also received many awards and have become one of the landmarks on the coastline (Figure 49). Among these awards are the public category award of 2017 in the Arkitera Employer's Award Competition organized by Arkitera Architecture Center and the award in the category of Building / Environment (Public Space Design) within the scope of the 'XVIth National Architecture Exhibition and Awards' program, which is organized by the Chamber of Architects every two years and aims to document and reward the current qualified architectural works in Turkey (Izmirdeniz, no date).

Figure 49. Bostanlı Pedestrian Bridge and sunset terrace (Source: Izmir Metropolitan Municipality, 2018)

Furthermore, examples of historical references along the waterfront can be seen in the Konak area. In the children's playground near the green amphitheaters in Konak, "sea"-themed play elements such as boats and lighthouses emphasized the city and coastal identity (Figure 50). In addition, a mosaic panel application was realized on a 100-meter wall on the coastal line between Konak and Karataş in line with the efforts to bring the citizens together with art in public spaces to revitalize and protect the urban culture and identity (Figure 50). This area, which young artists were involved in and realized, was designed to address the issues of Izmir and urban life. The mosaic panel application tells the story of city life, day and night, the sea, people, children, and Izmir as a whole, in which every color is present (Izmirdeniz, no date).

Figure 50. Playground (left) and Mosaic application (right) (Source: Izmirdeniz.com)

Another example of historical reference is the Monumental Sculpture symbolizing

Karantina Square. It was planned to put a work of art that would add meaning and identity to the Karantina Square, the ideas of the artists were consulted, the suggestions were evaluated, and the work of artist Günnur Özsoy, which depicts the people's claim to democracy and is compatible with the conceptual integrity of the area, was selected by the selection committee (Izmirdeniz, no date). The meaning of the chosen work is that the pebbles, which have been filing in life, stand up and become a whole together, evoking the people standing to shoulder and starting from a single piece and continuing by intensifying (Figure 51).

Figure 51. Monumental Sculpture in Karantina Square (Source: Izmir Metropolitan Municipality, 2019)

In the sculpture, where polyester material, which is easy to repair, lightweight, and resistant to external conditions, was used, white represents a whole nation. The 23 sculptures placed in the water pool are also said to emit freedom energy by reminding the sails of boats and the wings of birds (Izmir Metropolitan Municipality, 2019). There are other sculptures and design elements along the coastline, such as those mentioned above (Figure 52).

Figure 52. Some sculptures placed on the Izmir bay shore (Source: izmirdeniz.com)

The Izmirdeniz project has also worked to strengthen the opportunities and qualities the region offers for attracting people to the waterfront. In this direction, the project envisioned using the entire bay as a performance venue for festivals, shows, and events throughout the year to strengthen Izmir residents' relationship with the sea (Izmir Metropolitan Municipality, 2012, p.92). The project authorities have divided the 5th group as the show and events group. In this context, the design of the necessary tools and equipment for the festival, the decisions on how it will be organized and when it will take place, and the space-activity integrity were designed. The performance and activities working group prepared their designs and activities by interviewing sports clubs, skaters, cyclists, and fishermen. Events such as the Izmir Mediterranean Festival and Hıdırellez Festival were reconstructed as "People's Festival", while performing arts, music, cinema, theater, dance, contemporary art, and designs were evaluated comprehensively (Izmir Metropolitan Municipality, no date). Floating platforms have been planned where different activities in the event program spread over the whole year can take place, which can function as a stage and form a viewing plane when necessary.

The "Music on the Ferry" program, which includes amateur music performances, was planned to be implemented. In order to emphasize water sports such as sailing, canoeing, and surfing, sailing clubs are scheduled to be opened, and the participation of Izmir residents in angling is to be increased by providing logistical support. However, some of the proposed activities could not be realized or sustained. Although the music on the ferry continued occasionally, continuity could not be ensured. Concerts on the coasts kept on intermittently. The sports clubs to be established for sea sports, the shipyard for canoes, the floating platform for festivals, and the Hıdrellez Festivities planned in the project could not be put into practice (Arslan, 2021).

The skate park is another activity area realized within the project's scope (Figure 53). "Skate Plaza," which hosts Turkey's largest skateboard park with its theme of youth and sports, has also been put into service where those who use wheeled sports equipment such as skateboards, scooters, BMX bicycles, and rollerblades can safely improve their skills (Izmir Metropolitan Municipality, 2019).

Figure 53. Skate Park in Bostanlı (Source: Izmir Metropolitan Municipality, 2019)

One of the important steps taken in the Izmirdeniz project to improve the quality of urban life and turn it into an art production center is the Opera House (Figure 54). The design project included the opera house, and the attraction power it would create in the region was considered. It has been stated that the city has the potential to become a new attraction with its opera house (Izmir Metropolitan Municipality, 2012, p.43). However, despite reaching a particular stage in the construction, the project could not be completed and was stopped. It has been observed that no work has been done in the construction. In line with the goal of Izmir being a "culture-art city", the step taken to bring an opera house of international quality to the city could not be realized.

Figure 54. A visual of the planned Opera Center (Source: Izmir Metropolitan Municipality, 2021)

Another issue the Izmirdeniz project emphasizes is the facades of the buildings along

the bay shore. In order to strengthen the identity of the city and to add value to the coast, beautification of the facades was focused on (Izmirdeniz, no date). In creating the city skyline, buildings were seen as the city's showcase, and the appearance of the buildings in this area was given importance. In this direction, under the name of the Izmircephe, a unity of language (such as paint, shutters, billboards, and air conditioning outdoor units) was desired to be developed on building facades, and designs were made (Figure 55). However, it does not seem to have been implemented.

Figure 55. Facade designs made within the scope of the Izmircephe Project (Source: Izmir Metropolitan Municipality, 2015)

Lastly, the Izmirdeniz project has led to the development of different projects in terms of history and culture. In this context, within the scope of the strategy that includes bringing the historical heritage into urban life, the municipality has followed a similar path after the Izmirdeniz project experience and handled the historical axis of Kemeraltı-Agora-Kadifekale in the Izmir History Project (Tekeli, 2018, p.102). The planning phase of this project is still ongoing. In light of all this, within the scope of the Izmirdeniz project, studies have been carried out on the cultural and historical values of the city, and marinas, art centers, and festivals have been proposed to strengthen the relationship between the waterfront and the city and to develop tourism. Some of these suggestions have been implemented, and some have remained at the proposal stage.

4.3. Economic

In this section, the data on the economic dimension of the Izmirdeniz project are analyzed in line with the framework obtained from Chapter 2. In this context, the principles determined within the framework of the economic dimension will be explored within the project's scope. In the Izmirdeniz project, the waterfront has been used as a resource for economic growth. The Culture Workshop, which is the starting point of the Izmirdeniz project, aims to be a local government that leads and fulfills its responsibilities in making Izmir a city that continuously improves its place in the division of labor of the world economy (Izmir Metropolitan Municipality, 2012, p.8). In this context, strategies have been developed to achieve one of the dimensions of Izmir's vision - improving its place in the world economy. This brief analysis shows that three strategic choices can be made to realize the first dimension of the Izmir vision. These are:

- To stimulate the demand for design and innovation within Izmir's transformation into a city of design and innovation and to take the lead in developing the existing design capacity in Izmir,
- To try to strengthen Izmir's network of relationships among Mediterranean cities and make it an impressive focal point,
- To increase the externalities that Izmir, the hub of the Aegean urban region, provides through its specialized services and the necessary communication and transportation infrastructure to articulate the Aegean metropolitan area with the global world.

The workshop stated that a city like Izmir could improve its competitiveness in the world based on an economy that benefits from the externalities provided by diversified, multifaceted development dynamics (Izmir Metropolitan Municipality, 2009). In this respect, Izmir's role as a city of design and innovation was considered necessary in terms of contributing to its economic performance. The Izmirdeniz project is a result of this aim. In the financing part of the project, it was observed that the design teams initially worked voluntarily. In an interview with Arkitera Magazine, Hasibe Velibeyoğlu (2017), the project coordinator, described the project as a collective work of many volunteer designers. It was confirmed by the municipality that the designers were not initially paid for their design work, such as wages, royalties, accommodation, and transportation costs (Kent Stratejileri Merkezi,

2017). How to finance this planning activity, in which many designers started working, became a problem. One of the main reasons for this was that the municipality could not make the necessary payments according to the laws governing Izmir Metropolitan Municipality (Tekeli, 2018). Accordingly, instead of holding a design competition or going out to tender, a new model was created for its funding (Izmir Metropolitan Municipality, 2018).

The designers, who initially worked as volunteers, worked professionally in the later stages of the projects. The limited financial resources of the municipality tried to pay for the designers' work and cover the project expenses. Accordingly, the project was financed in a similar way to sponsorship. Since it was an Izmir project, it was thought that the leading names of the private sector in Izmir could finance the project. Meetings were held with the top big companies in Izmir, and the project was introduced. Under these circumstances, the problem of funding the Izmirdeniz project was solved innovatively; 17 major private sector organizations in Izmir came together and agreed to finance the project (Tekeli, 2018). In this sense, the mayor's close relations with business people helped finance the project. The sponsors also paid the salaries of the design teams in the later stages of the project.

As another issue, looking at the project's implementation phase, not all of the project could be realized at once, as it would take a long time, and realization possibilities were limited. Therefore, it was decided to implement the project in stages, and contractors were hired for the construction (Arslan, 2021). During the project's construction phase, problems arose from financial resources and contractors. The Opera House can be given as an example. The financing issue during the implementation phase frustrated the idea of bringing an Opera House of international quality to the city. The construction of the Opera House in Karşıyaka Mavişehir, which Izmir Metropolitan Municipality had included among its prestige projects in the previous period and tendered in 2017, has been blocked. Despite Mayor Aziz Kocaoğlu's statement that they have the economic power to put the Opera House project out to tender as soon as it is completed, and despite the start of construction in 2018, the construction of the building has been suspended (Karakoç, 2022). Due to increasing costs and problems in construction, the work has not been completed for five years. It was announced that the Izmir Metropolitan Municipality had

disagreements with the contractor company before the most crucial stage of the Opera House, 50 percent of which was completed, and the rough construction was only completed. (Figure 56).

Figure 56. Final view of the construction of the Opera Center (Source: Karakoç, 2022)

However, there are claims that the long-uncompleted project, which will burden the city's economic structure, will be changed (Karakoç, 2022). Accordingly, if the deal is finalized and the conditions become favorable, the Opera House function will be abandoned, and the building will be transformed from its rough construction state into another role. Besides the idea of changing the building into a city theater center, which was established by the Izmir Metropolitan Municipality last year, it was also stated that there were also ideas for it to be an elderly care and rehabilitation center. The fact that the construction did not continue and the allegations of change received many criticisms from the public (Altaylı, 2022). However, Izmir Metropolitan Mayor Tunç Soyer (2023) has announced that they are working to resolve the disputes and resolve the issue of sponsors for payments and that he wants to finish the construction as an opera house. Despite all this, the construction has not been resumed, and uncertainties remain.

