

BEYOND THE PRESENT

Therapy Rehabilitation Through Landscape For Those With
Post-War Traumatic Syndrom

YASIN YAHYA ATASOY



POLITECNICO
MILANO 1863

School of Architecture Urban Planning Construction Engineering
Master of Science in Sustainable Architecture and Landscape Design - PC

Author: Yasin Yahya Atasoy

Supervisor: Prof. Paola Nella Branduini

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ACKNOWLEDGEMENT

*To my mom, my father and
all my loved ones...*

CONTENTS

01 OUTLINE	6
Humanitarian Dimension Of Rehabilitation	
02 METHODOLOGY	14
Connecting With Memory Of Our Future Landscape Techniques	
03 INTRODUCTION SITE	20
Post-War Effects On Turkiye Post-War Effects On Istanbul Post-War Effects On Istanbul's Islands Short History Of Heybeliada	
04 CASE STUDIES	28
Freedom Park Kopupaka Reserve Healing Gardens at the Walter Reed National Military Medical Center	
05 ANALYSIS	38
Theoretical Framework Regional Scale Waste And Energy Transportation Medium Scale Landuse Of Island Synchronic Analysis Ecology of Island Landscape Structure Fauna Stakeholders Block Diagram Solar Energy Potential Map Sanatorium Scale Analysis Historical Section	

06 CONCEPT	70
The inspiration Of the Wild Our Wild Hearts	
07 STRATEGY	78
Honoring The Sustainable Land Narrating Beyond The Present Ecological System / Ecological System Approaches Economical System / Economical System Approaches Cultural System / Cultural System Approaches General Strategy MasterPlan Medium Scale	
08 DESIGN	94
Planting In a Neglected Area Site Integration Functions Masterplan for Sanatorium Integration With Plants Conclusion Finding Beyond The Present	
09 BIBLIOGRAPHY	120

01 OUTLINE

**“With guns you can kill terrorists,
with education you can kill terrorism.”
Malala Yousafzai**

**“The biggest battle is the war against ignorance.”
Mustafa Kemal Atatürk**



Figure 1: Image showing Children walk past sandbags fortifying a building as the city braces for a possible attack.
Source: Emre Caylak/ Ugur Gallenkus/ Author



ABSTRACT

HUMANITARIAN DIMENSION OF REHABILITATION

The humanitarian dimension of rehabilitation refers to a wide range of activities, from social work to monitoring human rights. These efforts seek to reintegrate lives and livelihoods in the circumstances of transition from conflict to relative peace. In this way, External actors' goals in rehabilitation are not simply to ensure security, return refugees, or 'reconstruct' physical assets, but also to encourage individuals to consider their own role and their right to hold someone responsible for their acts.

Globally, 426 million children live in conflict zones today. (According to savethechildren.org) Major conflicts around the world have tripled since 2010, and children have been impacted the most. This number is even only for children when we consider all the people in these conflict zones, then numbers are becoming insane. The one of the main target here is to take some action at some point to save their mental health in terms of bring them back with the help of landscape.



Figure 2:
Source: Ugur Gallenkus

In these conflict zones, people are under the effects of violence and suddenly they are forced to leave their land to escape from the war-zones. Therefore, all their lives are shaped by the new society and the environment. During this adaptation they start to face many problems with the process. One of the targets is also increasing this adaptation to society and the environment.

The idea will be based on 3 different categories, which are Research, Educating and at the end, problem solving. In all 3 stages, we're going to see different data and real surveys from people who live these conflicts and, at the end, we are going to design a world all together.

KEYWORDS: Rehabilitation, senses, Traumatic Loss, mental power, sustainable societies



Figure 3: sound, noise and silence
Source: Nela González Sanz / Author

“Sight isolates while sound includes [...] creates a sense of interiority.”
Juhani Pallasmaa.

STAGES

- **Research** to assist policy-makers and negotiators in their search for policy options, especially in relation to the smoother functioning of the international system. Also, getting benefit from UN SDGs and using data for research. Especially Promote one SDG that peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. Also, use their data and create some surveys with people who have been affected by war and learning their thoughts about post-war trauma and mental health.
- **Educating** people to reuse their lands. War is poisoning lands, burning nature and destroying the environment. With all this mental power, it is going to be possible to reuse this lands, also focus on strengths over weaknesses and explore one's passions.
- **Problem Solving** through engaging in dialogues in areas such as national and international governance, sustainable development, globalisation as well as in good offices in case of conflict. Basically, this center is going to be the central point of all these humanitarian criteria and this is going to spread all over the world with the support of governments and societies. The aim of the work is going to take some action about the post-war effect on society, especially for children, and create some spaces for them related to the site and landscape.

AIM

Design aims to take the mental therapy as the base, establish an urban aesthetic system through the creative design, lead the lifestyle of the old cities, activate the vitality of the landscape with innovative operation mode, and finally create a famous contemporary historical and cultural hub with both breath of life and aesthetic quality, also to make the human mentality revitalize. These conditions would reach through different strategies and 3 different scales:

- I) Firstly in the Regional Scale, the design aims to connect agricultural and natural areas for making ecological hubs
- II) Secondly Medium scale is the areas around the site such as peripherias where help social economic activities to carry them to the site.
- III) Thirdly the Site is going to be main intervention area to create momentum between three of them and the place for thinking beyond the present.

THEME

The thesis investigates:

How can landscape take part on Rehabilitation?

How would the design achieve us to sustainable approach?

How senses is going to help to promote new ecological hubs for Post-War traumatic people?

SCOPE AND FUTURE VISION

The general scope of research concerns children with Post War Traumatic Syndrome to create a therapy space where politics, nature and culture come into tragic collision.

As Jean-Christophe Bailly puts it: “what we feel, passing through the landscapes that surround us, is that the discrepancy between what we used to consider their legitimate representation and what they are actually becoming has grown, making room for an expectation of new images-images that would be not so much ‘realistic’ as simply in keeping with the fundamental tone of the age.”

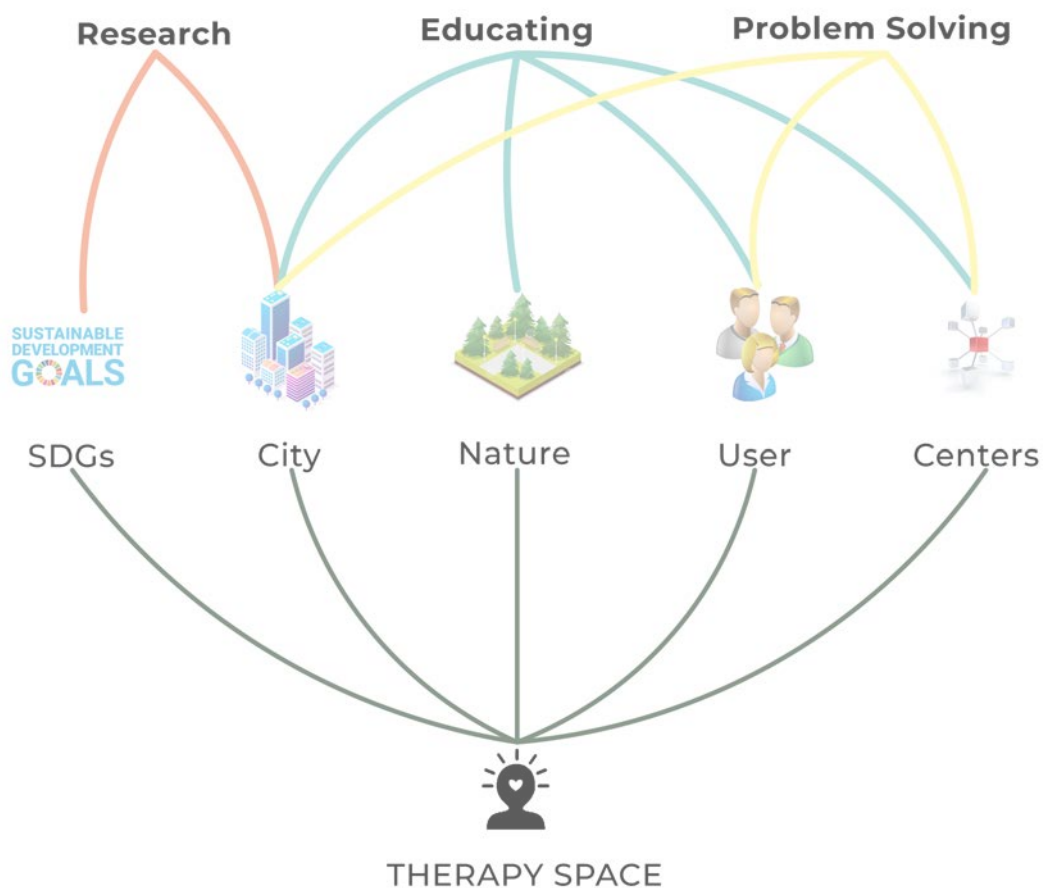


Figure 4: Therapy Space Chart
Source: Author

“Today, where humans are on the top of the ecological pyramid maximizing their egoistic needs while having a minimum care of the environment, the concept of therapy space incorporates human as a part of the ecosystem and aim to create an axis that unites rural life and urban life and finally create a mental freedom.”

Author

PROPOSED SITE

In recent years, Istanbul was the one of the stop for many refugees from all over the world seeking to get to Europe along the Western Balkans route. The Western Balkan route was then the preferred route for migrants from many countries of origin. Ekrem İmamoğlu, Mayor of Istanbul metropolitan municipality, says, “We can not get a clear number of asylum seekers. However, according to some reports, there are 1 million 600 thousand; in the opinion of mayors, there are 2 million migrant refugees.” (Ozlem Guvemli/Sozcu)



Figure 5:

Source: <https://www.istdergi.com/sehir/yasam/heybeliada-sanatoryumunun-hazin-hikayesi>

Heybeliada Sanatorium is Turkey's first pandemic hospital located in Heybeliada, Istanbul. It was closed in 2005 by the Ministry of Health. Far from the city center, in the pine forests, clean air and strong food care were the best form of treatment of the period. There was also a bed on the balcony for the patients. Meat, milk and honey were given to the patients as food, along with 4 meals a day. There was also a rehabilitation center in the sanatorium. Through masters, courses such as shoemaking, stocking, photography, sculpture, watchmaking and typing were given to patients, and patients could learn crafts and become professionals. According to a study conducted on the 50th anniversary of the establishment of the sanatorium, half of the approximately one thousand people who attended the courses had a profession or a job. The land has an area of 223 thousand square meters on the island of Istanbul.

02 METHODOLOGY



Figure 6: Image showing a third landscape example
Source: Istanbul Municipality and Author



FROM A THERAPEUTIC PERSPECTIVE OF THE THIRD LANDSCAPE

CONNECTING WITH OUR MEMORY OF NATURE

Most of us inhabit environments that people have crafted and maintained. The landscapes of our yards, office parks, and cities are synthetic assembly of abused evergreens chopped into meatballs, and enormous oceans of mowed lawns, in contrast to the vibrant spontaneity of wild vegetation. Only the poorly constructed rows of bedding annuals are colored, if at all. These vegetation have a harnessed quality that leaves landscapes seeming languid and lifeless.

The areas between farmed or developed areas and natural surroundings are referred to as the third landscape. These places can consist of neglected or abandoned areas, roadside verges, and other non-cultivated landscapes. According to Clément, the Third Landscape is a significant part of our ecosystem and has the capacity to sustain a variety of biological processes and biodiversity.

Compared to the territories submitted to the control and exploitation by man, the Third Landscape forms a privileged area of receptivity to biological diversity. Cities, farms and forestry holdings, sites devoted to industry, tourism, human activity, areas of control and decision permit diversity and, at times, totally exclude it. The variety of species in a field, cultivated land, or managed forest is low in comparison to that of a neighboring «unattended» space...

From this point of view, the Third Landscape can be considered as the genetic reservoir of the planet, the space of the future.

From a therapeutic standpoint, patients with post-war traumatic syndrome may find the Third Landscape to be a useful tool. Patients may experience a sense of connection to nature through the Third Landscape, which also encourages relaxation and stress relief. The Third Landscape's casual and unstructured atmosphere may also provide patients a sense of freedom and exploration, which may be especially beneficial for people who have been traumatized or imprisoned.

Moreover, horticultural treatment and other therapeutic pursuits would be possible in the Third Landscape. Patients might participate in Third Landscape area repair or upkeep, giving them a sense of achievement as well as chances for social engagement and skill development.

Finally, the Third Landscape concept could offer a useful foundation for creating landscapes that promote treatment and rehabilitation for those who have post-traumatic stress disorder. Design professionals might produce surroundings that support physical and emotional well-being while simultaneously helping to restore ecological health by including neglected or abandoned locations into the design process.