The Izmirdeniz project is one of the steps taken to develop projects that will support the economy as well as the spatial development of the city and diversify "spatial transformation" practices to revitalize the local economy (Izmir Metropolitan Municipality, 2018). The project aims to increase economic activity by attracting more people to the waterfront. In terms of seasons, the city's waterfront is used

almost all year round in terms of climatic characteristics. At this point, the economic life of the waterfront continues throughout the year. Hasibe Velibeyoğlu (2017) noted that opportunities that increase the use of the bay (new and comfortable ferry services) and solutions that facilitate the relationship with the sea in the design areas (piers and fishing units) create momentum for the residents of the city to turn towards the sea and the waterfront again. Izmir's strategy of developing as a multi-sectoral port city, emphasizing the tourism and service sectors, and becoming a design city based on establishing a relationship with the bay and maritime culture is intended to bring economic vitality and new opportunities (Izmir Metropolitan Municipality, 2012). One of the efforts to increase opportunities related to the bay and maritime culture is the Izmir Bay Festival. Thanks to the festival, both the city and the waterfront are receiving more visitors and athletes.

Additionally, the works are expected to give meaning to the inner gulf coasts, increase the quality of space, and enrich the urban identity and visual image with original and functional designs. The Bostanlı Pedestrian Bridge and Sunset Terrace, which forms part of the Mavişehir-Alaybey coastal zone project, includes approaches or practices that will fundamentally change the Karşıyaka coastal zone and its limited relationship with the background in its current state and public life, and gradually the image of the district (Izmir Metropolitan Municipality, 2018). Examples include the Bayraklı pedestrian bridge and the monument sculpture in Karantina Square. Such original designs are intended to attract more locals and tourists to the waterfront. However, the specially designed Opera building, which is one of the strong sides of the project that will renew and improve the image of the city, and the viewing terraces of Susuzdede and Gümüşpala, which were developed regarding the historical elevator, one of the tourist attraction points of the city, could not be put into practice (Figure 57).

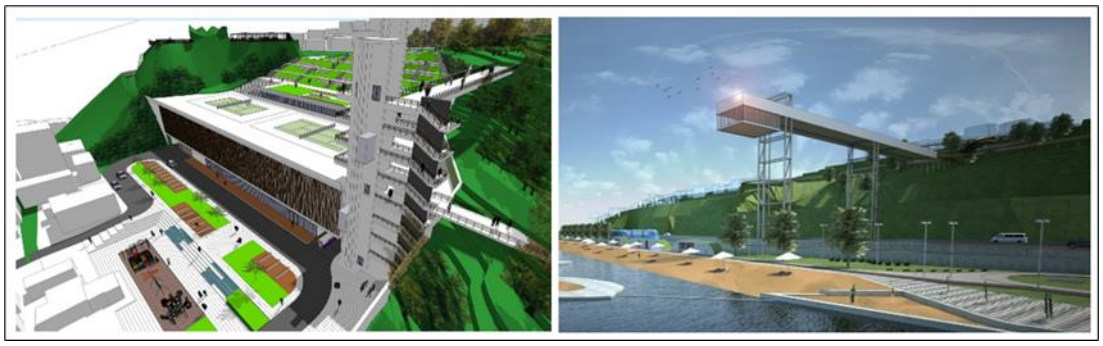


Figure 57. Susuzdede (left) and Gümüşpala (right) viewing terraces (Source: Izmirdeniz.com)

Consequently, if the designs in the design plan had been realized, they were expected to contribute to the silhouette and image of the waterfront. Due to the incomplete parts of the project, there has been a decrease in the expected number of visitors. As a result, the steps taken within the scope of the Izmirdeniz project to change the appearance of the coast to become a city of design and innovation tend to attract more people than before.

4.4. Environmental

In this section, the data on the environmental dimension of the Izmirdeniz project are analyzed in line with the framework obtained from Chapter 2. In this context, the principles determined within the framework of the environmental dimension will be examined within the project's scope. In the planning phase of the Izmirdeniz project, attention was paid to the ecological values to ensure the region's development. Environmental awareness has been identified as an essential factor in coastal development (Izmir Metropolitan Municipality, 2009). In line with environmental awareness, the cleanliness of seawater has been focused on. Izmir Bay has an ecological structure that includes people, plants, animals, urban patterns, programs, and events. However, after urbanization in the 60s, the form of the Izmir Bay started to change. The failure to install treatment systems during the rapid increase in the city's population polluted the gulf and made it smelly (Tekeli, 2010). This excessive population growth, lack of infrastructure, and rapid industrialization have led Izmir to face air, water, and soil pollution.

Pollution, which has been ongoing since the 1960s and continues at an increasing

rate, adversely affects Izmir, especially the bay. In the 1940s and 1950s, although people could swim from Karşıyaka pier, Konak, Güzelyalı, and Inciraltı, as a result of these events, pollution started to be felt in the bay, and it became impossible to swim (Izmir Metropolitan Municipality, 2012, p.15). The reasons for this were the lack of sewerage, the discharge of wastewater into the bay, the presence of the Gediz, which collects the water of large basins in the Aegean Region and reaches the bay, and the effect of small streams carrying wastewater discharges from the inland. During this period, municipalities in Turkey were unable to mobilize sufficient resources and were content with simply diverting wastewater away from homes via sewer lines and discharging it directly into rivers and the sea without any treatment (Tekeli, 2018, p.12). Accordingly, every mayor who came to the office took steps to clean the bay.

First, with the Grand Canal Project, all wastewater was treated in treatment plants and discharged into the bay. The establishment of water treatment plants followed this, the Ragıp Paşa Dalyanı's demolition, the Meles Delta's reclamation, the construction of treatment plants for industrial enterprises, and the cleaning and reclamation of streams. The fact that the city is located on the shores of an open sea alleviated the intensity of pollution problems caused by deep discharge to some extent (Izmir Metropolitan Municipality, 2018, p.12). Thanks to these efforts, as a result of all these works, carried out within the scope of the Izmir Grand Canal Project, the smell has been eliminated, and the bay's water quality has started to improve. After the Grand Canal Project prevented wastewater discharge into the bay, much additional work had to be done to restore the bay to its former glory. Although the sea is cleaner than it used to be with the efforts to clean the bay and install more treatment plants, this issue has also been emphasized in the Izmirdeniz coastal project (Izmir Metropolitan Municipality, 2012).

An important one of these projects is the "Great Bay Project". During the preparation phase of the Izmirdeniz project, it was stated that the problems created by the development of settlements around the Bay and the regulatory decisions taken and projects developed to eliminate these problems (Izmir Metropolitan Municipality, no date). The Bay of Izmir and its settlements create three main issues today. The first of these is the marine pollution caused by the wastes of the settlements surrounding

the gulf, the second is the destruction of biodiversity caused by sprawling accommodations, and the third is the siltation caused by the rivers around the Bay, which has started to fill the Bay and become an obstacle to ship traffic. Measures are being taken to tackle all three problems, and projects are being developed and implemented (Izmir Metropolitan Municipality, 2012, p.117). Accordingly, the "Great Bay Project" and the Izmirdeniz Project, initiated to make the gulf clean enough to swim in, were carried out simultaneously.

To protect and improve the existing water quality of the Bay and to ensure the sustainability of both the terrestrial and aquatic ecosystems, efforts have been initiated to clean the stream mouths flowing into the Bay, to open a circulation channel in the north, and to clean the materials on the bottom of the Bay. However, although the oxygen level in the water increases and the living species increase with these studies, experts say it is only possible to swim in the sea if the Bay is completely cleaned of dirt. Professor Doğan Yaşar (2020), from Dokuz Eylül University Marine Sciences and Technology Institute, stated that the prerequisite for a 'swimming bay' is the purification of organic pollution flowing from the streams and mentioned the necessity of clean water coming from the streams for seawater cleaning. Likewise, citizens state that the water is still cloudy and smells and cannot reach a swimming consistency without being thoroughly cleaned (Naneci, 2020). It is a fact that the bad smell on the coast could not be eliminated entirely. Sea pollution appears to be widespread from the coast (Figure 58).

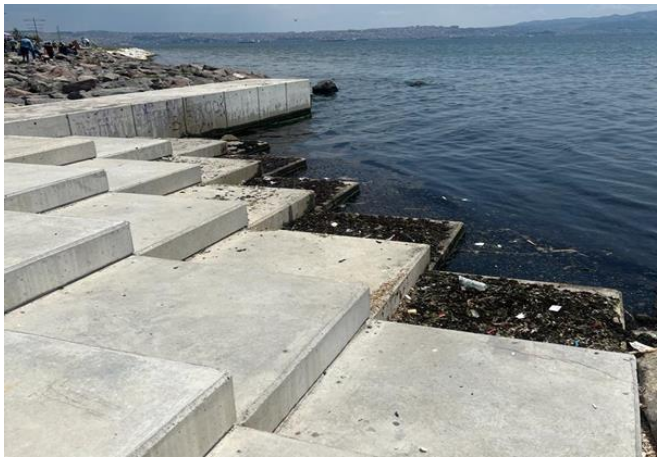


Figure 58. Pollution seen on platforms landing on the sea (Source: photographed by author)

In the Izmirdeniz project, the goal of being able to swim in the Bay is also included in the designs. In the past, it was stated that the sea was not only something that could be seen from afar and walked by but also something that could be swum in and that this was a goal that needed to be realized again in the lives of Izmir residents (Izmir Metropolitan Municipality, 2012, p.37). In this context, the project wanted to achieve the goal of a swimmable bay, and the design teams worked on this. One of the working areas for this goal was Bayraklı. Since Bayraklı is the region where the sea level is shallow along the Bay, it was imagined as a waterfront where Izmir residents come into contact with the sea and touch the sea. For this reason, the line surface where the shore meets the sea is designed as a variable surface, in some places as a beach, or sea bath, in some places as wooden decks or tribunes that meet the sea (Izmirdeniz, no date) (Figure 59). Due to the ecology and behavior of the sea, the planned sand beach could not be realized. The effect of sea currents was too strong to allow a natural-looking sand beach (Arslan, 2021). As a result, a shoreline in Bayraklı, which is not in direct contact with the sea, was designed, and beach furniture was installed (Figure 59). Concrete sunbeds and shade elements associated with the beach, stairs down to the sea, and wooden sun terraces were designed.

Figure 59. Designed Bayrak beach (left) and implemented beach (right) (Source: izmirdeniz.com)

Additionally, marine scientists guided the designs against the nature and behavior of the sea. Recommendations were received on the parts of the project that would affect the sea (foundations, filling areas, and pier construction), and conclusions were reached that filling the sea is not ecologically correct and that building platforms

with pile foundations has other negativities (Izmir Metropolitan Municipality, 2012, p.99). Accordingly, the implementation of the designs was shaped according to these recommendations.

Another aspect of environmental awareness in the Izmirdeniz project is the protection and development of green areas. The designs are planned to minimize damage to existing green spaces. In the project, it was reported that while the existing tree texture was preserved along the coastal arrangement, this texture was enriched with new trees and plants (Izmirdeniz, no date). It was requested to be renewed with trees and landscaping works suitable for the coastal climate. In particular, the Bayraklı region was identified as the region with the lowest satisfaction in terms of green space, and the capacity was increased, and thousands of trees and shrubs were planted (Figure 60). At the same time, green areas in the Karşıyaka, Alsancak, and Güzelyalı districts were landscaped, and grass amphitheaters were designed and afforested (Figure 61).

Figure 60. Green areas in Bayraklı (left) (Source: izmirdeniz.com)

Figure 61. Grass Amphitheatre (right) (Source: izmirdeniz.com)

In Karşıyaka, rocks and reeds were placed by the region's value. A thematic garden consisting of trees, shrubs, and groundcovers from the Aegean climate zone was designed for the Karşıyaka section of the project (Izmir Metropolitan Municipality, 2020) (Figure 62). Within the garden, pathways and resting areas have been created among various plants. An open workshop area was made, allowing planting and seed workshops to be organized. However, no workshops were identified.

Figure 62. Thematic Garden in Karşıyaka (Source: photographed by author)

Furthermore, it was stated that the Izmirdeniz project was designed with ecological approaches such as recycling rainwater into the soil and natural drainage systems (Izmirdeniz, no date). However, due to global climate change, excessive rainfall can

occasionally cause sea flooding. In the bay of Izmir, the waterfront is flooded in places due to sea water overflowing as a result of sea swell (Figure 63). Accordingly, there is criticism that the inadequate waste and stormwater system, which backs up seawater and floods streets, could have been improved but has yet to be (Avcan, 2018).

Figure 63. Images of seawater overflowing in Izmir Kordon with rain shower (Source: Yeniasır, 2018)

In addition, given its seasonal characteristics, shaded areas have been designed in Izmir, where the number of sunny days is high due to its geographical location, in order to prevent coastal use from being affected (Izmir Metropolitan Municipality, 2012). For example, wooden pergolas were designed and installed between Konak and Karataş (Figure 64). However, it was generally observed that the shaded areas were insufficient even though Izmir is in a hot climate. It was noticed that people who came to the shore sat on the chairs they brought themselves under the trees due to the lack of shade in the seating elements (Figure 65).

Figure 64. Wooden Pergolas in Konak (Source: izmirdeniz.com)

Figure 65. People sitting on their own chairs in shaded areas instead of seating furniture of coast (Source: photographed by author)

The Izmirdeniz project also emphasized the suitability of Izmir to become part of the world's adventure in thinking about sustainability (Izmir Metropolitan Municipality, 2012, p.13). One of the city's visions is to ensure that the development of the city fulfills the condition of ecological sustainability. It is crucial regarding Izmir's geographical location and the quality of life it seeks to realize. Since the Rio Summit in 1992, when the goal of sustainable development was adopted, research has provided important clarity on achieving sustainable urban development. In this respect, the European Urban Charter adopted by the Council of Europe has been an essential guide (Izmir Metropolitan Municipality, 2012, p.9). Using the European Urban Charter and scientific studies on this subject, the goal of increasing urban public transportation has been set. The environmentally friendly tramway application is an example of this in this direction.

Lastly, the Izmirdeniz project has led to some projects in terms of environmental awareness. Following the Izmirdeniz project, the Municipality developed the “Izmir Green Infrastructure Strategy” to create a resilient urban structure against the current socio-ecological problems of the city (Izmir Metropolitan Municipality, 2018, p.120). Environmental investments, sustainable transportation infrastructure, new generation parks, recreation areas, and sustainable energy action plans are envisaged as a synergetic effect on mitigating and adapting to the impacts of climate change. Working groups were formed in this context, and the “Izmir Green Infrastructure

Expert Workshop" was held. Five themes were identified in this workshop; Planning and governance, Water areas, Green areas, Corridor and connections, and Buildings (idle and repaired areas). In light of these five themes, the project activities (on a theme basis) to be carried out with internal and external institutions/units have been determined, and the relevant municipal departments have committed to include them in investment programs (Izmir Metropolitan Municipality, 2018, p.120). The work carried out within the scope of this project continues. As a result of all these projects and designs related to the environment, ecological awareness has been tried to be brought with the Izmirdeniz project, and applications have been made for this purpose.

4.5. Political

In this section, the data on the political dimension of the Izmirdeniz project are analyzed in line with the framework obtained from Chapter 2. In this context, the criteria identified within the framework of the political dimension will be explored within the project's scope. The Izmirdeniz project has developed as a result of policies based on the development of the city as a multi-sectoral and port city, improving the quality of life and design in the living environment, and establishing a relationship with the bay and sea culture (Izmir Metropolitan Municipality, 2018, p.116). Developing implementation of the project involves communication with designers, experts, and, depending on the subject of the project, sports clubs, associations, and communities.

The project is seen as a participatory design project. As a vision, the Municipality has defined an understanding of governance in democratic and participatory practices that respect human dignity. This project has emerged as an innovative way developed by the Izmir Metropolitan Municipality administration within its powers and possibilities, as traditional development plan approaches needed to be revised in various respects to achieve the desired results. In this scope, the goal of "realizing an intensive and high-quality participatory governance in urban project development and decision-making processes with the awareness of respecting people's right to live in dignity", which is included in the vision of Izmir, was developed (Izmir Metropolitan Municipality, 2012, p.7). With this approach of the Municipality, a collective project has emerged that has progressed through intensive meetings and

discussions with the participation of approximately 100 experts in their fields. Accordingly, as a result of this understanding, the Municipality placed a participatory plaque with the names of the experts in Demokrasi Square (Figure 66).

Figure 66. Thank you board for the project participants (Source: Dündaralp, 2019)

A collaborative urban design project was made possible with a fund of equal contributions from private companies doing business in Izmir (Tekeli, 2018, p.82). In this direction, the management fully participated in the meetings and strongly represented the Municipality. The design teams also said they supported the Municipality's participation and acted as a catalyst in meeting the demands (Arslan, 2021). However, as the project was the first interdisciplinary project of the Municipality and involved many participants, there needed to be better communication and cooperation between departments. The problems attributed to the lack of collective working experience were solved by learning through experience and collaborating with different actors (Arslan, 2021). In this way, the understanding of project management through a participatory process was experienced in practice.

Moreover, A public-centered municipalism approach and policy dominate the project. Public participation was also emphasized, and the way was kept open for the residents to participate in the decisions about them. In this regard, as mentioned in the previous chapter, Ege University was contracted to conduct a public survey and prepare an "Izmir Province Coastal Post-Use Assessment Report" (Izmir

Metropolitan Municipality, 2012, p.18). These surveys served as a guide for the design strategy and methods to follow. The project was designed as a constantly evolving system, flexible and open to suggestions. When the design product, which emerged with the participation of many professionals, reached a particular stage, it was presented to different segments of society and opened to their criticism and suggestions (Izmir Metropolitan Municipality, 2018, p.80). However, Aziz Kocaoğlu, the mayor at that time, stated in an interview in 2018 that after the design work was done, the coastal project was presented to the Professional Chambers and the people of Izmir and that they were asked for suggestions. Still, despite this, he noted that they received a reaction that they were not included in the process at the very beginning. At this point, it was criticized that the public did not participate in the design meetings despite so many participants. At the same time, there are criticisms that the project team did not include academics, experts, and consultants from social sciences such as sociology, psychology, geography, business administration, and communication and that the whole project was handled as an engineering-architecture-design project, even though the focus of the project is on human beings and their behavior towards the coastal space (Avcan, 2017).

As mentioned above, the Izmirdeniz project was shaped by a series of meetings. The project emerged at the October 24, 2009, Izmir Cultural Workshop, was discussed at the May 31, 2011, Design Forum, and was examined and designed at the December 2011 kitchen meetings (Tekeli, 2018). Following a participatory working process, a new office was established in the Izmir Metropolitan Municipality to implement the idea projects. The office was structured as an urban design unit within the Urban Design and Urban Aesthetics Branch Directorate in the bureaucratic structure of the municipality. Within the framework of existing planning conditions, zoning legislation, and coastal legislation, the office was responsible for conceptualizing idea projects, preparing implementation projects and tender legislation, coordinating with other units within the municipality, meeting with manufacturers, dialoguing with producers, and supervising services at the construction site (Izmir Metropolitan Municipality, 2018, p.117). In order to inform and involve people, a website called Izmirdeniz was established (Figure 67). This website provides information about the project, including the design areas, realized areas, publications, awards, and current news. In this way, it was aimed to involve and inform the citizens in the project.

Figure 67. The website of Izmirdeniz

When the project process is analyzed, it is seen that the project entered the implementation phase shortly after the preparation of the designs. The municipality decisively started implementing the parts that did not require the center's approval to ensure the project's realization despite any obstacles (Tekeli, 2018). Areas without barriers to project development regarding legislation and a design problem were selected as priority implementation areas. Since the holistic realization of the project would take time, small intervention areas were defined, and design and implementation studies were carried out. In a long-term project, it was aimed to achieve results in the short term. However, it was stated that the time constraints for the immediate start of the project caused a setback in implementation. At this point, criticisms were made, such as the need for the project to be spread over a more extended period, to be discussed more, and to go through a test phase where feedback could be received (Arslan, 2021). In other words, there were problems in terms of both time and permission in the transition to the implementation phase.

The project's implementation phase progressed more problematically than the design phase, and the designers stated that they were not sufficiently involved in the control and realization of their projects and that this was the most disadvantageous part of the project. The designers concretely expressed the failure of the project by saying that the project was implemented incorrectly, that a healthy relationship with the sea could not be established, that what was built did not coincide with the initial designs,

and that the urban furniture was placed carelessly (Avcan, 2017; Arslan, 2021).

At the same time, there were disagreements between the local government and the central government throughout the project process. In the early stages of the project, during the design process, Izmir Metropolitan Municipality experienced a judicial crisis instigated by the central government (Tekeli, 2018). Despite the problems, the municipality continued with the project. Another problem stemmed from Izmir Metropolitan Municipality being an opposition municipality. Since these plans are identified with the actions of an opposition municipality, the central administration imposes a systematic obstruction and delay in the approval and implementation of these projects (Tekeli, 2018). In the face of such a delay imposed on the project by the central government, it becomes a matter of contention between the local government and the central government and has been implemented "gradually" and has progressed incompletely. One of these unrealized designs is the Alsancak area. The proposed platforms on the sea, shops, and a marina for the Pasaport could not be realized due to permission problems from the Ministry (Figure 68).

Figure 68. Design of Pasaport (Source: izmirdeniz.com)

In addition, objections were received and could not be enforced because some of the elements designed (sea baths, floating platforms, and sailing piers) for the Kordon were within the protected area declared by the Ministry of Culture and Tourism (Arslan, 2021) (Figure 69). In this context, the designs proposed in the Alsancak area could not be realized and were limited to some arrangements, such as lighting and signage. Furthermore, the Konak Tunnel project implemented by the Ministry of Transportation and Infrastructure affected the strategies and designs applied to the

Izmirdeniz project area. Accordingly, although the designers planned to reduce the density in the Kemeraltı area, the traffic there has increased with the tunnel (Arslan, 2021).

Figure 69. Design of Kordon (Source: izmirdeniz.com)

As another example, overpasses and underpasses were proposed in some areas along the waterfront and required permission from the Ministry of Transportation and Infrastructure. In this context, the municipality obtained permission to create Karantina Square and the undergrounding of the road. However, permits could not be accepted for the project's intersections with highways and viaducts. All interventions on the sea and the coastal edge, such as the construction of a bicycle bridge over the Meles stream and the construction of more enormous piers, structures, boat moorings, and docks, could not be realized as they required the approval of the relevant ministries (Arslan, 2021).

In particular, none of the designs (open-air cinema, floating platforms, marina) for the shoreline, between Bostanlı Ferry Pier and Zübeyde Hanım Wedding House, in Karşıyaka have been implemented so far (Figure 70). Although artificial islands, a boat park, restaurants, a marina, and Meles eco-park in Bayraklı (Figure 71), a pier with stairs in Güzelyalı, neighborhood marinas, and boat parks (Figure 72) were proposed, they could not be realized due to the difficulties of the approval phase. Instead of the large piers designed, piers within the municipality's authority were placed. Due to permitting problems with the Ministry, the Uçkuyular- Konak line of the project was limited to coastal landscaping with a pedestrian walkway (Arslan, 2021). The central government did not accept the city terrace and elevators in

Gümüşpala and Susuzdede. The parts of the project that have been realized are designs that are within the authority of the municipality and limited by the central government.