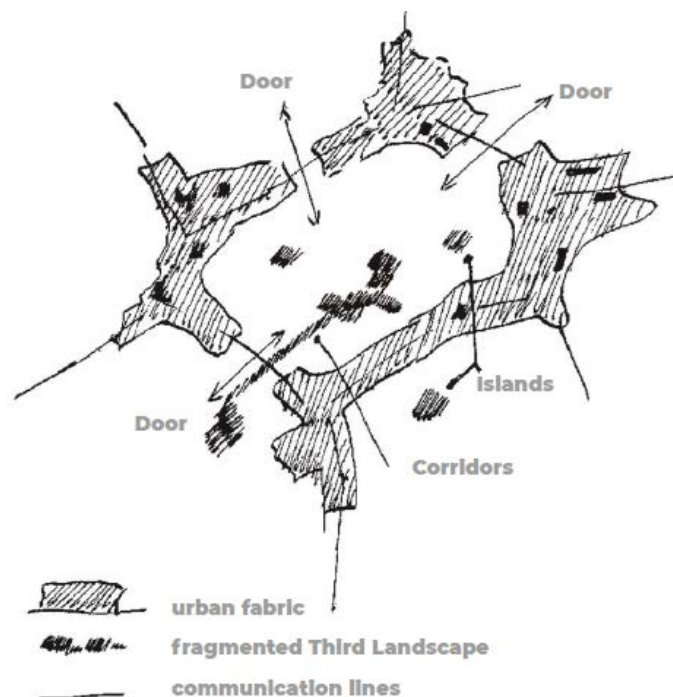


Figure 7: Image showing third landscape fragmentation
Source : Manifesto of Third Landscape by Gilles Clement

LANDSCAPE TECHNIQUES

There are a number of landscape strategies that could be appropriate for post-traumatic stress disorder (PTSD) therapy and rehabilitation. Here are a few of them :

Healing gardens: Gardens created particularly to encourage healing and wellbeing are known as “healing gardens.” They frequently include organic components like plants, water, and stones, and are intended to stimulate the senses, encourage relaxation, and lessen tension. Healing gardens can be designed with elements like walking trails, seating places, and spaces for silent thought to address the individual requirements of individuals with post-war traumatic syndrome.

Horticulture Therapy: Gardening and other horticultural pursuits are used in horticulture therapy, a therapeutic method, to advance both physical and mental health. Horticultural treatment can be especially useful for individuals with post-traumatic stress disorder because it offers a secure and supportive setting where patients can interact with nature and learn new skills.

Ecological Restoration: The process of restoring damaged or degraded ecosystems to their original form is known as ecological restoration. As it gives patients the chance to engage in meaningful labor that helps to restore natural processes and fosters a feeling of connection to the natural world, this method may be especially useful for the therapy and rehabilitation of people with post-traumatic stress disorder.

Biophilic Design: the goal of biophilic design is to incorporate natural aspects into the built environment. As it offers patients a caring and comfortable setting that encourages relaxation, stress reduction, and a sense of connection to nature, this method may be very useful for therapeutic rehabilitation for people suffering from post-war traumatic syndrome.

Therapeutic Landscapes: Outdoor areas created particularly to encourage healing and well-being are known as therapeutic landscapes. They are intended to provide relaxation, stress reduction, and a sense of connection to nature and can contain a variety of amenities, such as gardens, water features, and seating spaces. Healing landscapes may be created to specifically address the requirements of patients with post-traumatic stress disorder and can offer a secure and supportive setting for patients to interact with nature and improve their physical and mental health.



Figure 8: Image showing natural disorder after 20 years Source :
Author

03

INTRODUCTION OF SITE

"Nature, insatiable in giving, has diversified the capital not only with the Bosphorus and the Golden Horn, but with the tiny archipelago of the Princes' Isles. More than Ischia and Capri are to Naples, are Khalki, Prinkipo and their sister islands to Constantinople.

Nothing more ideal can be pictured than the loveliness of these islands in May and June. The hills are covered with pine forests, and the meandering shores are indented with shaded and sequestered bays.

Edwin Grosvenor -1895

Figure 9: Image showing the former Sanatorium and Istanbul at the behind of Island.
Source: Istanbul Municipality and Author



POST-WAR EFFECTS ON TURKIYE

In the last two hundred years of Anatolia, nearly 6 million people settled in the future of the Republic of Turkey. They will be resettled and accommodated with what immigrants can help. Other potentials are settled close to peers and friends who came before. Over the years, there have been important agendas in all domestic and foreign policy, which are included in the choices among the people and designs involved in public relations and interactions.



Figure 10:Turkiye's Map
Source:Author

POST-WAR EFFECTS ON ISTANBUL

İstanbul is the one of the central point in the world. That makes It very interesting from all over the point. Since republic established (1923), İstanbul got alot of immigration because of the wars. Numbers are uncertain but according to municipality reporters there are 1.5 million immigrant are staying in İstanbul right now.



Figure 11:Istanbul's Map
Source:Author

POST-WAR EFFECTS ON ISTANBUL`S ISLANDS

During the Byzantine period, Greek fishermen and sailor families constituted almost the entire population of Burgazada, Heybeliada and Büyükada, while Armenians were in the majority in Kınalıada. In the last period of the Ottoman Empire, prominent Turkish and Jewish families started to settle in the Islands, especially in Büyükada, together with some foreign diplomats and businessmen. There are still significant Armenian and Jewish communities and Greeks on the Islands, but today the majority of the island's population is Turks.

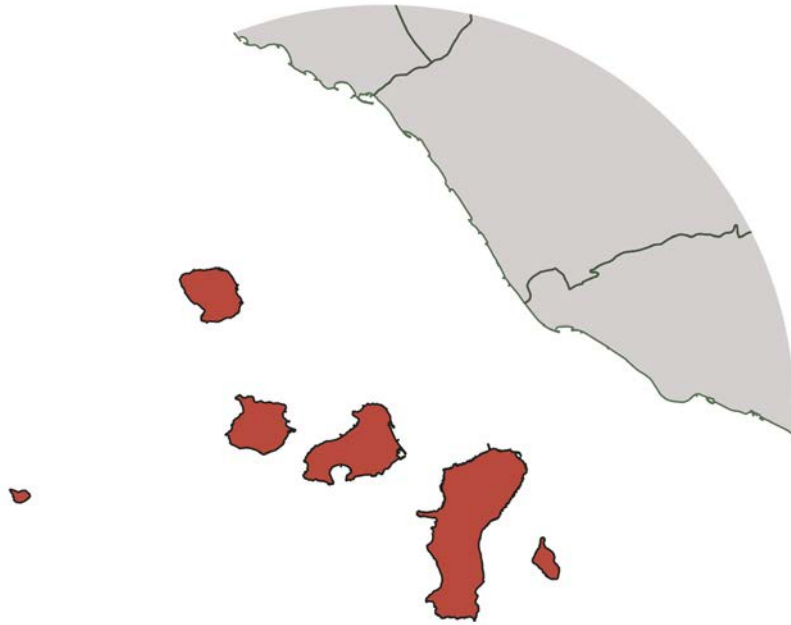


Figure 12:Princes Islands
Source:Author



Figure 13: Image showing the former Sanatorium and Istanbul at the behind of Island.
Source: Istanbul Municipality and Author



HEYBELIADA SEMINARY SCHOOL

HEYBELIADA MOSQUE

BET YAAKOV SYNAGOGUE

AL MILITARY SCHOOL

AYA YORGI GREEK CHURCH

Heybeliada
Ferry Terminal

FORMER SANATORIUM SITE

Aristotle talked about Demonisos, who operated the copper mine in Heybeliada in his book of *Mirabilibus Auscultationibus*



Figure 14: Cover page of De Mirabilibus
Source: Author

4th century BC / AD 300

Ottoman Captain Derya Baltaoğlu Süleyman first conquered Kınalıada, Burgazada and Heybeliada, and then Büyükada after a short resistance.



Figure 15: Conquest of Istanbul by Ottomans
Source: Panaroma 1453

1453

6th Century



Figure 17: Eastern Roman empire drawing for Constantinople
Source: Arsiv Adali Dergisi

The islands were owned by Prince Justin (later Byzantine Emperor Justinus II) and Empress Sophia. Henceforth, "Nisos tu Prinkipos", "Prinkiponisos" went down in history as the Island of Princes...

In 1923, Islands are becoming the part of Turkish Republic and some of Greeks and Armenians left to the island after independency. Also Ataturk (first president of Turkish republic) visited here in that years.



Figure 16:Heybelida Fairy Station
Source: Arsiv Adali Dergisi

1923

1831



Figure 18:Naval school of Heybeliada
Source:Arşiv Adalı Dergisi

With the relocation of the Naval School to Heybeliada , the construction of military facilities, schools, and mosques, and the interest of Turks as a settlement area after the Tanzimat, it gradually became integrated with the life of Istanbul.

1950-



Figure 19:Greek Orphan School
Source: Ada Newspaper

The population decline caused by the fact that the settled minority population, especially the Greeks, left the islands and Turkey due to the political developments such as the Events of September 6-7, 1955, the forced migration of the Greeks in 1964, the 1974 Cyprus Operation, and the coup of September 12, 1980.

04 CASE STUDIES



Figure 20: Image showing Freedom Park and representation of free African Nations on landscape
Source: Graham Young / Edited by Author



FREEDOM PARK SOUTH AFRICA, 2008

GAPP + Mashabane Rose Architects + MMA

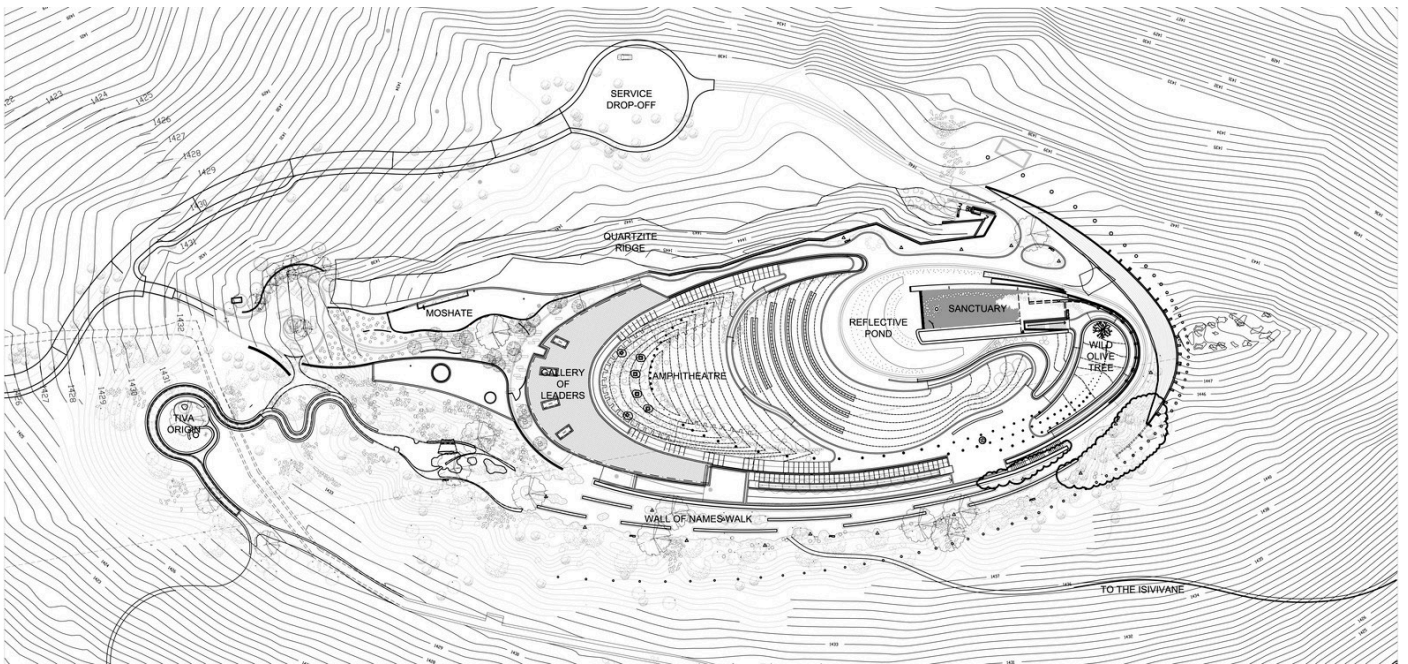


Figure 21: Master Plan of Freedom Park
Source: GAPP + Mashabane Rose Architects + MMA

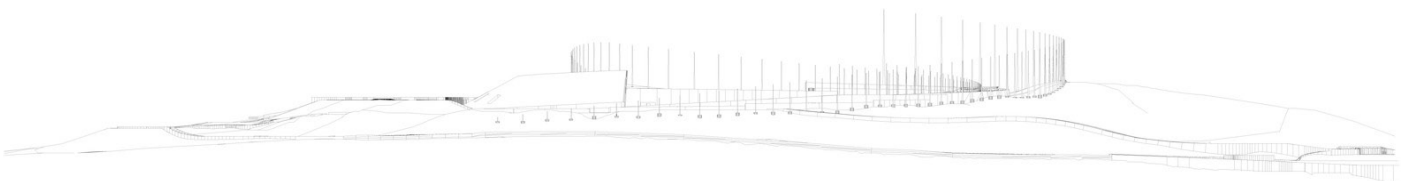


Figure 22: Elevation of the park
Source: GAPP + Mashabane Rose Architects + MMA

Freedom Park is located in one of South Africa's capital cities Pretoria. Situated on the top of a hill overlooking the city of Salvokop, the park was mandated by President Nelson Mandela to communicate a narrative of South Africa's journey to freedom following the end of the apartheid. It is a part of the rebuild seeking to address social fragmentation between races and significant disparities in access to education, health care and employment. Freedom Park is a therapeutic land-scape in the form of an urban park that tells a narrative of South Africa's journey to freedom and celebrates the 3.6 billion years of physical change in environment as well as those who fought for its freedom.