Figure 70. Marina and Open air cinema in the designs of Karşıyaka region (Source: izmirdeniz.com)

Figure 71. Small islands design in Bayraklı (Source: izmirdeniz.com)

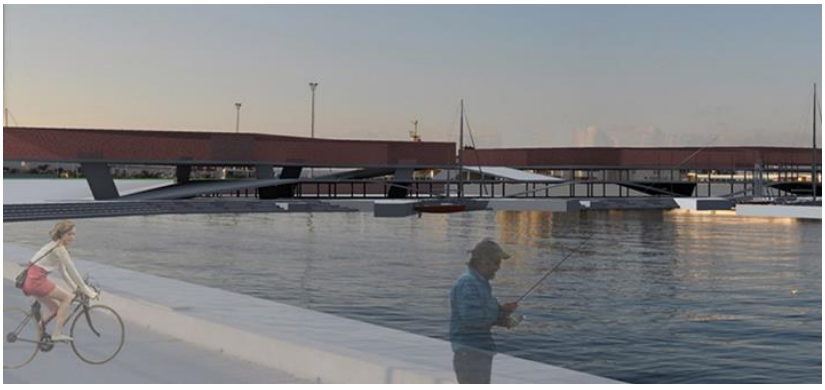


Figure 72. Marina design in Güzelyalı (Source: izmirdeniz.com)

As another issue, examples of coastal design projects in different countries were utilized in the design process. They examined world examples regarding participation and organization in line with the policies to be implemented (Izmir Metropolitan Municipality, 2018). Following the studies mentioned in this context, the municipality has created unique policies for this project. Since the Izmirdeniz project is a waterfront transformation project, it is a project that will be completed in stages over a long period. The project was initiated under the leadership of Aziz Kocaoğlu, the mayor of the period, and continued after the arrival of Tunç Soyer. It was included in urban policies and strategic plan reports during both mayoral terms (Izmir Metropolitan Municipality, 2015;2020). Nevertheless, since the project emerged from the vision of Aziz Kocaoğlu, it progressed faster during his term. As a result of all these explanations, the policies implemented by the municipality for this project in both periods can be seen.

4.6. Findings Through the Dimensions

Above, the Izmirdeniz project has been analyzed in line with the dimensions and principles derived from Chapter 2. In this context, it is seen that it has both positive and negative features under the social, cultural, economic, environmental, and political dimensions. According to the research findings obtained from the project, the outcomes, the discussion, and recommendations are presented in this section. However, it is understood that no dimension can be evaluated in isolation. The characteristics of these dimensions are interrelated. The features of each dimension affect each other. Looking at these, many important points emerge.

For example, the project aims to provide an uninterrupted pedestrian and bicycle route along the coastline, and steps have been taken to achieve this. Although continuity is ensured in most places and pedestrian fluidity is tried to be solved with the newly created coastal roads, it is observed that the continuity between Alsancak and Alaybey cannot be easily provided on a pedestrian and bicycle scale due to the Alsancak Port and highways such as Altınyol, Liman and Anadolu roads. The harbor area, which results in a non-public area along the coast, negatively affects both accessibility and public use. In this context, based on the importance of the port for the city of Izmir, the idea of moving the port is not considered appropriate. Moreover, moving the port is not seen as feasible for both economic and political

reasons. Therefore, an observation terrace and pedestrian path continuity can be provided with viaducts behind the harbor in order to maintain the relationship between the waterfront and the city.

Another issue where economic and political factors have an impact is accessibility. In terms of accessibility, the project has been a significant success in terms of public transportation and alternative vehicles. Solutions to facilitate transportation, such as bicycle rentals, additional ferry services and trams have been provided. At the same time, it has been determined that the project also works to reduce private vehicles in coastal areas. Since the coastal and residential areas, which constitute a large part of the project's scope, are cut by a wide and fast road, it is difficult to establish a relationship with the sea. In this regard, taking the road to the underpass at Karantina Square has made a positive contribution to make the waterfront a pedestrian area. These interventions are costly and require permission. However, more solutions need to be developed along the entire bay coastline to make it easier for users to cross the road and get to the beach.

On the other hand, although the project develops the coast as a public space and recreational activity area, there are deficiencies in comfort and quality (Arslan, 2021). Poor quality and deformed materials can be seen on almost the whole coast. It is also a visible problem that deformed areas are not renewed for a long time. This deficiency is, due to the lack of quality materials and the inability to ensure their maintenance and renovation, as a result of financial reasons. Comfortable coastal furniture should be provided for more people to spend more time. In addition, the project was found insufficient in terms of functional diversity and coastal focal points. Especially in Bayraklı and Karşıyaka regions, it has been determined that activity opportunities and usage for sports areas have increased. However, it is seen that the project does not cover different areas except for some cafes, sports, and picnic areas and is limited to public open spaces. In this direction, the desired art centers, elevators, and watchtowers that would provide more social interaction could not be implemented. As in the Hafencity example mentioned in Chapter 2, in order to transform the waterfront into a living part of the city, it should be functionally developed by including different sectors such as commercial, residential, entertainment, and art. This requires more financial resources.

Another important point, the project is seen to emerge from objectives that are in line with the cultural dimension. One of the project's goals is to ensure the continuity of the social and urban elements that have given the city identity from the past to the present. The fact that the project emerged with the goal that becoming a city of culture, art, and design in the Cultural Workshop held in 2011 shows this. The cultural dimension is more dominant than other dimensions. The steps taken toward the history and culture of the waterfront have a positive impact. However, it is seen that the studies on the industrial and maritime past of the city with the harbor, which has a place in the city's history, are insufficient. In this direction, some industrial and maritime heritage buildings can be restored and put into use. In addition, it is significant to protect and preserve registered monuments such as coastal mansions, of which very few have survived to the present day. In this direction, the mansions along the coastal line can be used for sociocultural functions, and city dwellers can enter these buildings to see the spatial understanding of the period.

Like mansions, boats, which have a place in the city's history, can also be given more space. More use can be made of the bay, such as boat trips. As mentioned in Chapter 3, sea baths, which are part of Izmir's coastal culture, can also be located at specific points on the shore. In fact, the Izmirdeniz project was intended to create a beach in Bayraklı. However, although furniture resembling sun loungers was placed to give a beach atmosphere, the water could not be cleaned, and a socio-cultural relationship with water could not be established due to environmental reasons. Yet a city by the sea needs to have a relationship with water. In this sense, the city of Copenhagen can be taken as an example by using water as a cultural element and defining sea baths and water sports. At the same time, the waterfront's historical and cultural traces and uses can be recalled as symbols. Along the shoreline, various billboards can be used to introduce the city to images and places with historical significance (sea baths, horse-drawn tramway, open-air cinemas, etc.) and to create defined focal points along the shore that do not obstruct the public flow.

On the other hand, like in the case of Bilbao, more iconic buildings can be brought in to give the waterfront unique qualities and create a sense of place. In fact, the Izmirdeniz project was designed to put certain landmarks on the shore and wanted to

develop it culturally. Accordingly, the planned Opera House can be seen as an attempt to create an iconic building on the water's edge. However, economic and political reasons did not allow these cultural structures to form on the coast. Another point to be noted is that although the project's main purpose is to integrate with art, there are not enough activities for this purpose. Despite occasional concerts and races, the absence of events such as open-air movie screenings and Hıdirellez festivities, as mentioned earlier, indicates that fewer events were held than planned. For this reason, the bay shores are expected to have a more content-rich strategy, and cultural, concerts, races, art events, and exhibitions that take place in certain periods should be organized at more frequent intervals. The use of the waterfront should be made attractive by adequate promotion of the events, and summer and winter events should be planned separately to ensure the four-season use of the coastal area. Since the main emphasis of the project is on cultural development, more funding should be allocated to this issue.

It is clear that all the above-mentioned shortcomings and issues that need to be improved are in some way related to the economic and political dimensions. The disruption of some parts of the project due to financial reasons has shown the need for a more comprehensive cost assessment at the beginning of the project. As mentioned in Chapter 2, research has also shown that for a successful transformation process to take place, an organization in which the actors and their roles are well defined and the financing model should be well resolved. By taking a more serious approach to financing, the local government can act as an engine to mobilize implementation, while the private sector can act as a supporting actor in guiding project development and funding. It is also concluded that the contractors contracted to implement the project's designs have been wrongly selected and should be selected more carefully (Kent Stratejileri Merkezi, 2017). In this context, financial resources should also be considered for the waterfront's operation, repair, and maintenance.

Moreover, the Izmirdeniz project also has shortcomings in terms of providing employment for the public. As noted in Chapter 2, research has confirmed that for balanced economic development, the direction, scale, and nature of employment arising from coastal related activities should be investigated, and that taking jobs into account in the relationship between coastal areas and coastal activities will benefit

the communities living in these areas. In this direction, areas that will provide employment on the waterfront can be developed. Mobile stall sales in the coastal area can be supported and regulated. Mini-bazaar areas can be organized in specific coastal zones. Like in the example of the Baltimore Inner Harbor, new functions to be added to the waterfront (sports stadiums, conference centers, arenas, museums, parks, concert halls, etc.) and upgrading the spatial quality of these living environments can also attract visitors and especially tourists to the waterfront and increase employment. Each added amenity will increase the number of people coming to the waterfront and lead to economic and social development.

At the same time, the economic inefficiencies of the Izmrideniz project prevented further progress in the environmental dimension. Accordingly, environmental awareness has been developed, and it has been observed that studies have been carried out in this regard. However, the project's slogan of making the bay swimmable has not been achieved (Yaşar, 2020). It is known that it is still risky to swim in the bay. Although the Great Bay Project has been initiated by the Municipality, it is important to plan financing more comprehensively for the implementation and continuity of the measures taken to clean the water. The factors that pollute the coasts need to be reconsidered by allocating more funds institutionally. The issue of clean water will enable the project to develop in the social and cultural dimension, which will enable more activities. Research has revealed that the cleanliness of the water is essential for establishing a healthy relationship with the waterfront.

Another issue, increasing green areas, has been successfully realized with the project. However, due to inadequate financial resources allocated related to the economic dimension, it was observed that rainwater collection was not sufficient (Avcan, 2018). In this context, infrastructure and drainage systems on the waterfront should be improved, and upper and lower currents and wave movements should be well analyzed. In addition, although pergolas have been installed with the project, it has been determined that more shaded areas should be provided in a sunny city like Izmir, where intense heat is experienced, especially in summer. At this point, the fact that most of the project consists of open public spaces has a negative impact on this, while closed public spaces should also be added. Developments in this direction will

bring more people to the coast and will improve the social dimension.

Finally, the political dimension of the project also has features that are relevant to other dimensions and need to be improved. The Izmirdeniz project is the municipality's first participatory design project and therefore involves diverse decisions. It is a positive feature that the project design process is transparent and flexible, that surveys are conducted with coastal users that the designs incorporate their wishes and needs, and that it proceeds in a way that is open to participating professionals' comments, ideas, and suggestions. However, although comments were received through surveys, there are some deficiencies in terms of public participation in the project. The absence of a member of the public in the meetings held during the design process and the absence of experts from social sciences are negative features of the project (Avcan, 2017). In this context, the users of the area should be involved in the transformation process, different designs should be produced by considering their opinions, and a project should be implemented by considering the public's choice with multiple proposals.