- Freedom Park addresses the physical, mental, spiritual, societal and environmental elements of the landscapes of South Africa and embodies them into one space for all.
- The park supports South Africa's newfound identity, attempts to create new social networks, and supports the once fractured society. It acknowledges the holistic approach of traditional African culture focusing on the collective and bringing community interests to the forefront of any decisions.

One African principle that was not lost with colonialism was 'ubuntu', meaning that 'I am what I am because of who we all are', which follows on from the Zulu saying 'umuntu ngumuntu ngabantu', which means 'a person is a person through other persons'. This principle values people first and foremost with a view of the collective whole.

One of the most vital features of the park is its engagement to a sense of place. The development of a sense of place is a social and cultural process that depends upon the user's response and cannot be derived from location alone. Creating a sense of place is affirmed in Freedom Park by the inclusion of the historical narrative and the use of traditional practices. When entering through the //Hapo external space the users make their way through traditional and native medicinal plants. The journey educates the user about traditional practices and sparks conversation. Sense of place is not only an embedded relationship with the natural environment but directly links to the people within the place. The inclusion of the eleven languages around the park aids in establishing place identity.



Figure 23: View of the Park
Source: Graham A. Young

The various components are linked by a spiral walk that creates a commemorative ascent up the hill to the sanctuary, which is the primary area of dedication and contains the everlasting flame. The material that ties all of the architectural and landscaping components to the site is phalaborwa quartzite rock, which is often dry-packed.

Hapo is the first point of arrival to the park. This space is an interactive exhibition telling the story of South Africa over the course of 3.6 billion years. The hapo name means based on “a dream is not a dream until it is shared by the entire community.” (“hapo ge hapo tama haohasib dis tamas ka i bo.”)

Hapo there are three external spaces. The first space is the Garden of Indigenous Knowledge/the Healing Garden. In this garden, water channels lead visitors into a quiet and contemplative space where they are immersed in medicinal plants and gain knowledge of Indigenous healing methods. The second space is Sentihaga, the children’s area. The landscape has been terraced with a series of cascading walls. Children and others are able to play with water features and plant material. Totems, an amphitheatre and small passageways are features of the garden to spark imagination. The third space is called the Boulders. They are metamorphosed layers of rock composed in a circular formation and surrounded by savannah vegetation to tell the story of South Africa’s creation. Indigenous vegetation surrounds Hapo blending the building into the landscape and preserving the natural terrain of the hillside. (Figure XX)

Exiting the Hapo, visitors continue on a contemplative journey up the Salvokop hill along a pathway named the Vhuwaelo. Along the Vhuwaelo there are a series of small gardens that you can weave in and out of, exploring the small private spaces comprised mainly of natural materials and plants. Dramatic views over-look the city of Pretoria and the Union Buildings. At the final moment before you descend down the hill is a space named the Mveledzo. It is made from heavy stones and concrete, providing a final resting spot. Then the visitor descends the hill to arrive at the S’khumbuto, a Swati word for remembering or memorial. The memorial is for those who fought for freedom and showed great leadership. Water has been used throughout the memorial because of its importance to African culture and its relation to healing and purification.



Figure 24: Eternal Fire
Source: Graham A. Young



Figure 25: Aerial View
Source: Clive Hassall (CNN)

Kopupaka reserve NEW ZEALAND, 2016

Robert Konieczny + KWK Promes

Kopupaka Reserve is a large urban wetland in Auckland, New Zealand. It is unique as it combines an expansive natural environment, which has been identified as having unique healing qualities, with Indigenous Māori cultural values. Māori call themselves the tāngata whenua (people of the land), which places importance on the connection between land and sea and respect and preservation of the natural environment and its people. Māori collective cultural orientations brings with them a much more holistic approach to health and well-being, combining sustainable and restorative methods with genealogy.

Wetland waterways provide an abundance of life with food and purification, contributing to the well-being of the people as Māori maintain that a healthy land-scape makes for a healthy individual. Views over the wetlands surrounding the confluence of the two freshwater streams, display the varied birdlife and biologically diverse horticulture. Hard landscape forms are inspired by the abundance of kai (food) found in wetlands and guide the boardwalk design (Figure xx). Open spaces for communal activities are contrasted with private places for emotional retreat (Figure xx).

The body is engaged through sitting or walking, the senses are engaged through sights, sound and smells. The park is a celebration of the inseparable bond of water and earth. This is deemed vital to sustaining and balancing the natural environment and which is reflected through wairua and which refers to the spiritual plane. Healthy water and rich resources are deeply embedded in Māori cultural and spiritual landscape values as water is sacred.

What makes Kopupaka Reserve a successful therapeutic landscape?

The place has ability to encourage community engagement and establish a strong sense of place and place identity. These themes are threaded throughout most of the literature that has been written on therapeutic landscapes. As research shifted from its focus on the big event or extraordinary healing spaces to the everyday, the method of healing also shifted from an internal singular process to a communal and inclusive process.



Figure 26: Landscape Elements
Source: Via World Architecture Festival

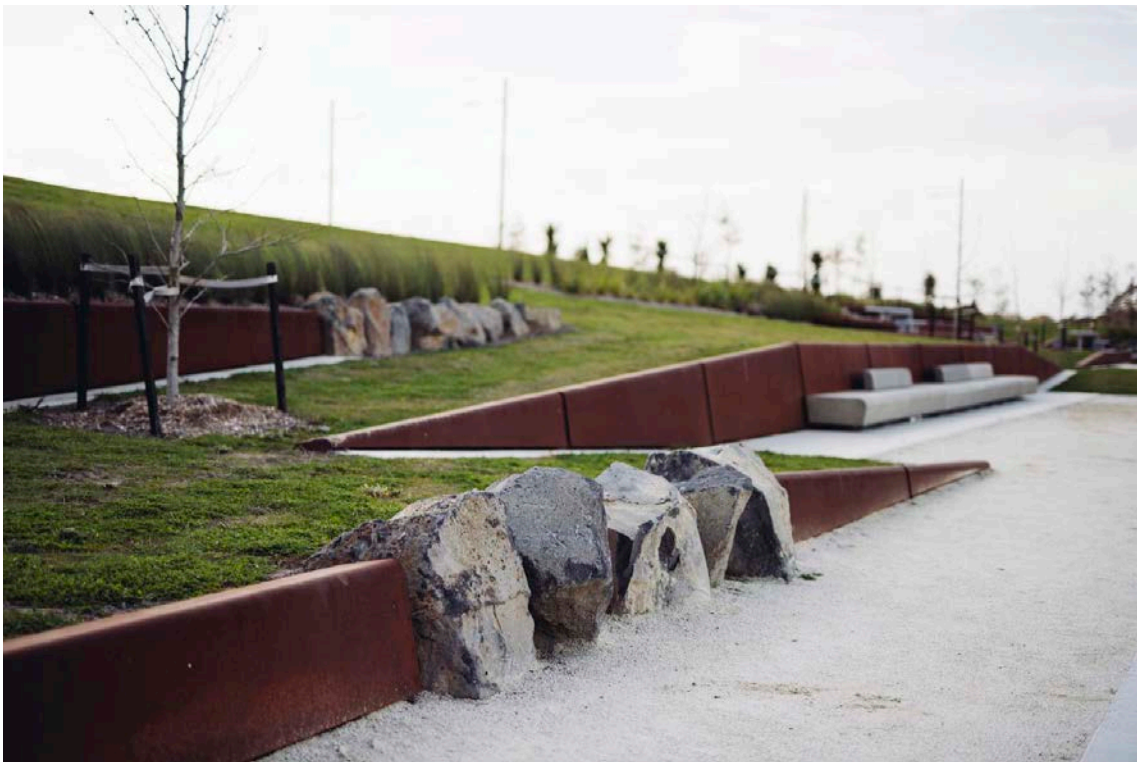


Figure 27: Public Spaces
Source: Via World Architecture Festival

Healing Gardens at the Walter Reed National Military Medical Center, 2013

Topotek 1 Berlin

Veterans can rehabilitate from psychological and physical trauma with the aid of a network of Healing Gardens at the Walter Reed National Military Medical Center in Bethesda, Maryland, in the United States. The gardens include various landscaping features, such as water features, native plants, and walking trails, within the current hospital site. Veterans and their families may unwind, ponder, and recover in the gardens' serene and healing setting.

Goals

The Healing Gardens' objectives are to give soldiers healing from PTSD and other forms of physical trauma a therapeutic landscape. The gardens encourage physical activity, interpersonal communication, and mental healing by exposing visitors to nature and stimulating their senses.

Design Elements

- Various garden areas, such as a therapeutic, sensory, and meditation garden
- Native plants for varying seasons' interest and sensory stimulation
- Seating spaces for relaxing and socializing
- Pedestrian routes for exercise and mobility
- Pergolas and shade structures for sun protection
- Interactive garden features include a sculpture garden and labyrinth

Results

The Healing Gardens at Walter Reed have been a success in giving veterans and their families a soothing landscape. The gardens have been demonstrated to elevate mood and general well-being while lowering stress, anxiety, and sadness. The gardens have also been utilized as a tool for physical therapy, assisting veterans in regaining their strength and mobility through walking and other exercises. Veterans and their families have gathered in the gardens as well, giving them a feeling of camaraderie and support as they go through the healing process.

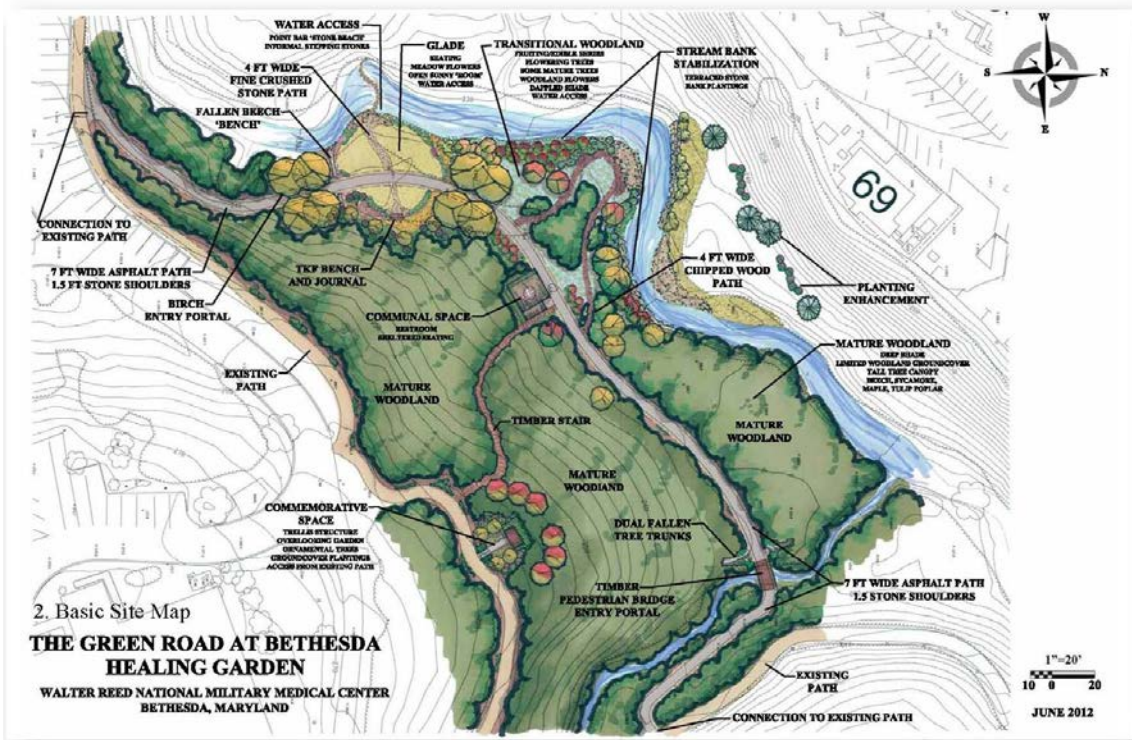


Figure 28: Site Plan
 Source: <https://naturesacred.org/healing-our-wounded-warriors/>



Figure 29: Gathering Place
 Source: Lisa Helfert

05

ANALYSIS

- Territorial Scale
- Medium Scale (Prince Islands)
- Sanatorium Area
- Heritages
- Stakeholders

"All we need to do is change our attitude: see natural disorder as a new opportunity, trust the biological order, accept weeds (unwanted plants) and recognise them as resources."

Pierluigi Nicolin

Figure 30: Image showing sketch of Heybeliada
Source: Author



THEORETICAL FRAMEWORK

According to our research, The Third Landscape refers to a space that neither expresses authority nor subjection to it (rather than the Third World or Third State). This enables grouping them under a single term. Third Landscape is the phrase I suggest for an analysis in which the primary visible data is organized with light on one side and shadow on the other.

Understanding the landscape structure and its determining factors will be possible by using successive approaches that range from the territorial scale to the scale of the Sanatorium, back and forth: cultural heritages, landscape structure, the morphology of the territory, the incidence of climate, the pressure of infrastructure, the traces of history, etc.; and of course, the socio-economic factors relating to human activity and its spatial manifestation.

Even though it depends on the management strategy, neglected land is typically the outcome of the concept of spatial organization. We will take agriculture, forestry, and cultural heritage into consideration while evaluating these regions. We will arrive at our sustainable ways for our one portion when we take into account that lands with the natural regions.