Local people should be informed about all kinds of plans, designs, and organizations in the coastal area. Sharing meetings should be organized at regular intervals, targeting public participation. At the same time, awareness-raising activities should aim to create public demand for information about the development of the Izmir Bay coastal area. The public should have the right to know, discuss and oppose projects related to Izmir's waterfront on a common platform. To this end, a platform should be created to assess the constructive criticism and opinions of civil society organizations and the public, using appropriate media tools, not after the project is completed but before its implementation. At this point, progress can also be made in the social dimension by capturing the public spirit.

There are also problems with the project schedule due to economic and political reasons. It was found that such a long-term project was implemented in the short term. The project wanted to be implemented immediately because of the problems with the government. Instead of partial projects prepared in line with the short-term goals of local governments and the private sector, they should be handled in line with the city's development vision within a holistic planning approach framework. As

mentioned in Chapter 2, research has demonstrated that instead of short-term and piecemeal approaches, practical, detailed, and discussed changes freed from time pressures can only lead to development. In addition, political obstacles have caused projects to fall short, with many designs not being implemented and thus failing in some ways (Arslan, 2021). As a result, social, cultural, and environmental features have not developed sufficiently as the designs have not been realized. However, coastal areas are too sensitive to be sacrificed to political differences. In this respect, the neutrality of the coastal alliance to be established should be guaranteed. During the design process, the coastal protection legislation of the country should be carefully examined, and planning decisions should be shaped within the framework of the articles. Since urban projects are long-term projects, they should not be interrupted by the changing ideas of different governments and mayors, and stability should be ensured.

CHAPTER 5: CONCLUSION

As emphasized throughout the thesis, waterfront design and transformation projects have become a necessity for coastal cities. The present findings confirm that waterfronts offer a different understanding of urbanism to the city due to their attractiveness, inviting scale, different geography, and primary settlement location. Within the framework of the existing potential of rapidly changing and developing cities, it is a gain for cities in every way to bring the urban coastal areas, which are a part of the city that has started to weaken and are not actively used, back to the city and to revitalize them by providing new functions. The issue of waterfront projects, which began to be researched as a subject of literature in the world in the 1960s and in Turkey in the 1980s, is still up to date worldwide.

Based on the waterfront's importance, this thesis examines the relationship between the waterfront and the city. For this purpose, answers to the questions of what urban coastal concepts are, how urban waterfronts have developed throughout history, how post-industrial coastal areas have been reconsidered in the leading cities of the world, which issues have been given importance in this reconsideration process, and how coastal uses have diversified have been sought. Furthermore, research has been included in order to understand the issue of urban waterfront transformation in more depth, how these projects have been realized and what kind of model they are based on. Following this, a framework shaped by the social, cultural, economic, environmental, and political titles was distilled based on the principles of urban waterfront transformation approached developed Torre (1989), Breen and Rigby (1996), Urban 21 (2000), Bruttomesso (2001), Krieger (2004), PPS (2009), Jones (2013) and Evans et al. (2022). In this research, the Izmirdeniz project is analyzed to contribute to Turkey's transformation model in line with this framework.

Overall, this study strengthens the idea that the Izmirdeniz project appears to include social, cultural, economic, environmental, and political dimensions. As mentioned before, these findings show that there are positives and negatives within each dimension. In the Izmirdeniz project, cultural dimension features appear as the project's starting point. With the project, they wanted to create a culturally developed

city. However, each dimension has interdependent features and cannot be considered separately from each other. For example, it is more likely that political and economic reasons have contributed to the incompleteness of the project. Lack of funding and disagreement with the government became a problem during the project's implementation phase. Due to these reasons, many of the designs and structures promised to the public could not be realized. Unrealized designs had a negative effect on cultural and social development. The project's development in economic and political directions will ensure the development of social, cultural, and environmental dimensions accordingly. The main conclusion that can be drawn from this is that when the completed version of the project is considered, it is observed that it is a public open space approach that is mostly limited to coastal arrangements. At the same time, although the project is incomplete, as a result of the evaluations made in the field study carried out on the coastal line of the bay, it is possible to say that the vitality realized in the region along with spatial transformations has been achieved through improvements in basic needs/structural and environmental requirements, quality of life/physical and psychological comfort and social benefit/accessibility criteria. It can also be argued that the project is a pioneer in terms of being the first urban design study in Turkey to be carried out on such a large scale and to include the entire bay waterfront.

The findings of this research have several important implications for future practice. Based on the research findings, the thesis presents a comprehensive analysis of the Izmirdeniz project and makes recommendations. This approach will prove helpful in expanding our understanding of how to analyze waterfront transformation projects. From this point of view, future studies should examine spatial transformation projects of this nature in different regions, explore and reinterpret their contributions to social, cultural, economic, environmental, and political dimensions, and contribute to the diversification of this idea and the designs to be realized in this direction and to the expansion of the application area. Future studies can explore and develop the framework addressed in this context more fruitfully according to the needs of the period. Accordingly, this proposed urban waterfront transformation project guideline for the Izmirdeniz project is intended to serve as a guide for other waterfront projects. This framework, derived from the literature, can be considered as a pilot study and can serve as an example not only for the Izmirdeniz project but also for

other projects to be prepared by Izmir Metropolitan Municipality or any other city administrators in regions where urban coastal areas need to be improved. Local governments and professionals working in the fields of urban design and landscape design can benefit from the results of this study, and the findings of this study can shed light on urban design guidelines. At this point, it is hoped that the findings of this thesis will form a basis for future studies and projects on urban waterfront transformation projects.

REFERENCES

Agüloğlu, M. E. (2020) *Pasaport İskelesi*, İzmir. [Online]. Available at: https://gezebildiginkadar.com/pasaport-iskelesi-izmir (Accessed: 16 March 2023).

Akkaya, M. A. and Müftüoğlu, E. *Denizel Ortamın Doldurulmasıyla Kazanılan Kıyı Alanının Hukuki Statüsü*, Türkiye'nin Kıyı ve Deniz Alanları III. Ulusal Konferansı Bildiriler Kitabı, Kıyı Alanları Yönetimi Türkiye Milli Komitesi, Orta Doğu Teknik Üniversitesi, Ankara. 26-29 Haziran 2001.

Akyüz Levi, E. and Genç, U. (2018) *19. Yüzyıldan Günümüze İzmir'in Morfolojisindeki Değişimde Tarihi Dokuların Yeri.* Türkiye Kentsel Morfoloji Araştırma Ağı II. Kentsel Morfoloji Sempozyumu.

Alpaslan, H. (2020) *Kentin Dönüşümünü Bir Parselden Okumak: İzmir'in Kordon'undaki 1201/20 Numaralı Parselin 150 Yıllık Tarihçesi*. Megaron. pp. 217-229.

Altaylı, F. (2022) *'İzmir'in opera ayıbı'*, *Habertürk*, 26 September [Online]. Available at: https://www.haberturk.com/yazarlar/fatih-altayli-1001/3522976-izmir-in-opera-ayibi (Accessed: 13 April 2023).

Amatullo, M., Boyer, B., May, J. and Shea, A. (2021) *Design for Social Innovation: Case Studies from Around the World*. Routledge.

Angelidou, M. (2014) *Smart city policies: A spatial approach*. Cities, pp. 3-11.

Arslan, Ö. (2021) *Participatory Approach in Urban Design: Evaluating The Process in the Case of İzmirdeniz*. Unpublished Doctoral Thesis. İzmir Institute of Technology.

Avcan, A. R. (2017) '*İzmir-Deniz, İzmirlilerin Denizle İlişkisini Güçlendirme Projesi – 1'*, *Kent Stratejileri Merkezi*, 9 January [Online]. Available at: https://kentstratejileri.com/category/projeler/izmir-deniz-projesi/ (Accessed: 23 April 2023).

Avcan, A. R. (2017) *'Yeniden İzmir-Deniz Projesi…'*, *Kent Stratejileri Merkezi*, 27 October [Online]. Available at: https://kentstratejileri.com/2017/10/27/yeniden-izmir-deniz-projesi/ (Accessed: 10 June 2023).

Avcan, A. R. (2018) '*Kıyı dolguları ve su baskınları…*', *Kent Stratejileri Merkezi*, 19 January [Online]. Available at: https://kentstratejileri.com/category/projeler/izmir-deniz-projesi/ (Accessed: 16 April 2023).

Aydoğan, M. (2001) *Kent Kimliğinin Ortaya Çıkartılması Amacıyla Kentsel Tasarım Rehberlerinin Kullanımı Kemeraltı Örneği*. Yüksek Lisans Tezi. Dokuz Eylül Üniversitesi, İzmir.

Bender, R. (1993) *Where the City Meets the Shore*, in Bruttomesso, R., ed., *Waterfronts: A New Frontier for Cities on Water*, Venice, pp. 32-35.

Beyru, R. (2011) *19. Yüzyılda İzmir Kenti*. İstanbul: Literatür Yayınları.

Bilsel, F. C. (2016) *XVII. Yüzyıldan XX. Yüzyıla İzmir'in Bir Ticaret Limanı Olarak Gelişimi, Kent Mekânının Oluşumu ve Başkalaşımı*. Akdeniz'in Kıyısında İzmir Körfezi Konferans Bildirileri, İzmir.

'Bisim' (2021) *Izmir Büyükşehir Belediyesi*. 15 October. [Online]. Available at: https://www.izmir.bel.tr/tr/Projeler/bisim/1277/4 (Accessed: 10 March 2023).

'Bostanlı'da yeni bir dünya kuruldu' (2019) *Izmir Büyükşehir Belediyesi.* 11 March [Online]. Available at: https://www.izmir.bel.tr/tr/Haberler/bostanlida-yeni-bir-dunya-kuruldu/39480/156 (Accessed: 10 June 2023).

Breen, A. and Rigby, D. (1994) *Waterfronts. Cities Reclaim Their Edge*. New York: McGraw-Hill Inc.

Breen, A. and Rigby, D. (1996) *The New Waterfront A Worldwide Urban Success Story*. New York: McGraw-Hill Inc.

Bruttomesso, R., ed. (1993) *Working on the Water's Edge*, Waterfronts: A New Frontier for Cities on Water. Venice.

Bruttomesso, R. (2001) *Complexity on the Urban Waterfront.* In: R. Marshall, ed. *Waterfronts in Post Industrial Cities*, New York: Spon Press. pp. 39-51.

Bruttomesso, R. (2006) *Waterfront development: A strategic choice for cities on water*. Paper presented at the Waterfront Development Forum: China Maritime (02 March 2006), Hong Kong.

Bütüner, B. F. (2006) *Waterfront Revitalization as a Challenging Urban Issue in İstanbul. Waterfront Revitalization as a Challenging Urban Issue*, ISoCaRP Congress, İstanbul, Türkiye.

Catlett, H. (2019) *Interactive music studio coming to Cleveland's Rock and Roll Hall of Fame.* [Web-based visual]. Available at: https://www.cleveland19.com/2019/01/14/interactive-music-studio-coming-clevelands-rock-roll-hall-fame/ (Accessed: 16 April 2023).