Psychology is a key element in developing mental capacity and protecting the site's heritage. The concept and mindset are the same in the third landscape. The Third Landscape's existence is a mental world. It functions because the topic being discussed, namely life on the planet, is itself mobile. It temporarily aligns with the administrative divisions. It has a permanent position in the planetary citizen's ethical sphere. The Third Landscape takes on a political dimension due to its substance, the risks that diversity poses, and the necessity to sustain its dynamics.

The analysis part will carry us to our Post War Traumatic Syndrome Rehabilitation through sustainable, durable, unrestricted and adaptable process. The process will end a pangea which hosts more species than several separate continents representing the same surface.

FRAMEWORK

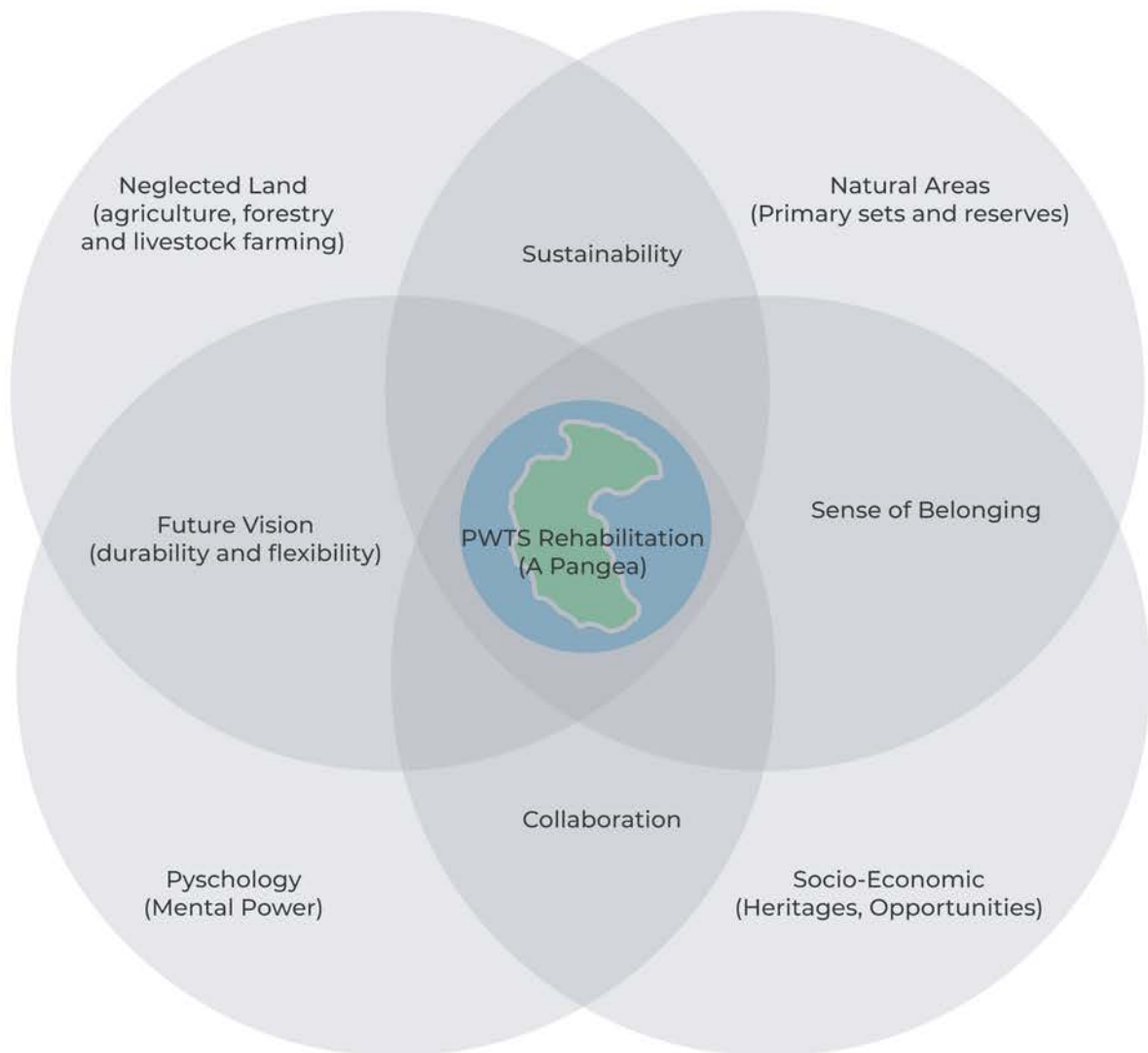
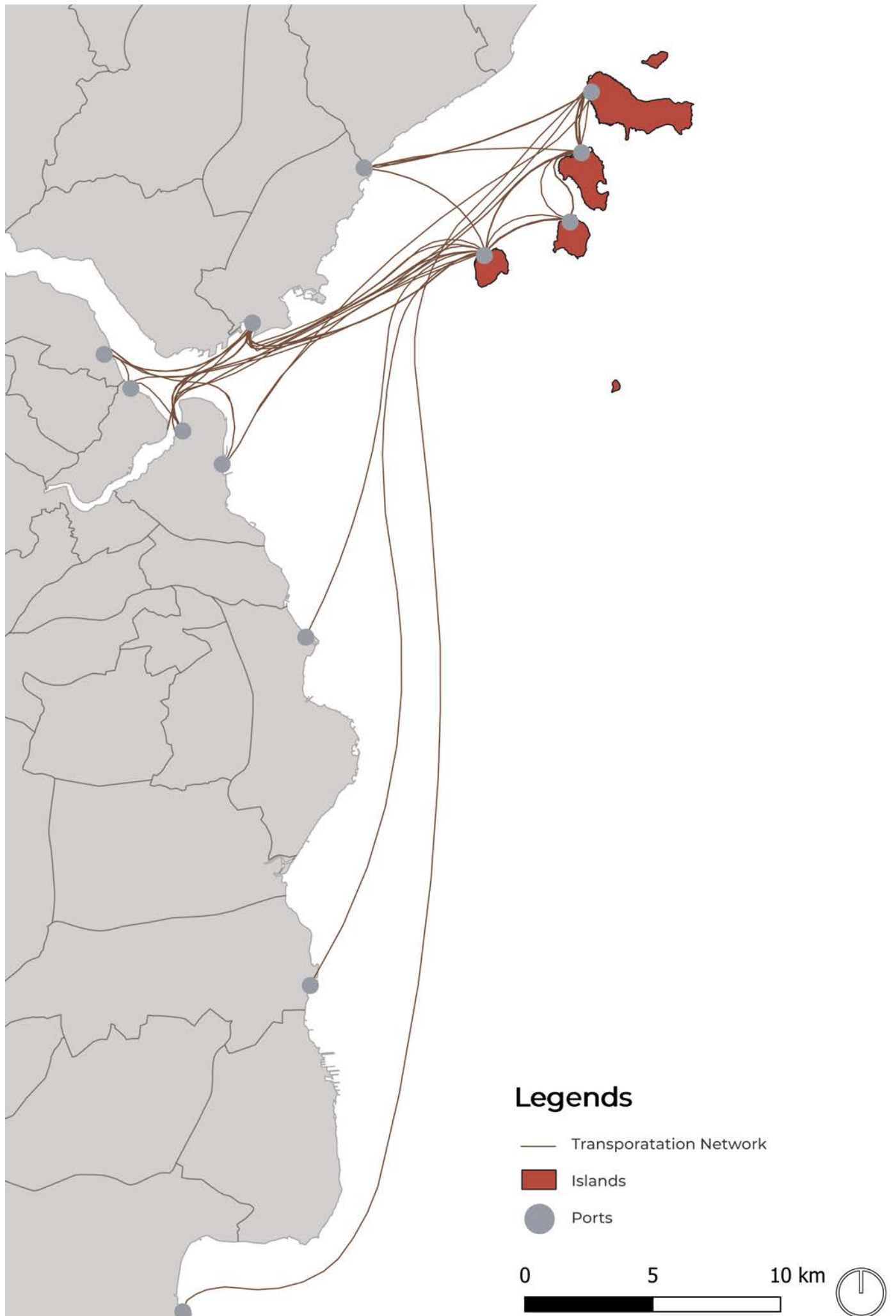


Figure 31: Theoretical Framework
Source : Author

Figure 32: Transportation of Islands
Source : Author



TRANSPORTATION

In addition to being distinct from other Istanbul districts in terms of its topography and location, the Adalar District has its own special arrangements for infrastructure and transportation that guarantee the continuity of daily life. The major means of mobility on the islands traditionally have been pedestrians and non-motorized vehicles, with motor cars only being utilized for public functions. However in recent years, there have been more requests for additional private and public transportation options on the island as a result of rising everyday tourists, shifting demands, and technology advancements. In this situation, it is important to assess both the arrangements on an island and the way that the transportation, logistics, and infrastructure between the islands and the mainland are organized. These concerns clash with the islands' top protective priority. Parallel to this, as demands evolved over time, rules also had to adapt, but these adjustments sparked a lot of debate.

How to reach Islands from the mainland of Istanbul?

Transportation to the Islands is provided by City Lines and Private Motors. The pier infrastructure of the İDO enterprise is idle in the Islands. Nearly 140 daily flights are organized from different points of Istanbul to the Islands during the peak summer season. (Belbim Database,2019)

When the unilateral trips to the island during the summer are analyzed, it is found that although around 23.5% of them are made by city lines, 76.5% are made by private transportation firms. Kabataş, Eminönü, Bostanc, Kartal, and Kadıköy were the departure points that saw the most traffic. Bostanc Pier is the one that gets the most visitors to the Islands. At Bostanc Pier, the number of crossings rose by 50% throughout the summer. Its growth rate varies between 20% and 40% in various piers.

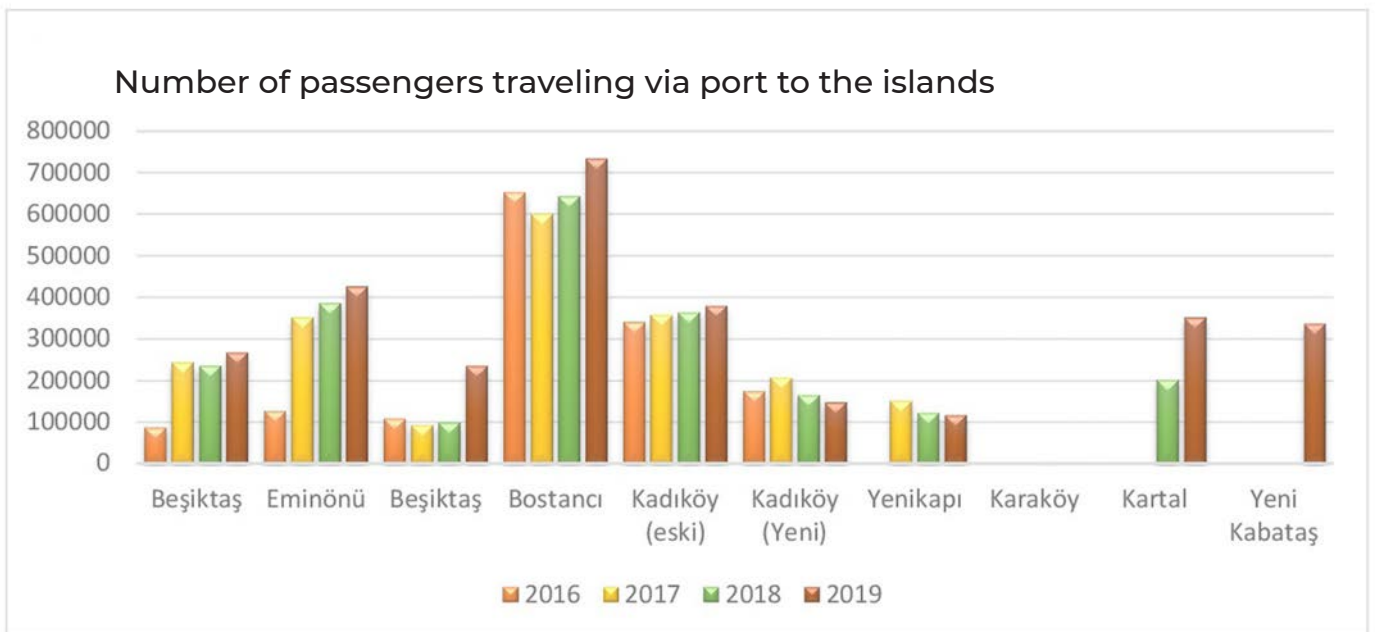


Figure 33: Transportation Chart
Source : Istanbul Municipality

MEDIUM ANALYSIS (HEYBELIADA)

LAND USE

Being one of the most important natural protection areas of Istanbul with its unique natural landscape and biological diversity, the Islands form a unique ecosystem with its unique topography as well as the intertwined natural and ecological cycles of forest areas, sea and coastal areas.

PROBLEMS OF ISLAND

The islands' biodiversity and natural habitats are faced with problems such as intensive tourism use originating from commercial enterprises in forests and coastal areas, interventions to coastal areas, environmental pollution and fire risk caused by daily tourism, infrastructure and maintenance deficiencies.

The opening of natural areas to tourism use beyond their capacity and harmful and incompatible interventions to ecosystem areas cause both the disruption of ecological balances and the restriction of the use of sea, forest and coastal areas by the people of the Islands.