'Copenhagen Harbour Bath / BIG + JDS' (n.d.) *Archdaily.* Available at: https://www.archdaily.com/11216/copenhagen-harbour-bath-plot

Craig-Smith, S. J. and Fagence, M. (1995) *Recreation and Tourism as a Catalyst for Urban Waterfront Redevelopment*, London: Praeger.

Cumhurdoğu, B. (2021) *'İzmir'in ilk deniz müsabakaları-1924'*, *Karşıyaka Haber*. 19 May [Online]. Available at: https://www.karsiyakahaber.com/yazarlar/arastirmaci-bedri-cumhur-dogu/izmirin-ilk-deniz-musabakalari-1924/2695 (Accessed: 9 May 2023).

Çelik, M. M. (2019) *'"Ateşin gelini" İzmir'i 12 Eylül 1922'de kim yakıp kül etti?'*, *Independent Türkçe.* 24 August [Web-based visual]. Available at: https://www.indyturk.com/ (Accessed: 10 June 2023).

Çimen, H. D. (2020) *30 bin m² betondan yeşil alana dönüşen proje: Konyaaltı Sahil Projesi*, gzt, 3 October [Online]. Available at: https://www.gzt.com/arkitekt/30-bin-m-betondan-yesil-alana-donusen-proje-konyaalti-sahil-projesi-3561331 (Accessed: 25 May 2023).

Davidson, M. (2012) *Urban Geography: Waterfront Development*, University of Western Sydney, Australia.

'Deniz taştı, İzmir battı' (2018) *Yeniasır*. 18 January [Online]. Available at: https://www.yeniasir.com.tr/surmanset/2018/01/18/deniz-tasti-izmir-batti (Accessed: 5 June 2023).

Dündaralp, B. (2019, April 15) *İzmirdeniz Projesi / Demokrasi Meydanı Katılımcı Plaketi* [Blog]. Available at: https://bogachandundaralp.wordpress.com/2019/04/15/2019-03-izmirdeniz-projesi-demokrasi-meydani-katilimci-plaketi/

'Dünden Bugüne Kordon'un Geçirdiği Evrimin Hikayesi' (2016) *Izmirmag*. 27 April [Web-based visual]. Available at: https://izmirmag.net/dunden-bugune-kordonun-gecirdigi-evrimin-hikayesi/ (Accessed: 10 March 2023).

Eiseley, L. (1957) *The Immense Journey*, New York: Random House.

Erkmen, B. (2015) *The Revitalizatıon of Urban Waterfront: a Proposal for İstanbul Harbor*, Master's Thesis, Yıldız Technical University.

[Eskitürkiye] (2023, June 10) Izmir [Web-based visual]. Available at: http://www.eskiturkiye.net/arama/izmir

Evans, C., Harris, M. S., Taufen, A., Livesley, S. J. and Crommelin, L. (2022) *What does it mean for a transitioning urban waterfront to "work" from a sustainability perspective?*, Journal of Urbanism: International Research on Placemaking and Urban Sustainability.

[Galataport] (2023, June 10). [Web-based visual]. Available at: https://www.galataport.com/

Gier, G. Y. (2016) *Akdeniz'in Kıyısında: Körfezin Değerleri*, İzmir Akdeniz Akademisi.

Giovinazzi, O. and Moretti, M. (2010) *Port Cities and Urban Waterfront: Transformations and Opportunities*. TeMaLab journal of Mobility, Land Use and Environment.

Gordon, D. (1996) *Planning, Design and Managing Change in Urban Waterfront Redevelopment*. Liverpool University Press: Town Planning Review Vol. 67.

Gordon, D. (1998) *Different Views from the Water's Edge: Recent Books on Urban Waterfront Development: A Review Article*. Liverpool University Press: Town Planning Review Vol. 69.

Güder, S. E. (2019) *Urban Design Guıdelines as a Tool To Improve Urban Space Quality in Waterfront Areas: The Case of Silifke – Taşucu*, Master's Thesis, İstanbul Kültür University.

Gülöksüz, Y. (1976) *Kıyıların toplum yararına kullanılması üzerine düşünceler*. Mimarlık, Vol. 147, pp. 54-58.

[Guggenheim-bilbao.eus]. (2023, June 10) [Web-based visual]. Available at: https://www.guggenheim-bilbao.eus/en/the-building/outside-the-museum

'Günbatımı Terası'na bir ödül daha' (2018) *Izmir Büyükşehir Belediyesi.* 12 May [Online]. Available at: https://www.izmir.bel.tr/tr/Haberler/gunbatimi-terasina-bir-odul-daha/37628/156 (Accessed: 10 June 2023).

'6 bin ağaç bulunan en büyük şehir parkımız: Seka Park' (2021) *Haber7*. 11 September [Web-based visual]. Available at: https://m.haber7.com/dunyayi-geziyorum/haber/3139184-6-bin-agac-bulunan-en-buyuk-sehir-parkimiz-seka-park (Accessed: 28 April 2023).

Hall, P. (1991) *Waterfronts: A New Urban Frontier*. Institute of Urban and Regional Development, University of California, Berkeley.

Hall, P. (1993) *Waterfronts: A New Urban Frontier*, In: Bruttomesso, R., ed., *Waterfronts: A New Frontier for Cities on Water*, Venice, pp. 12-19.

Hepcan, Ş., Hepcan, Ç. Ç., Kılıçaslan, Ç., Özkan, M. B. and Koçan, N. (2013) *Analyzing Landscape Change and Urban Sprawl in a Mediterranean Coastal Landscape: A Case Study from Izmir, Turkey*. Journal of Coastal Research Vol. 29, pp. 301-310.

Hoyle, B. S. (1988) *Development Dynamics at the Port-City Interface*. In: B. S. Hoyle, D. A. Pinder, and M. S. Husain, ed. *Revitalising the Waterfront: International Dimensions of Dockland Redevelopment,* London and New York: Belhaven Press. pp. 5-19.

Hoyle, B. (2000) *Global and Local Change on the Port-city Waterfront*, Geographical Review, Vol. 90(3), pp. 395-417.

Hoyle, B. (2001) *Fields of Tension: Development Dynamics at the Port-City Interface*, Jewish Culture and History, Vol. 4(2), pp. 12-30.

Hudson, B. (1996) *Cities on the Shore: The Urban Littoral Frontier*, London and New York: Pinter.

İdil, B. (2017) *"Tasarımcı Gözüyle Bakıldığında İzmir'in En Büyük Problemlerinden Biri Kıyı Kültürü".* [Interviewed by Bahar Bayhan, Arkitera, 7 February].

İtez, Ö. (2020) *Bayraklı Sahili Yaya Köprüsü, Arkitera*. 26 August [Online]. Available at: https://www.arkitera.com/proje/bayrakli-sahili-yaya-koprusu/ (Accessed: 25 May 2023).

'İzmirdeniz Projesi dünyaya örnek gösterildi' (2022) *Izmir Büyükşehir Belediyesi*. 10 March [Online]. Available at: https://www.izmir.bel.tr/tr/Haberler/izmirdeniz-projesi-dunyaya-ornek-gosterildi/46356/156 (Accessed: 16 March 2023).

[Izmirdeniz] (2023, June 1) [Web-based visual]. Available at: https://www.izmirdeniz.com/

'İzmir-Deniz, İzmirlilerin Denizle İlişkisini Güçlendirme Projesi – 3'. (2017) *Kent Stratejileri Merkezi*, 26 January [Online]. Available at: https://kentstratejileri.com/category/projeler/izmir-deniz-projesi/ (Accessed: 16 April 2023).

İzmir Büyükşehir Belediyesi (2009) *İzmir Kültür Çalıştayı*, İzmir Büyükşehir Belediyesi.

İzmir Büyükşehir Belediyesi (2011) *İzmir Tasarım forumu*, İzmir Büyükşehir Belediyesi.

İzmir Büyükşehir Belediyesi (2012) *İzmirlilerin denizle ilişkisini güclendirme projesi tasarım stratejisi raporu*. İzmir Büyükşehir Belediyesi.

İzmir Büyükşehir Belediyesi (2015) *2015-2019 stratejik planı*, İzmir Büyükşehir Belediyesi.

İzmir Büyükşehir Belediyesi (2018) *İzmir Modeli Çalışmaları Beşinci Kitap: İzmir Modelinin Komünite, Kamu Alanı ve Yer Oluşturabilme Stratejileri*. İzmir

Büyükşehir Belediyesi.

İzmir Büyükşehir Belediyesi (2018) *İzmir Modeli Çalışmaları Üçüncü Kitap: İzmir Büyükşehir Belediyesi'nin Yerel Kalkınma, Çevre ve Altyapı Sağlamadaki Performansları*, İzmir Büyükşehir Belediyesi.

İzmir Büyükşehir Belediyesi (2018) *Dördüncü Kitap: İzmir Büyükşehir Belediyesinin Fiziki Planlama Yaklaşımları*, İzmir Büyükşehir Belediyesi.

İzmir Büyükşehir Belediyesi (2020) *2020-2024 stratejik planı*, İzmir Büyükşehir Belediyesi.

İzmir Büyükşehir Belediyesi (no date) *Kıyı Tasarım Kitapçığı*, İzmir Büyükşehir Belediyesi.

'İzmir Kayıkları Mavi Körfeze Geri Döndü' (2005) *Izmir Büyükşehir Belediyesi.* 21 May [Online]. Available at: https://www.izmir.bel.tr/tr/Haberler/izmir-kayiklari-mavi-k0rfeze-geri-d0ndu/1649/156 (Accessed: 10 June 2023).

'İzmir Körfez Festivali'nde yarış heyecanı' (2018) *Trthaber*. 22 September [Online]. Available at: https://www.trthaber.com/haber/yasam/izmir-korfez-festivalinde-yaris-heyecani-385946.html (Accessed: 10 June 2023).

'İzmir Kültürpark Fuar Alanı' (n.d.) *Izmirinrenkleri.* Available at: https://izmirinrenkleri.com/kulturpark/ (Accessed: 10 June 2023).

'İzmir Operası Mavişehir'de yükseliyor' (2021) *Izmir Büyükşehir Belediyesi.* 29 May [Online]. Available at: https://www.izmir.bel.tr/tr/Haberler/izmir-operasi-mavisehir-de-yukseliyor/45062/156 (Accessed: 10 June 2023).

'İzmir'in yeni meydanı açılıyor' (2019) *Izmir Büyükşehir Belediyesi.* 14 February [Online]. Available at: https://www.izmir.bel.tr/tr/Haberler/izmir-in-yeni-meydani-aciliyor/39413/156 (Accessed: 10 June 2023).

Jones, A. (2013) *Urban waterfronts: learning from legacies lessons from the past pointers for the future*. Regenerating Maltese and Sicilian Waterfronts : Perspectives from Two Mediterranean Islands.

Jones, A. L. (2017) *Regenerating Urban Waterfronts—Creating Better Futures—From Commercial and Leisure Market Places to Cultural Quarters and Innovation Districts*, Planning Practice and Research.

Karabey, H. (1976) *Fransa'nın Yönetim ve Planlama Düzeyinde Kıyılarını Düzenleme ve Koruma Çabaları*, Mimarlık Vol. 76(2), pp. 90-96.

Karabey, H. (1978) *Kıyı Mekanın Tanımı: Ülkesel Kıyı Mekanının Tanımı İçin Bir Yöntem Önerisi*. Doktora tezi. MSÜ Fen Bilimleri Enstitüsü, İstanbul.