EXPECTATIONS AND DEMANDS

There is a demand for a calm life focused on nature in the Islands, where humans, animals and all living things can live in harmony. There is concern that the dense urban life in Istanbul will move to the Islands. It is requested to develop effective practices for solving the problem of garbage originating from tourism purposes, to improve solid waste and wastewater infrastructure and to construct necessary facilities. In addition, opinions were expressed that the transportation of domestic solid wastes to the mainland is a great economic and ecological loss, and it was stated that recycling, separation of solid wastes and zero waste practices are very important for the ecology of the Island.



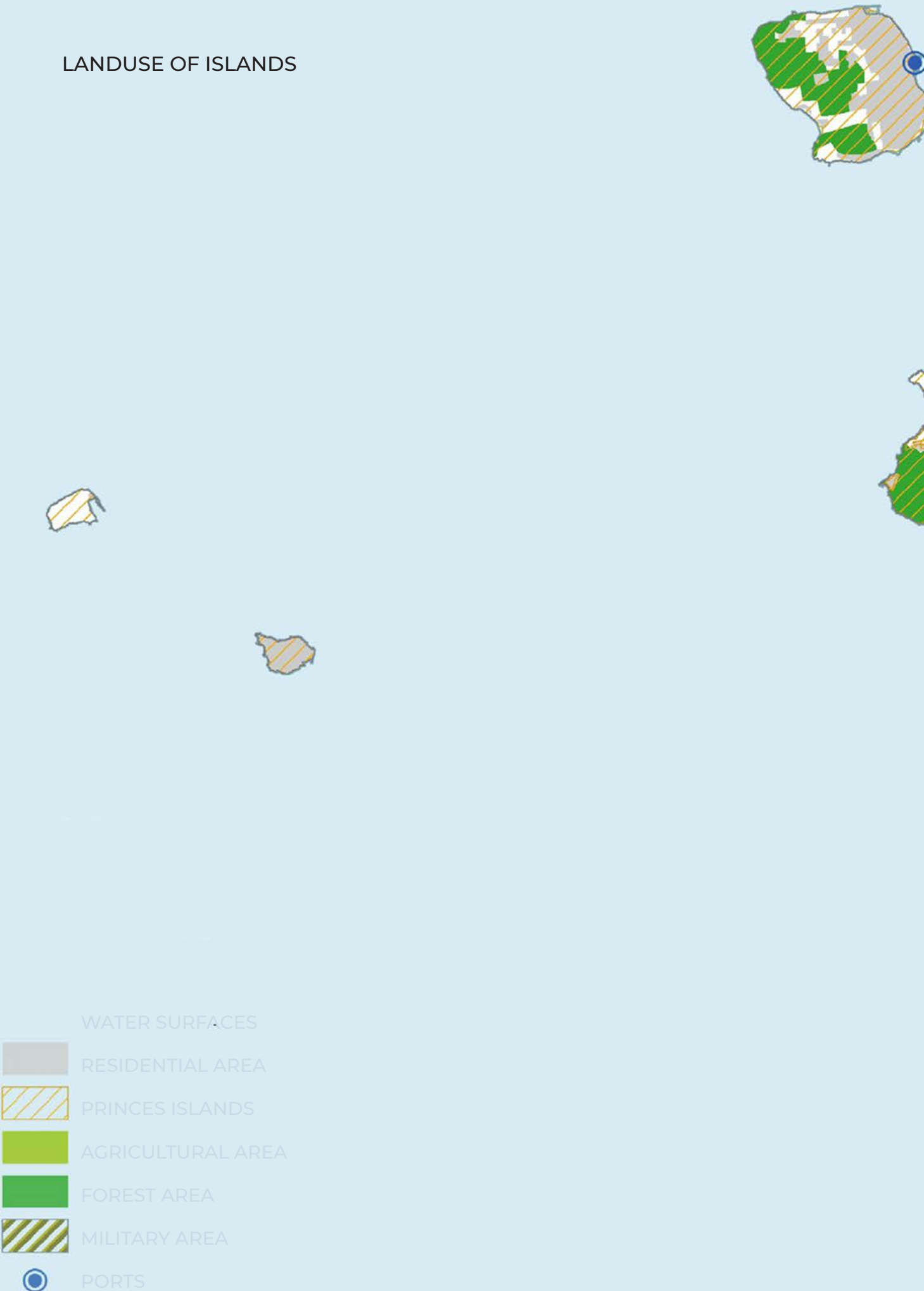
Figure 34: Illustration shows settlements of Island
Source : Author

AIM

With an ecology-oriented planning approach, priority protection of forest and sea coastal areas, conducting campaigns for ecological awareness, creating innovative control and participation mechanisms, limiting the use of economic activities and urban land uses on the ecological system, limiting the uses, and ensuring that the settlement structure outside the natural protected areas is protected with natural life. intended to be harmonized. and zero waste practices are very important for the ecology of the Island.

Figure 35: Landuse of Islands
Source : Author

LANDUSE OF ISLANDS



MALTEPE

KARTAL

HEYBELIADA

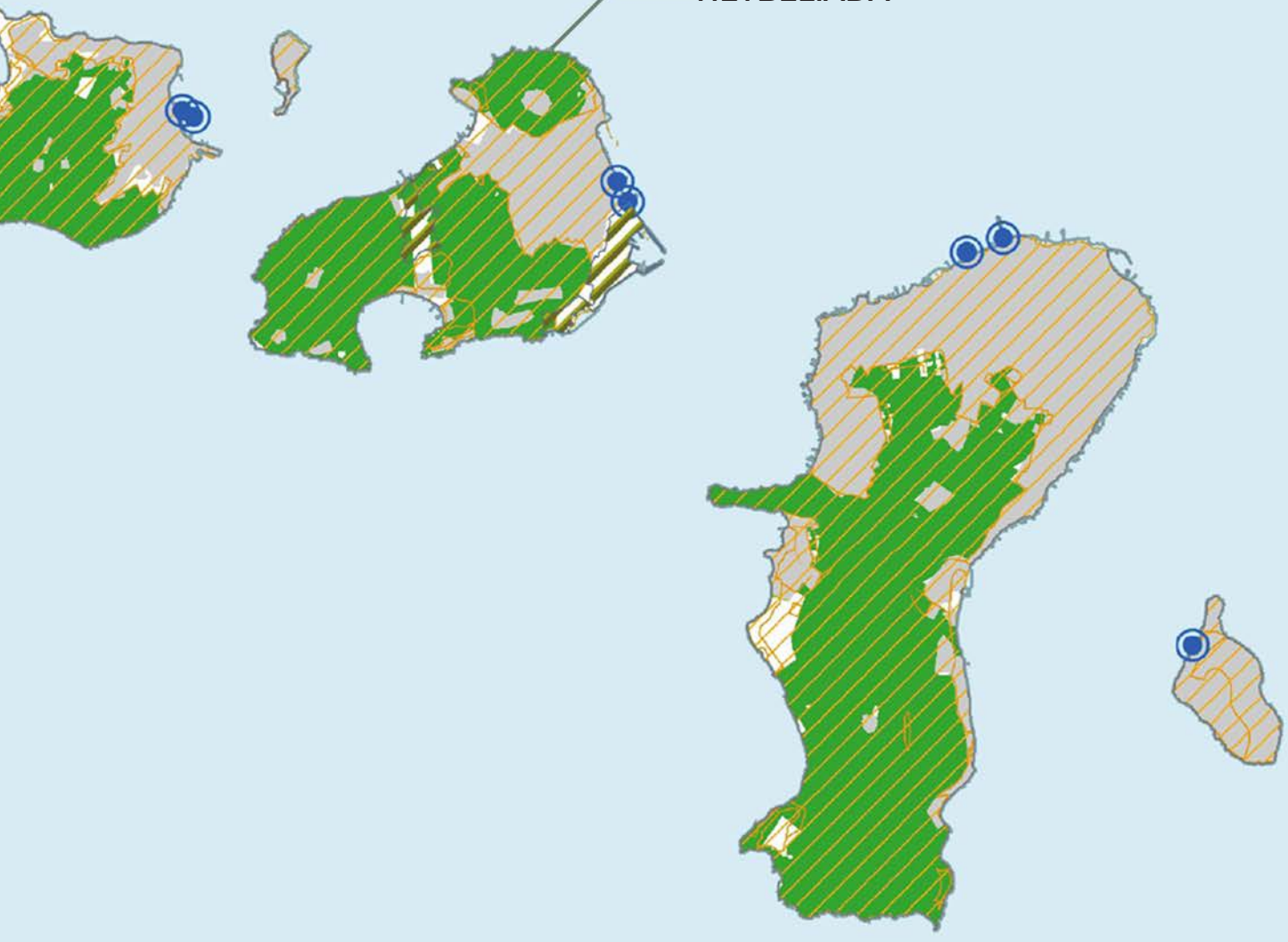
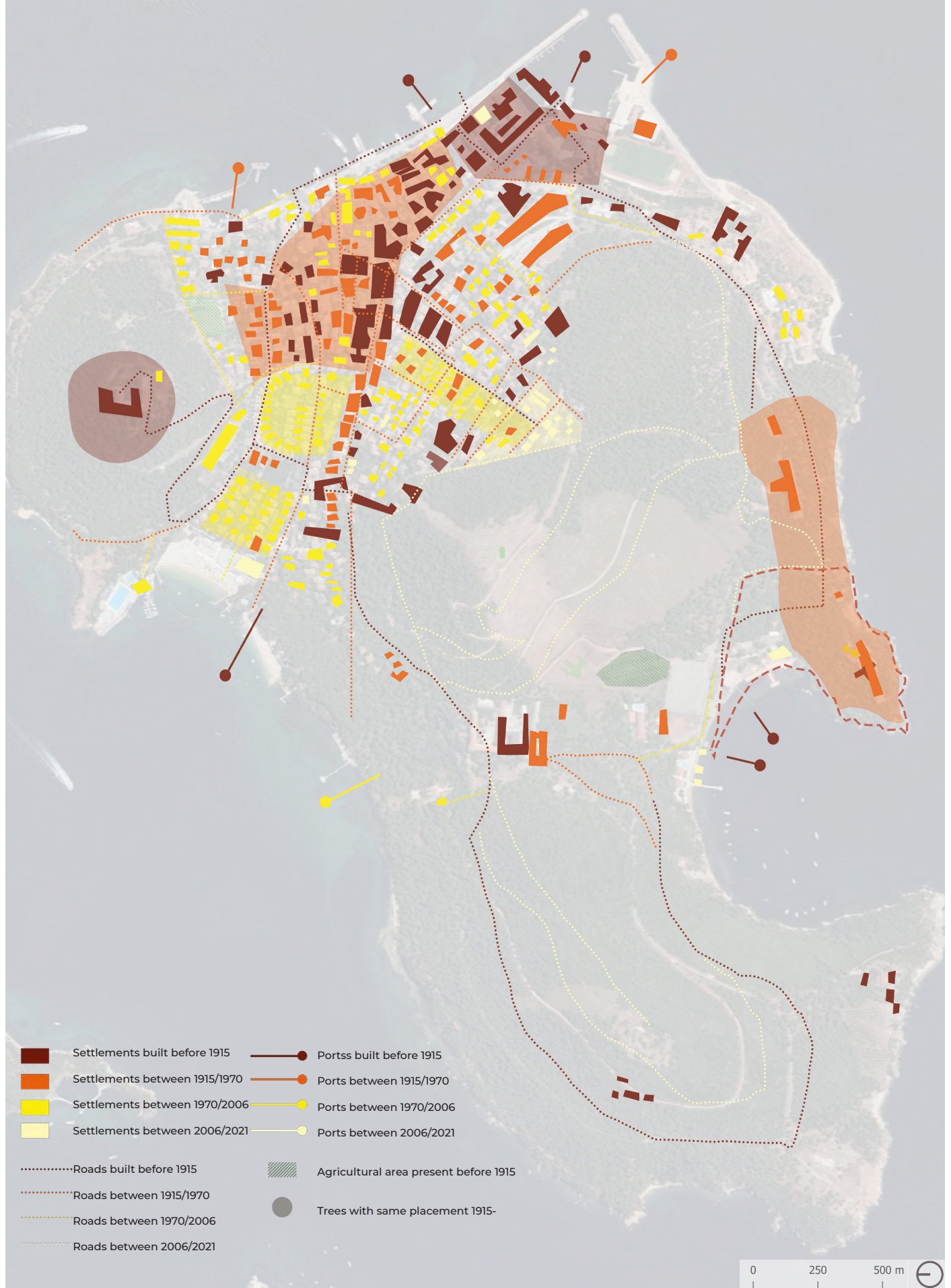


Figure 36: Heybeliada Synchronic Map
Source : Author

HEYBELIADA ANALYSIS



BUILDING ELEMENTS

The growth of the urban settlement began after 1970 with strong link to the ports. Island shapes around the settlements and also military buildings affected parts. Most obvious heritage is Theological School of the island on the north needs to be preserve. Also, first PM of Turkiye Ismet Inonu and famous writer Huseyin Hamdi's house represent today one of the classic Istanbul house type. At the other side, Sanatorium is also first pandemic hospital for the city and country so It also represent one of the tangible and intangible testimonies of the health building.

ECOLOGIC ELEMENTS

The rural development has create new opportunites for the new settlements. Agricultural areas disappeared for most of the areas. Places have been marked with new military settlements which represent character of new settlements after the independency of Turkish government. Forests mostly kept under conversaiton but south of the part got lost during the fire in 2020. Also they add artificial ports after 1915. Forests needs to be preserve in its forms and plant types. But divisions of site and urban richness are very not clear and the current situation on the site is highly disorganized, and there is insufficient infrastructure to define island and soft mobility. So the major objective here is to reduce "urban poverty".

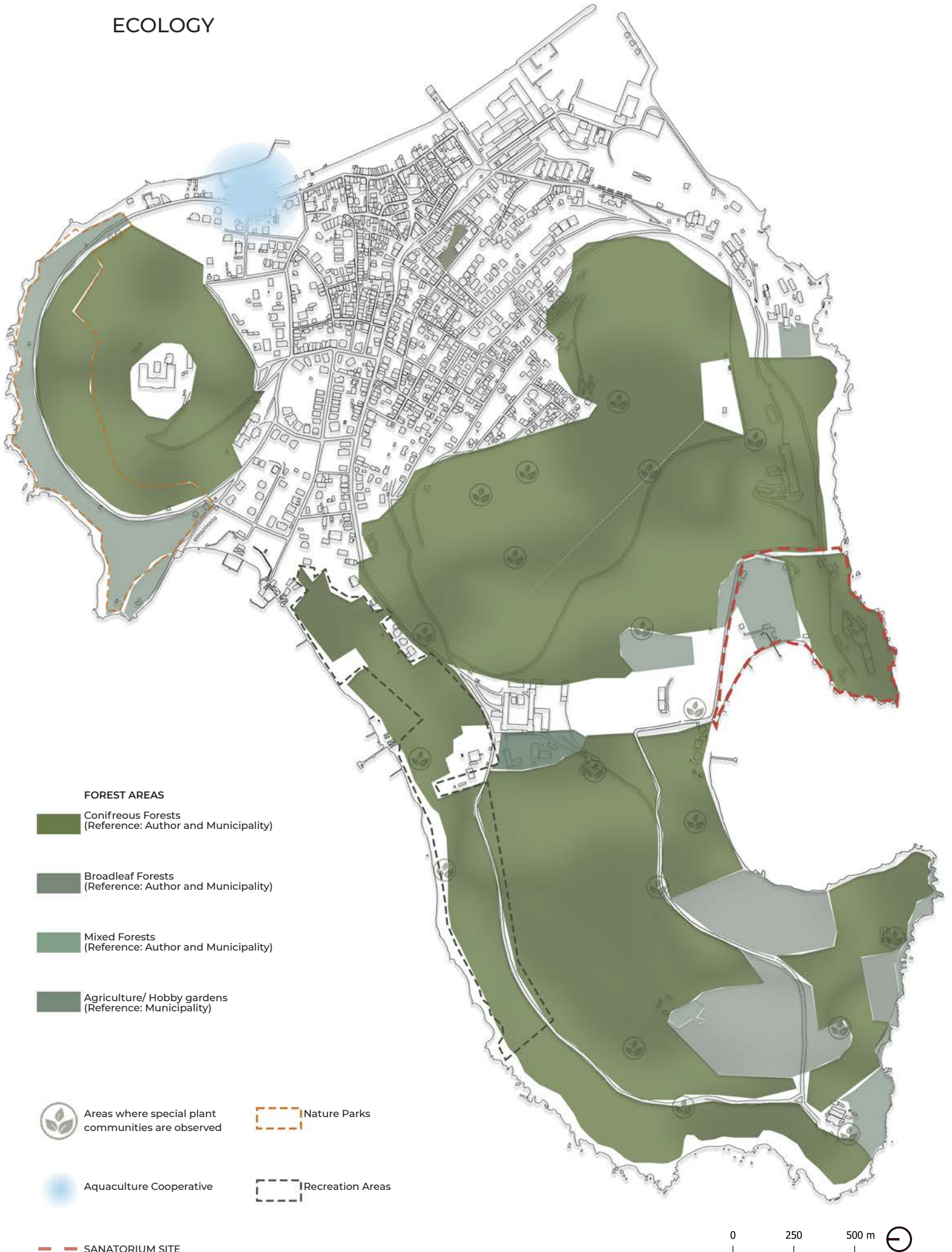
GOALS FOR REGENERATION AND REHABILITATION

The identification of the place will be integrated and regenerated within the project concept. In actuality, they will be integrated with various operations in designated regions. The planning process to recover the historical value of Heyebliada and its forests has begun in the ancient Heybeliada.

The road through Sanatorium from the main port will redesign and emphasize former first Pandemic hospital in Turkiye also connect to coastline.

Increasing our attachment to the island, paving the streets, and constructing infrastructures that assist us in reducing our lack of infrastucture and achieving our ideal conditions in the Heybeliada in terms of livable living standards, as well as reducing social fragmentation will reach our ideal regeneration. Biodiversity, soil and plant growth, and various agricultural operations, as well as the cultivation of various tree and shrub species, will all rise.

ECOLOGY



SOIL STRUCTURE

While the climate and plant community of the islands, which are near to the Mediterranean climatic zone, have features that are good for soil formation, the majority of them don't have a horizontalized soil cover. Almost everywhere, the material is pushed and washed by the topography's overslope. Because to this, the current covering of red dirt has gotten quite thin and foundation has started to show in different locations. Where the plant community is relatively lush, the red soil is covered with very fine debris consisting of rotten and crumbled leaf debris with little humus. Only in these locations does the earth have a brownish hue. **The soil is reddish where organic material does not accumulate or is not washed away.**

Red soil is combined with relatively thick slope debris in alluvial zones. They are covered with a thin layer of material that is mixed with some raw humus and decayed organic waste. As a result, the soil in these locations has a brownish color. **Iron oxide and aluminum oxide make up the reddish soils that give the Istanbul Islands their nickname of the Red Islands.** They give the veneer a clayey look.

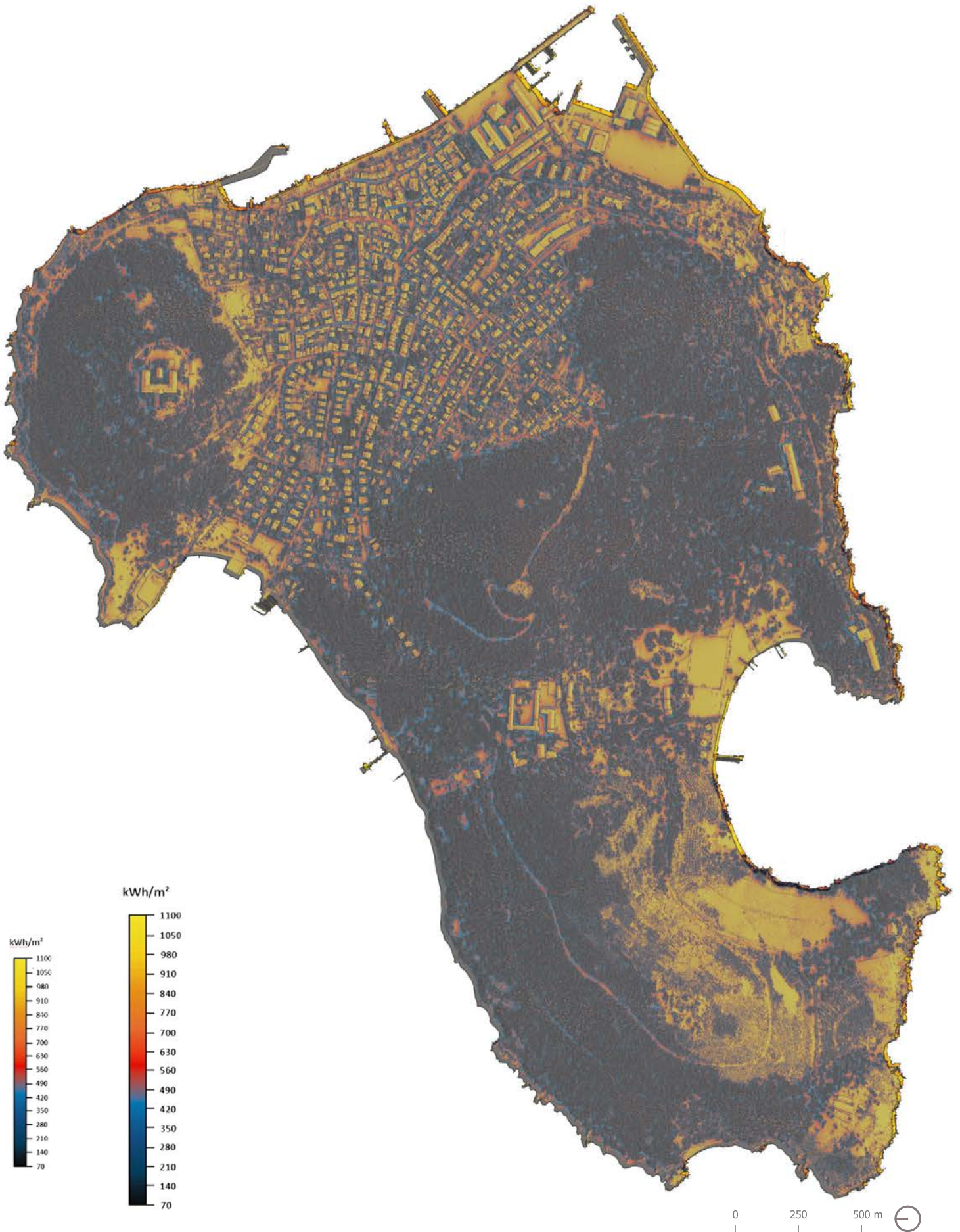
CLIMATE

In general, the district's climate is comparable to that of Istanbul. The crossover between the Mediterranean and Black Sea climates is evident. The Mediterranean climate is known for its summer dryness, which is a key aspect of the climate in the Islands. As a result, the temperature is higher than the normal for Istanbul. While the winters and springs are wet, the summers are dry.

It also shows the existence of several exotic and alien plants that were historically established on the islands in regions with stream beds and alluvial soils. **Under the red pine trees, the only species that can produce forests on the islands, exceptionally rich maquis ecosystems and regions with high biodiversity were found.** On the other hand, it has been seen that the maquis cover has disappeared in regions where stone pine has been planted, and that red pines are naturally rejuvenating themselves in locations where tourism is allowed, the soil is compacted, etc. It was found that the forest ecosystem had collapsed and that the amount of degraded forest land had grown. **It was discovered that cormorant nesting grounds were abandoned in some coastal regions where human and tourism business pressure rose, and that the crow and seagull populations that expanded concurrently with the growth in human distribution reduced the frequency of other bird species.**

According to this study, more than 400 plant and tree species and more than 90 bird species, some of which are on the IUCN Red List, were observed in the maquis ecosystem, which is in harmony with these forests, on the Islands, most of which are covered with red pine forests.

Figure 38: Heybeliada Solar Energy Map
Source : Author



WASTE AND ENERGY

The Princes' Islands mainly rely on electricity from the mainland, which is transmitted through submarine cables. However, there are also several solar panel installations on the islands, which generate renewable energy. Additionally, some residents and businesses on the islands use generators powered by fossil fuels as a backup source of electricity. Observation for the Island's waste and energy:

- There are currently no solid waste collection or separation areas in the Adalar district.
- Annual electronic waste is 617kg, marine and coastal waste is 632kg, packaging waste is 752 thousand kg, domestic waste is 12 thousand kg.(Istanbul Municipality,2021).
- Facilities such as power generation plants, wastewater treatment plant, solid waste landfills, and recycling facilities are not present.
- It is necessary to determine and calculate data on energy efficiency and calculation of ecological footprint.

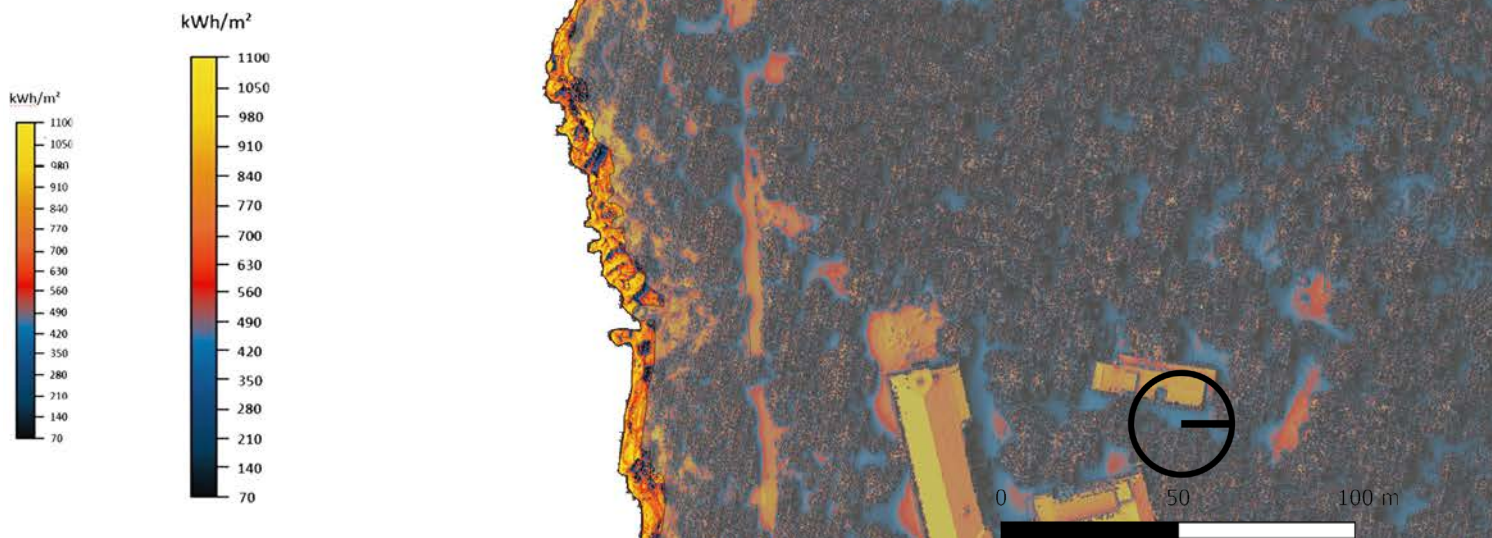
There is also waste management on Heybeliada. The Istanbul Metropolitan Municipality has implemented a solid waste management system on the island, which includes collecting and disposing of waste in an environmentally-friendly way. The waste is collected and transported to a transfer station, and then to a landfill outside of the island. In addition, there are recycling bins available on the island for residents and visitors to separate recyclable materials from other waste. The municipality also provides education and awareness-raising programs to encourage people to reduce waste and increase recycling.