Karakoç, N. (2021) *'Bayraklı Sahili Yaya Köprüsü BigSEE Kamu ve Ticari Yapılar Kategorisinde Ödül Aldı'*, *Arkitera*, 22 January [Online]. Available at: https://www.arkitera.com/haber/bayrakli-sahili-yaya-koprusu-bigsee-kamu-ve-ticari-yapilar-kategorisinde-odul-aldi/ (Accessed: 16 April 2023).

Karakoç, N. (2022) *'İzmir Opera Binası Projesinde Değişikliğe Gidiliyor'*, *Arkitera*, 6 July [Online]. Available at: https://www.arkitera.com/haber/izmir-opera-binasi-projesinde-degisiklige-gidiliyor/ (Accessed: 16 April 2023).

'Karantina seferleri başlıyor' (2018) *Izmir Büyükşehir Belediyesi.* 24 December [Online]. Available at: https://www.izmir.bel.tr/tr/Haberler/karantina-seferleri-basliyor/39291/156 (Accessed: 10 March 2023).

Karasu, D. B. (2019) *The Design of Public Urban Waterfronts in Terms of Spatial Quality and Placemaking the Cases of İzmir and Bodrum*. Master's Thesis, Dokuz Eylül University.

[Karşıyakalı] (2023, April 23) *Karşıyakada kürek yarışları* [Web-based visual]. Available at: http://karsiyakali.iwarp.com/photo.html

Kayın, E. (2000) *İzmir Oteller Tarihi*. İzmir: İzmir Yayıncılık.

Kayın, E. (2016) *İzmir Kentinin 21. Yüzyıl Başındaki Dönüşümü ve Yeniden Dönüşümü*, Arkitera. 14 December [Online]. Available at: https://www.arkitera.com/gorus/izmir-kentinin-21-yuzyil-basindaki-donusumu-ve-yeniden-donusumu/ (Accessed: 10 March 2023).

Keleş, R. (1998) *Kentbilim Terimleri Sözlüğü*, Ankara: İmge Yayınevi.

Kocaoğlu, A. (Former Mayor of İzmir). 2020. *"Interview with Aziz Kocaoğlu"*.

Kocaoğlu, A. (Former Mayor of İzmir). 2013. *"Interview with Aziz Kocaoğlu"*.

Koçman, A. (1991) *İzmir'in Kentsel Gelişimi.* Atatürk Kültür, Dil ve Tarih Yüksek Kurumu Coğrafya Bilim ve Uygulama Kolu Araştırmaları Dergisi, Vol. 3, pp. 101-123.

Koçman, A. (1993) *İzmir'in Kentsel Gelişimi ve Bunu Etkileyen Faktörler*. Çağdaş Türkiye Tarihi Araştırmaları Dergisi, Vol. 1(3). Available at: https://dergipark.org.tr/tr/pub/cttad/issue/25524/269224

Krieger, A. (2004) *Ten Principles of Waterfront Development*. In: Bonnie Fisher, ed. *Remaking the Urban Waterfront*, Washington DC: Urban Land Institute.

[Landezine] (2021) *Western HafenCity, Hamburg*, 12 March [Web-based visual]. Available at: https://landezine.com/western-hafencity-hamburg/ (Accessed: 28 April 2023).

[Mapio] (2023, May 10) [Web-based visual]. Available at: https://mapio.net/pic/p-6151548/

Marshall, R. (2001) *Waterfronts in post-industrial cities*. London, UK: Spon Press.

Merriam-Webster. (n.d.) *Waterfront*. In Merriam-Webster.com dictionary. Retrieved June 2, 2023, from https://www.merriam-webster.com/dictionary/waterfront

Naneci, E. E. (2020) 'İzmir Körfezi'nde yüzmek için derelerdeki kirliliğin arıtılması gerekli', *Hürriyet*, 12 September [Online]. Available at: https://www.hurriyet.com.tr/gundem/izmir-korfezinde-yuzmek-icin-derelerdeki-kirliligin-aritilmasi-gerekli-41609589 (Accessed: 9 May 2023).

Niemann, B. and Werner, T. (2016) *Strategies for the Sustainable Urban Waterfront*. WIT Transactions on Ecology and the Environment, Vol. 204, pp. 431-439.

Özbey, D. (2020) *Kıyı Alanlarının Kent Kimliğine Olan Yansımaları: İzmir Örneği*, İzmir Demokrasi Üniversitesi.

[Pinterest]. (2023, June 10) Baltimore Inner Harbor View [Web-based visual]. Available at: https://www.pinterest.cl/pin/365776800985279270/?amp_client_id=CLIENT_ID%28_%29andmweb_unauth_id=andfrom_amp_pin_page=true

'Pirrama Park / Hill Thalis Architecture, Aspect Studios and CAB Consulting' (n.d.) *Archdaily*. [Online] Available at: https://www.archdaily.com/121164/pirrama-park-hill-thalis-architecture?ad_source=searchandad_medium=projects_tab

PPS (Project for Public Spaces) (2009) *'How to Transform a Waterfront'*, 31 January [Online]. Available at: https://www.pps.org/article/turnwaterfrontaround (Accessed: 20 April 2023).

PPS (Project for Public Spaces) (2009) *'10 Qualities of a Great Waterfront Destination'*, 1 January [Online]. Available at: https://www.pps.org/article/10-qualities-of-a-great-waterfront (Accessed: 20 April 2023).

Ragheb, A. A. and EL-Ashmawy, R. A. (2020) *Urban Waterfront Development for Designing Space in Coastal Cities*, International Journal of Sustainable Development and Planning, Vol. 15(3), pp. 345-352.

Sairinen, R. and Kumpulainen, S. (2006) *Assessing Social Impacts in Urban Waterfront Regeneration*. Environmental Impact Assessment Review, Vol. 26, pp. 120-135.

Shaw, B. (2001) *History at the water's edge*. In: Marshall, R., ed., *Waterfronts in Post-Industrial Cities*. London, UK: Spon Press, pp. 160-172.

'Sizce hangisi daha güzel?' (2015) *Izmir Büyükşehir Belediyesi*. 8 May [Online]. Available at: https://www.izmir.bel.tr/tr/Haberler/sizce-hangisi-daha-guzel/14356/156 (Accessed: 14 June 2023).

Smith, H. and Garcia Ferrari, M. S. (2012) *Waterfront Regeneration: Experiences in City-Building*. Oxfordshire, UK: Routledge.

Sözer, A. N. (1988) *İzmir: Ege'nin Metropolü*. Ege Coğrafya Dergisi, Vol. 4(1), [Online] Available at: https://dergipark.org.tr/tr/pub/ecd/issue/4890/67020

Şenlier, N., Yıldız, R. and Güzel, B. İ. (2015) *Evaluation of Contemporary Approaches for Coastal Area Regeneration Projects*, International Sustainable Buildings Symposium. Ankara.

Tanış, F. (2015) *The Waterfront Regeneration Projects and Contemporary Design Approaches of European Port Cities*, Master's Thesis, İstanbul Technical University.

Tanış, F. (2018) *Waterfront Regeneration Projects | Development Strategies and Conservation Approaches*, Master's Thesis, Mimar Sinan Fine Arts University.

Tekeli, İ. (1976) *Kıyı Planlamasının Değişik Boyutları*, Mimarlık, Vol. 76(2), pp. 41-42.

Tekeli, İ. (2010, June) "*İzmir'in Farklılığı Üzerinde Düşünmek*", İzmirli Olmak Sempozyumu Bildirileri, İzmir Büyükşehir Belediyesi, İzmir, pp. 29-37.

Tekeli, İ. (2018) *İzmir Belediyeciliğinde 2004-2018 Dönemi'nin Öyküsü*. İzmir Büyükşehir Belediyesi.

Tekeli, İ. (2018) *İzmir Modeli İzmir İçin Demokratik Bir Belediyecilik Modeli Önerisi,* İzmir Büyükşehir Belediyesi.

Tekeli, İ. (2018) *Sorularla İzmir Modeli*. İzmir Büyükşehir Belediyesi.

'Toronto Central Waterfront / West 8 and DTAH' (2011) *Archdaily*, 15 February [Online]. Available at: https://www.archdaily.com/111635/toronto-central-waterfront-west-8-and-dtah (Accessed: 16 April 2023).

'Tramvay Kısa Sürede Yaşamımızda Yer Edindi' (2021). *Izmir Büyükşehir Belediyesi*. 15 October. [Online]. Available at: https://www.izmir.bel.tr/tr/Projeler/tramvay-kisa-surede-yasamimizda-yer-edindi/1261/4 (Accessed: 10 March 2023).

Torre, L. A. (1989) *Waterfront Development*. New York: Van Nostrand Reinhold.

Turunç, Z. (2008) *A Research About the İstinye Bay Area*, Master's Thesis, Yildiz Technical University.

Türk Dil Kurumu (2021) *Genel Açıklamalı Sözlük*. Ankara: TDK Yayınları.

Vallega, A. (2001) *Urban waterfront facing integrated coastal management*. Ocean and Coastal Management, ElSevier, Vol. 44, pp. 379-410.

Velibeyoğlu, H. (2017) *"İzmirdeniz, Belediyenin Proje Üretme Anlayışına Yenilik ve Açılımlar Getirdi"*. [Interviewed by Burcu Bilgiç], Arkitera, 28 December.

[Visitvancouverwa]. (2022, November 1). New on the Waterfront [Web-based visual]. Available at: https://www.visitvancouverwa.com/blog/post/new-on-the-waterfront/

Wasser stadt GmbH, Centre Cities on Water, *10 Principles for a Sustainable Development of Urban Waterfront Areas*. Berlin: Urban Future (URBAN 21) Conference; July 2000.

[Wikipedia] (2023, June 2) London Eye [Web-based visual]. Available at: https://en.wikipedia.org/wiki/London_Eye

Wrenn, D. M., Casazza, J. A. and Smart, J. E. (1983) *Urban Waterfront Development*. Washington, DC: Urban Land Institute.

'Yanıtlanan ve yanıtlanmayan sorular…' (2017) *Kent Stratejileri Merkezi*, 20 March [Online]. Available at: https://kentstratejileri.com/category/projeler/izmir-deniz-projesi/ (Accessed: 16 April 2023).

'Yenilenen ahşap iskeleler İzmirlinin hizmetinde' (2021) *Izmir Büyükşehir Belediyesi.* 21 December [Online]. Available at: https://www.izmir.bel.tr/tr/Haberler/yenilenen-ahsap-iskeleler-izmirlinin-hizmetinde/46036/156 (Accessed: 10 March 2023).

Yılmaz, A. (2017) *Uzaklaşan Kıyının Unutulan Mekânları*. Akdeniz'in Kıyısında İzmir Körfezi Konferans Bildirileri, İzmir.

Yılmaz, A. (2018) *Forgetting the Shore : Effects of Land Reclamations on Memory of Place in Izmir*. İzmir Akdeniz Akademisi Dergisi, pp. 46-67.

Yılmaz, F. and Yetkin, S. (2002) *İzmir Kent Tarihi*, T.C. Milli Egitim Bakanlığı Izmir Ili Milli Egitim Müdürlügü Yayınları.

Zorlusoy, H. (2013) *(XVII. Yüzyıldan Günümüze) Fransız Gezginlerin Gözüyle İzmir*. Ahmet Priştina Kent Arşivi ve Müzesi, Konak, İzmir.