Statements

There are several statements and plans related to the energy future of the Princes' Islands, including Heybeliada. One notable example is the "Sustainable Energy Action Plan for Istanbul Metropolitan Municipality (2014-2019)" which includes energy efficiency and renewable energy measures for the entire Istanbul Metropolitan Municipality, including the Princes' Islands. The plan sets specific targets for reducing energy consumption, increasing the use of renewable energy sources, and reducing greenhouse gas emissions.

Additionally, the Istanbul Environmental Protection Agency (ÇEDBİK) has published an Environmental Impact Assessment (EIA) report for a proposed wind energy project on Heybeliada. The project aims to install wind turbines to generate electricity from wind power, which would contribute to the island's energy needs while reducing its reliance on fossil fuels.

SOLAR ENERGY POTENTIAL MAP



MAP TECHNIQUE

While creating the map, the “Digital Surface Model” of 5345 km², 25 cm sensitive, produced from the 2013 LiDAR (Light Detection and Ranging, Beam Detection) data of Istanbul was used.

The map was calculated as a result of the analysis of sunshine duration data taken every 14 days in a 6-month period (1 January - 31 June). While making the calculations, the solar energy values taken from the birth of the couples to the end of the day with 30 usage periods are used.

Used when generating maps; 30 uses the calculated solar energy values together. In this way, it has participated in reaching the optimum level of shadow and other effects that will cause the blocking objects near the roofs to occur on the panel.

With the use of high precision (25cm) Digital Surface Model (DSM) data in the calculations, the view location of the cells, the position of the calculated roof on the world and the geometric shape, direction and direction of the roofs were obtained together.

OUTCOMES

North of the sanatorium have less potential solar power than other part of the site. Around the sanatorium have covered with pine trees that make it lower of the solar energy potential.

Çam Harbor has most solar energy power potential on the site. In history, copper mining effected the landscape of this part and create more artificial place in the island. Addition of some new building and removing some part of trees increased the power once again.

East side of the sanatorium is more covered with high rocks that effect the solar power potential inconsistently.

The road which is coming from the settlements has creating one solar energy axis for the site which may use for ecological corridor for our idea.

LANDSCAPE STUCTURE MAP (FOREST AXIS)

MIXED FOREST

**T
R
E
E
S**
Illatro (*Phillyrea Latifolia*)
Terebinth (*Pistachia Terebinthus*)

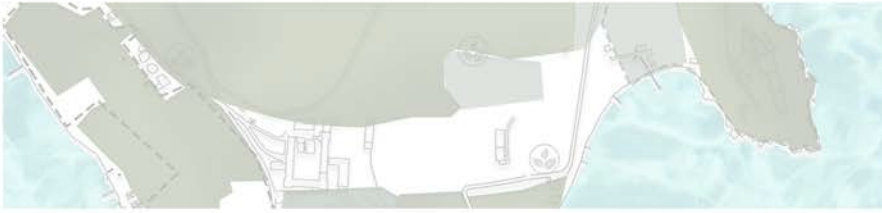
**S
T
R
U
C
T
U
R
E
S**
Lavender (*Lavendula Stoechas*)
pink rock-rose (*Cistus creticus*)

BROADLEAF FOREST

Mimosa (*Acacia Dealbata*)

Sarcopetterium Spinossium
The villous sparrow (*Calicotome villosa*)
Thyme (*Thymus vulgaris*)





Coniferous F.
 Broadleaf F.
 Mixed F.
 Agriculture
 Water

CONIFEROUS FOREST

Stone Pine (*Pinus Pinea*)
 The red juniper (*Juniperus oxycedrus*)
 The wild asparagus (*Asparagus acutifolius*)

AQUATIC PLANTS

Agave Americana
 The thorn oak (*Quercus coccifera*)
 Tree Heather (*Erica arborea*)



Heybeliada Fauna



Cormorant



Euroasian Jay



Hoopoe



Euroassian Squirrel



Euroassian Rabbit



European Hedgehog



Euroasian Sparrowhawk



Blackbird



Common Chaffinch



Common Pandora



Sea bass



Bluefish

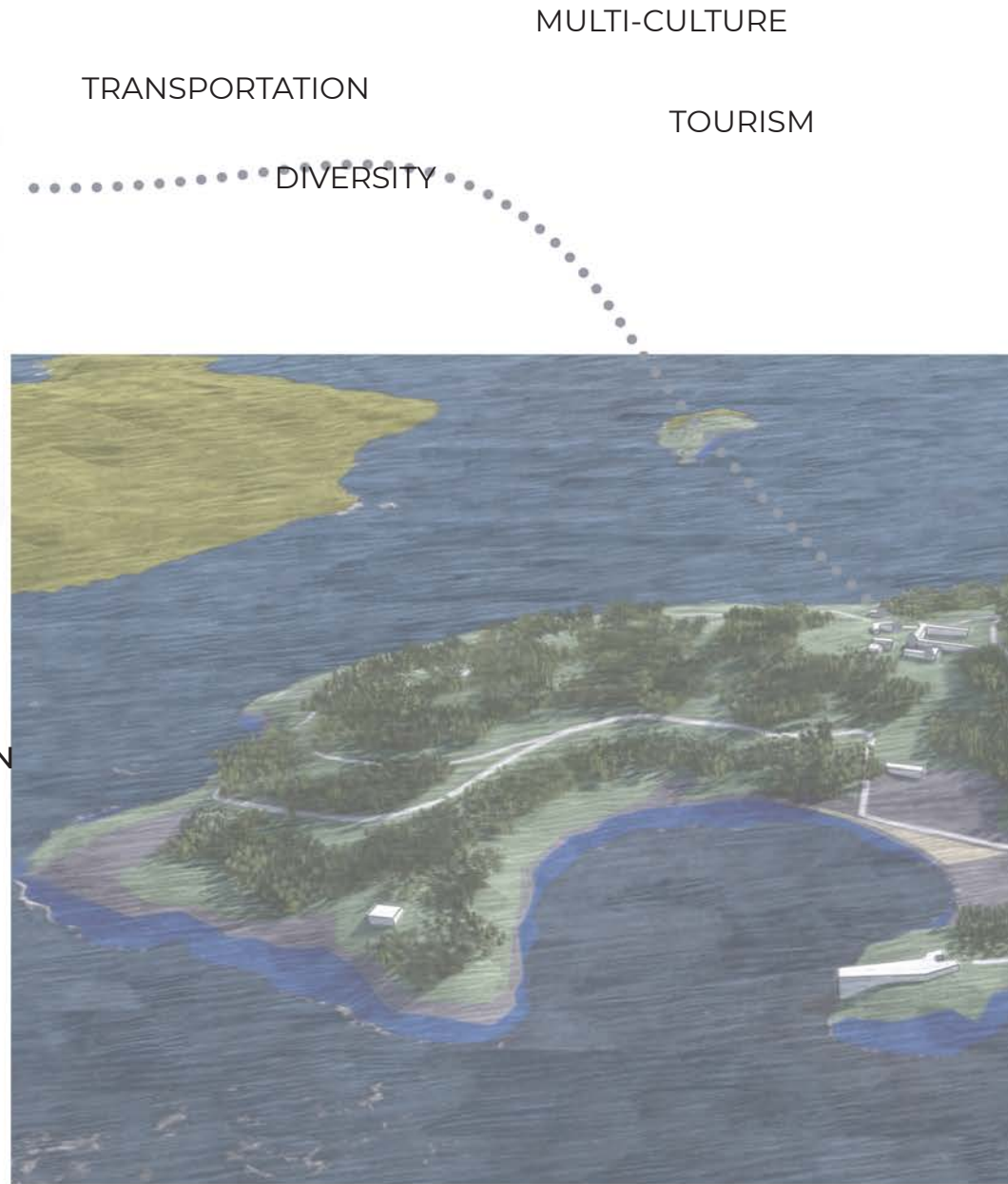


Bottlenose Dolphins

STAKEHOLDER ANALYSIS



AHMET
FORMER SOLDIER/CITIZEN



Education, culture, art and health institutions such as Heybeliada Sanatorium and Trade School should be brought back to the life of the Islands and Istanbul by gaining such functions.

Approaches should be developed that will encourage the recording of the multicultural memory of the Islands, and open the works of important personalities of the Islands and the movable heritage values they left behind to be a part of the cultural life of the Islands. The planning and conservation principles required to preserve the balance between urban elements such as the built area, green space, silhouette, garden, vegetation, and to preserve the cultural landscape, which have survived to the present day and present the original identity of the Islands, should be handled with sensitivity in practice.

CONNECTIONS

NATURAL REGENERATION

ACCESSIBILITY

HISTORICAL PRESENCE

NEW INFRASTRUCTURES



HEYBELIADA LIBRARY



AYNUR AKBIYIK
INONU MUSEUM



Detach the local economy of the Islands from dependence on mass tourism, take measures to support the crafts unique to the Islands, such as carriage, wood and iron craftsmanship, gardening and floriculture, and thereby reinvigorate local small production.

Coasts such as Çam Port, which can remain open to the public for years, should not be abandoned for the commercial purposes of private enterprises, and it should be aimed to protect them as public beaches by providing public management.

TANGIBLE HERITAGES



Nature Parks

A significant area of the island is covered by the Heybeliada Forest, which is home to a wide variety of plant and animal species.



Heybeliada Seminary School

one of the island's most well-known landmarks. The institution, which was established in 1844 as a center for higher learning for the Greek Orthodox Church, has over the years turned forth a number of notable theologians, academics, and leaders. Due to political difficulties between Greece and Turkey, the school has been closed since 1971, although it continues to be a significant representation of the island's cultural history.



Historic Houses And Mansions

Many old homes and mansions, many of which are from the Ottoman period, can be found in Heybeliada. These structures are renowned for their unusual design and elaborate ornamentation, and they provide a window into the island's former status as a hub of privilege and riches.



HEYBELIADA SANATORIUM

First pandemic hospital of Türkiye.



Çam Port

According to historians, Çam Liman Bay is not natural and was formed in the shape of a half-moon by digging. It is unclear where the old coastline was before the excavations. Excavation work began in the 4th century BC to extract the copper mine found here and continued until the 18th century.



Greek-Orthodox Educational System

It is an international theology school that Orthodox Churches participate in. It has played an important role in bringing order in the education of the clergy for the Greeks.



Fishing Culture

It is an international theology school that Orthodox Churches participate in. It has played an important role in bringing order in the education of the clergy for the Greeks.



RELIGION UNITY

Former Mining area and important place for summer tourism of the island.



MILITARY DISCIPLINE

Military discipline is effected by militart settlement of the island which also connected with the daily life of the island. Such as daily clothing and activities.