APPENDICES

Appendix A – Tables

Table 3. The Principles of Social Dimension

DIMENSIONS		SOCIAL
PRINCIPLES*	**Torre, 1989**	Function - Pedestrian access to a lively outdoor eating area and entertainment centre gives visitors the chance to enjoy the water environment along with convenient services for residential and working districts.
	Bruttomesso, 2001	Opening up the waterfront to the public, through a process that may entail successive phases of appropriation of the border zones between city and water
		Become one of the city's main pedestrian zones. Development of accessibility to the waterfront. Pedestrian access is essential, especially in relation to link routes with the city center and outlying zones
		Limitations on vehicle traffic. High-level accessibility via public transport must also be guaranteed so that the waterfront is more easily reachable by various modes of land and water transport
		The multiple activities in the redeveloped zones. The mix of functions referring to the different sectors of the principal urban activities (economic-productive, residential, pertaining to culture and leisure, mobility)
		The functions, so that alongside the activities usually referred to the public domain are those typically managed by the private sector
	Krieger, 2004	Even though a city's waterfront serves as a natural boundary between land and water, it must not be conceptualized or planned as a thin line.
		To make underused or obsolete urban waterfronts come alive they must become desirable places to live not just to visit and recreate.
		The public increasingly desires and expects access to the water. This usually requires overcoming historic barriers -- physical, proprietary and psychological -- while persuading new investors that there is merit in maintaining that valuable edge within the public domain.
	PPS, 2009	Optimize public access. It is essential that the waterfront be accessible for people's use to the greatest extent possible.
		Access made easy by boat, bike and foot. Waterfronts flourish when they can be accessed by means other than private vehicles.
		Connect the destinations. A walkable waterfront with a wide variety of activity along it will successfully connect destinations, allowing each to strengthen the others.
		Creative amenities boost everyone's enjoyment. The best waterfronts feature amenities that increase people's comfort and enjoyment.
		Limits are placed on residential development. Great waterfronts are not dominated by residential development.

Table 3 (Continued). The Principles of Social Dimension

	Urban 21, 2000	Public access is a prerequisite. Waterfronts should be both physically and visually accessible for locals and tourists of all ages and income. Public spaces should constructed in high quality to allow intensive use.
		Mixed use is a priority. Waterfronts should celebrate water by offering a diversity of cultural, commercial and housing uses. Those that require access to water should have priority. Housing neighborhoods should be mixed both functionally and socially.
	Evans et al., 2022	Retains public ownership of streets and open space and prevents exclusion by design.
		Provides equitable physical access to waterfront spaces and associated social activities.
		Prevents gentrification and displacement.
		Adopts authentic waterfront narratives that are representative of various histories and communities.
*** The principles were compiled from approaches developed by Torre (1989), Urban 21 (2000), Bruttomesso (2001), Krieger (2004), PPS (2009), and Evans et al. (2022).**		

Table 4. The Principles of Cultural Dimension

DIMENSIONS		CULTURAL
PRINCIPLES*	**Torre, 1989**	Determine the theme. Significantly important to maintaining people's loyalty to a waterfront area. The implementation of the theme would create the image.
		Maintaining authentic value of the waterfront area and the surrounding area is important for a successful waterfront project.
	Bruttomesso, 2001	A significant number of activities linked to previous and original uses for these zones, with the purpose of keeping alive the memory and preserving meaningful traces of the identity of these places
		Special viewpoints must be chosen for the urban landscape and even modest elements salvaged to testify to the past. In this sense, the attention paid to the design of the furnishings for the waterfront can take on a special significance, which goes beyond the aesthetic aspect and aims to rediscover or introduce emblematic values.
	Krieger, 2004	The aura of a city resides and endures along its waterfront allowing substantial changes to occur without inevitably harming its enduring qualities of place.
		Despite undergoing periodic and at times quite rapid change, a waterfront maintains for its bordering city some inherent and unalterable stability.
	PPS, 2009	Local identity is showcased. Making the most of local identity, history and culture stimulates widespread interest in the waterfront and creates a unique sense of place.
		The water itself draws attention. Embracing the natural uses of a waterfront leads to thematic programming such as boat festivals, fish markets, bait and tackle shops, and performances on floating stages.
		Iconic buildings serve a variety of functions. Iconic, attention-grabbing buildings that reflect a human scale and do not detract from the surrounding context can be a boon to the waterfront, so long as they serve a variety of functions.
		Frequent opportunities to appreciate local art, music and theatre helps draw a community together around the waterfront.
	Urban 21, 2000	The historic identity gives character. Collective heritage of water and city, of events, landmarks and nature should be utilized to give the waterfront redevelopment character and meaning. The preservation of the industrial past is an integral element of sustainable redevelopment.
		Waterfronts are part of the existing urban fabric. New waterfronts should be conceived as an integral part of the existing city and contribute to its vitality.
	Evans et al., 2022	Approaches cultural heritage as both past and future oriented.
		Incorporates culture as both process and product.
		Takes a participatory, inclusive approach to culture.
		Cultivates a robust and authentic physical setting by perpetuating, enhancing, or re-establishing meaningful physical and cultural connections between cities and their waterfronts

*** The principles were compiled from approaches developed by Torre (1989), Urban 21 (2000), Bruttomesso (2001), Krieger (2004), PPS (2009), and Evans et al. (2022).**

Table 4. The Principles of Economic Dimension

DIMENSIONS		ECONOMIC
PRINCIPLES*	**Torre, 1989**	Financial feasibility - A waterfront is considered feasible once it is packaged, designed, promoted, managed and operated effectively.
	Bruttomesso, 2001	A careful arrangement of productive activities, compatible with the renewed context and capable of ensuring diversification in the zone's economy, with the capacity to guarantee diversification.
		The traditional "tools of the trade" of the sector analysts (economists, urban planners, sociologists, etc.) should be avoided, at least in part, and an attempt made to "invent" and calibrate new methods for defining constraints on and the potential of waterfront projects.
	Krieger, 2004	Distinctive physical environments (characteristic of waterfront setting) can serve as an antidote to the homogenizing tendencies of modern development, providing a competitive advantage for a city in relationship to its region or rival cities.
		As valuable and often-contested realms, urban waterfronts bring forth the opposing though reconcilable human instinct to preserve and to reinvent.
	PPS, 2009	Integrate seasonal activities into each destination. Waterfronts that can thrive in year-round conditions will reap the benefits of greater economic activity and higher attendance at public facilities.
	Urban 21, 2000	New waterfront developments should be planned in public-private partnerships. Public authorities must guarantee the quality of the design, supply infrastructure and generate social equilibrium. Private developers should be involved from the start to ensure knowledge of the markets and to speed the development.
	Evans et al., 2022	Adopts a financing structure based on a realistic and comprehensive assessment of costs and benefits.
		Establishes and secures adequate financial resources for ongoing operation and maintenance and anticipates economic downturns.
		Fosters a sustainable and diverse mix of economic opportunities over time.
		Engages local labor market at all stages and provides liveable wage for all employees

*** The principles were compiled from approaches developed by Torre (1989), Urban 21 (2000), Bruttomesso (2001), Krieger (2004), PPS (2009), and Evans et al. (2022).**

Table 5. The Principles of Environmental Dimension

DIMENSIONS		ENVIRONMENTAL
PRINCIPLES*	**Torre, 1989**	Construction technology - Use cost-effective and environmental friendly materials for construction.
	Bruttomesso, 2001	Ensuring the quality of the water in the recovered waterfront zones. It is clear that this must cover all the bodies of water in the city
	Krieger, 2004	The success and appeal of landside development is intrinsically tied to the success and appeal of adjacent water uses -- and, of course, to the environmental quality of both the water and the shore.
	PPS, 2009	Balance environmental benefits with human needs. While a wide variety of uses can flourish on a waterfront, many successful destinations embrace their natural surroundings by creating a close connection between human and natural needs. Marine biologists and environmentalists today promote the restoration of natural shorelines -- at least where marine uses do not dominate – and advocate replacing crumbling bulkheads with natural vegetation that will improve water quality, and revive fish and wildlife habitat. But this natural restoration should not preclude human use.
	Urban 21, 2000	Secure the quality of water and the environment The quality of water in the system of streams, rivers, canals, lakes, bays and the sea is a prerequisite for all waterfront developments. The municipalities are responsible for the sustainable recovery of derelict banks and contaminated water.
	Evans et al., 2022	Reduces and controls levels of pollution above and below the waterline.
		Reduces and cleans/reuses stormwater and wastewater.
		Enhances terrestrial and aquatic habitats favouring native and self-generating communities.
		Embraces exemplary green building techniques and strategies

*** The principles were compiled from approaches developed by Torre (1989), Urban 21 (2000), Bruttomesso (2001), Krieger (2004), PPS (2009), and Evans et al. (2022).**

Table 6. The Principles of Political Dimension

DIMENSIONS		POLITICAL
PRINCIPLES*	**Torre, 1989**	Effective management - Proper management must include a number of different sources of expertise, and coordination between them is very important.
		Participation from all responsible groups, including the public, is important at every stage of development.
		Organizational management: establish a waterfront committee and include representatives from the government authority to make the process effective.
		Maintain momentum: create anticipation and marketing, and maintaining the momentum until the project is completed is important.
	Bruttomesso, 2001	the "actors" managing the services on the waterfront, as the different systems of managing the zones and complexes situated in these areas help to recreate the typically urban mix of public and private activities
	Krieger, 2004	Transformations along urban waterfronts are a recurring condition in the evolution of cities, and tend to take place when there are major economic or cultural shifts leading to conflicting visions about the course of contemporary urbanity.
		Waterfront redevelopments are long-term endeavors with the potential to produce long-term value. Endangering this for short-term riches rarely produces the most desirable results.
	PPS, 2009	Good management maintains community vision. Management is essential to ensure that a successful waterfront stays that way.
		Create a shared community vision for the waterfront. Because a vision is adaptable and can be implemented gradually, starting with small experiments, it often becomes bolder as public enthusiasm for making changes builds and the transformation of the waterfront gains credibility.
	Urban 21, 2000	Public participation is an element of sustainability. The community should be informed and involved in discussions systematically from the start.
		Waterfronts are long term projects. Waterfronts need to be redeveloped step by step so the entire city can benefit from their potential. Public administration must provide the impulse on a political level to ensure that the objectives are realized independently of economic cycles or short-term interests.
		Re-vitalization is an ongoing process. All master planning must be based on the detailed analysis of the principle functions and meanings which concern the waterfront. Plans should be flexible, adapt to change and incorporate all relevant disciplines. To encourage a system of sustainable growth, the management and operation of waterfronts during the day and at night must have the same priority as their construction.
		Waterfronts profit from international networking. The re-development of waterfronts is a highly complex task that involves professionals from many disciplines. The exchange of knowledge in an international network between contacts involved in waterfronts on different levels offers both individual support and information about the most important projects, completed or in progress.

Table 7 (Continued). The Principles of Political Dimension

	Evans et al., 2022	Reflects an inclusive and shared city identity/vision
		Engages communities in transparent decision-making partnerships and processes
		Establishes adaptive contractual and management models to respond to emerging issues and adopt improved practices.
		Governs consistently and non-politically according to objectives agreed collectively.

*** The principles were compiled from approaches developed by Torre (1989), Urban 21 (2000), Bruttomesso (2001), Krieger (2004), PPS (2009), and Evans et al. (2022).**

Appendix B - Locations of Figures on the Map