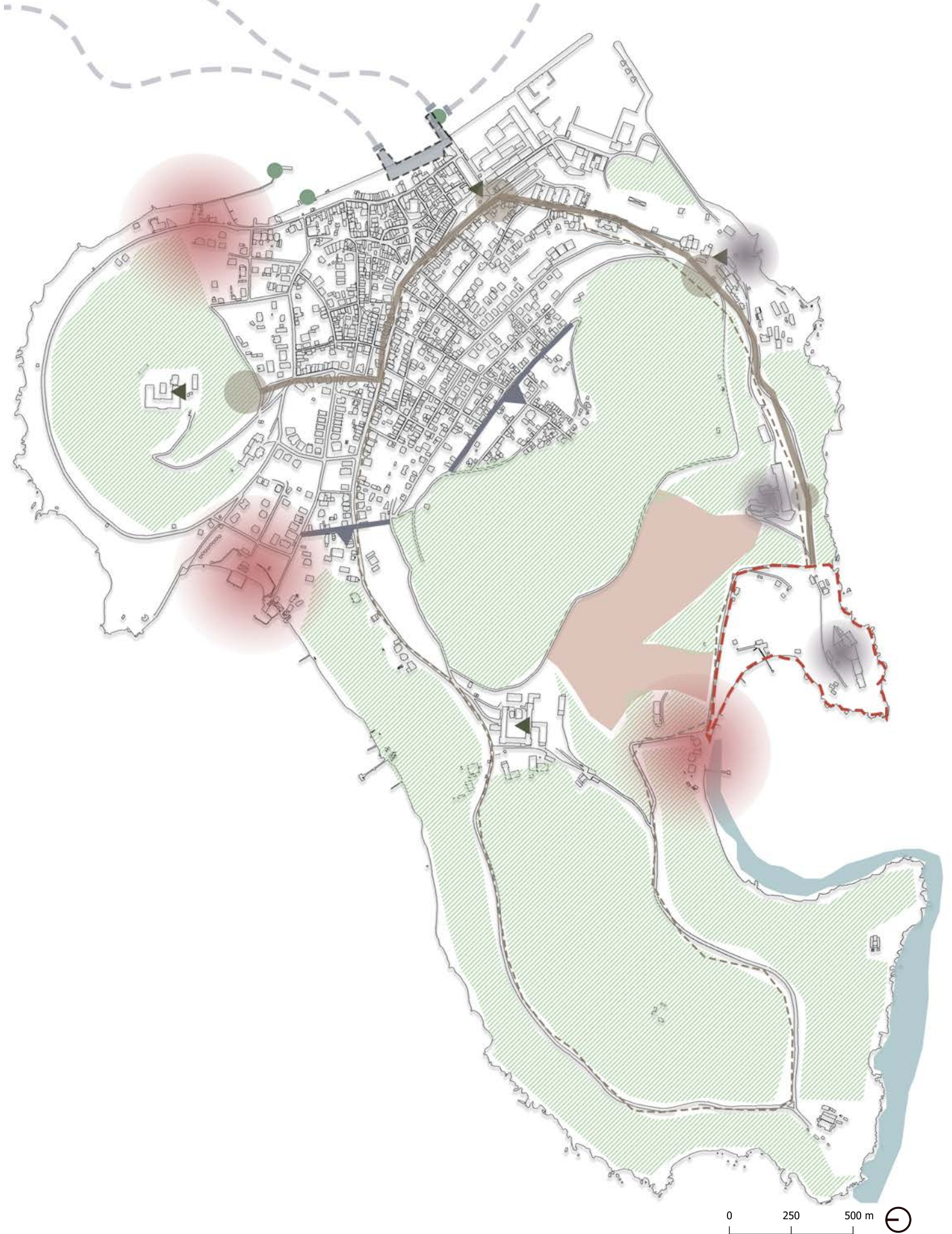


Healing Power Of Air

Air and water has special healing that believes from local people. That might be reason of existion the Pine trees and iodic level of water in the island.








SWOT MAP






SWOT ANALYSIS OF HEYBELIADA

The SWOT analysis made is the strongest in terms of space usage and management of Heybeliada; natural residence protection, ease of transportation, tourist attractions, close proximity to dense residential areas, etc. consists of features. Weaknesses are the intense population pressure in certain periods, invisible pollution, connection problem to the mainland, lack of water resources, legal regulations, etc. consists of structures (Figure). The working position, which has important goals, is the biggest threats, pollution and earthquake risk due to intense human pressure.”

Strengths

-  **Green Infrastructure Functions:** Sports fields, athletic centers, parks, hiking, biking/
-  **Green Infrastructure Functions:** Sports fields, athletic centers, parks, hiking, biking/
-  **Blue Infrastructures** Protected Area
-  **Transportation Zone**
-  **Ports**
-  **Historical Landmarks:** Seminary School

Weaknesses

-  **No continuity between settlements and forest area:**
New settlements and pine trees forest
-  **Lack of transportation option:**
Only way is city ferries or boat taxi.
-  **Neglected Areas:** Sanatorium, former pandemic hospital

Opportunities

-  **Advance mobility between landmarks, green spaces and neglected areas:** Ecological corridors bike lanes etc
-  **Motor vehicle free transportation:** electrical busses, cars, bikes etc

Threats



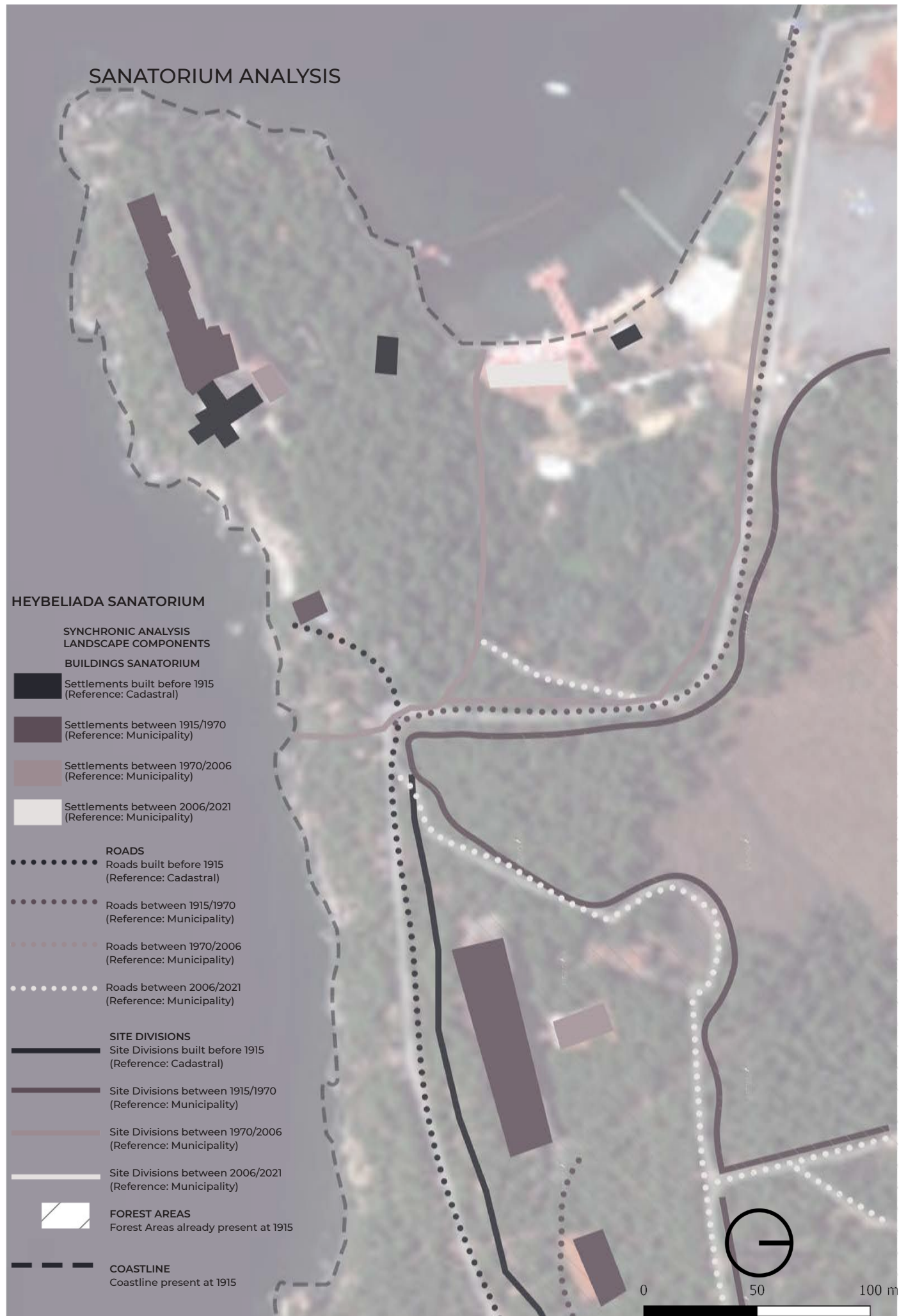
-  **Destruction of nature from a commercial point of view:** Habitat conservation area, beaches, heritages
-  **Fires and pollution:** tourists, daily trips, camp fires, ungovernance

Figure 45: Sanatorium Synchronic Map
 Source : Author



BUILDING ELEMENTS

Before 1915, the main section of the structure is constructed, and the other building is added between 1915 and 1970. They were developed with the intention of being able to manage the region and utilize its resources, and they have a close relationship with forests. There were additional uncommon additions to the site after the 1970s. Eventually, in the wake of the island's rising tourist, there were new additions to the site. However this was only applicable to the coasts that the municipality made accessible to the general public. The old pandemic hospital and sanatorium are recognized as historical landmarks that must be conserved. They are frequently attractive structures that serve as one of the Island's tangible and intangible testimony.

ECOLOGIC ELEMENTS

The connotation of the area around the Sanatorium was certainly forest, the evidence of which dates back to even before the construction of the Sanatorium themselves. Furthermore, the air quality of the areas is fundamental, so much so that the presence of pine trees is important, with the appearance already before 1915 (most likely the same years of construction of the Sanatorium itself). The water area such as over the years these lands have maintained their soil and moreover, it is very healthy because of the iodine level that included.

GOALS FOR REGENERATION

The elements analyzed are part of "third landscape" design project. The sanatorium site will be the fulcrum of the transformation process in which the original structures are recovered and preserved, implementing only the new functions, such as those of forest, preserving those that are the original functions; Then there is a new cultural function of education and dissemination of traditions and finally and most importantly spaces for the rehabilitation; everything follows the three concepts of preserving, redeveloping and adding.

As Clemence said "It may be that it is precisely the "indefinition" of the third landscape that helps us imagine together the space of all, with priority to the most unprotected, as a territory of diversity and resilience."

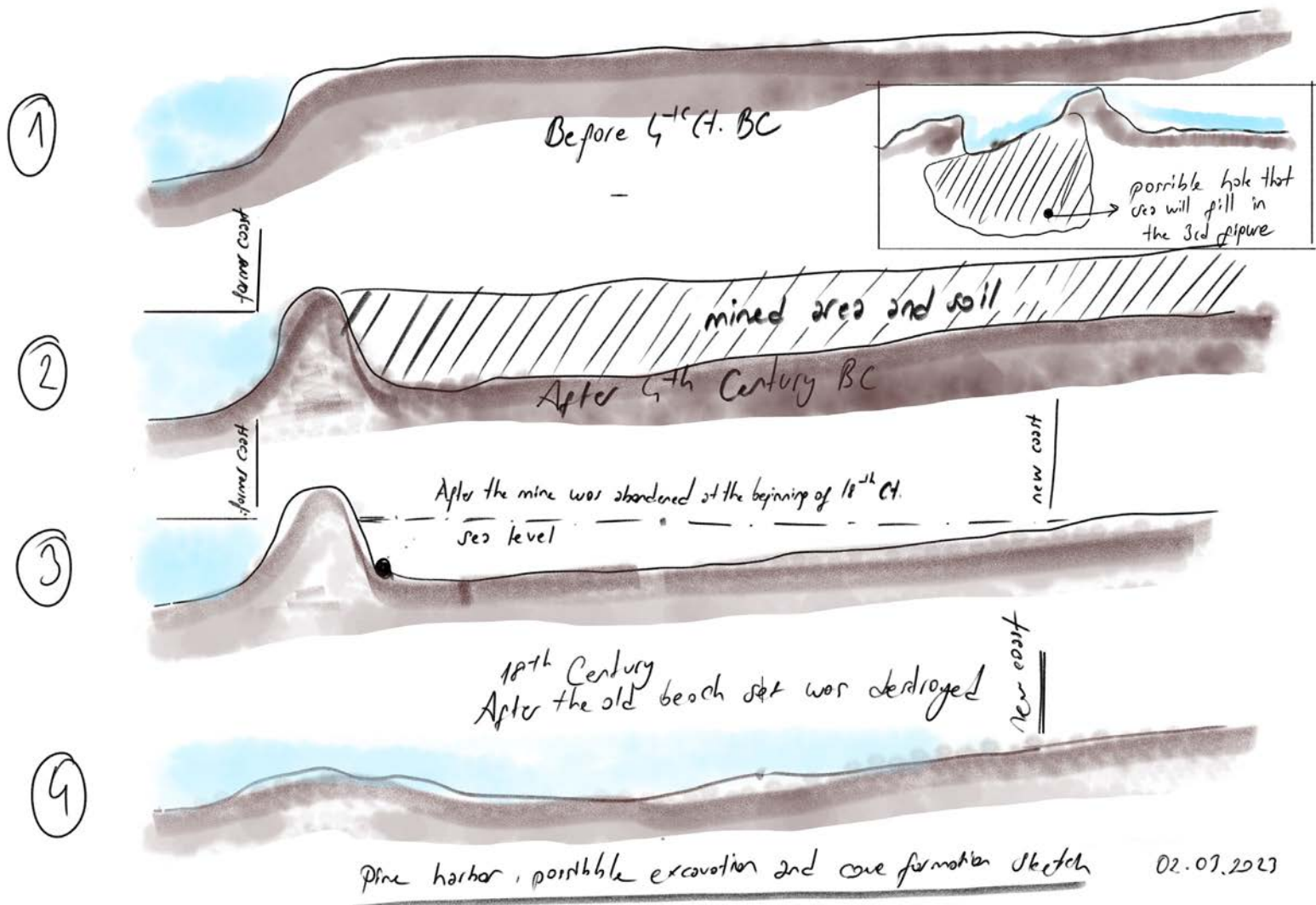


Figure 46: Çam Port Historical Section
Source : Author

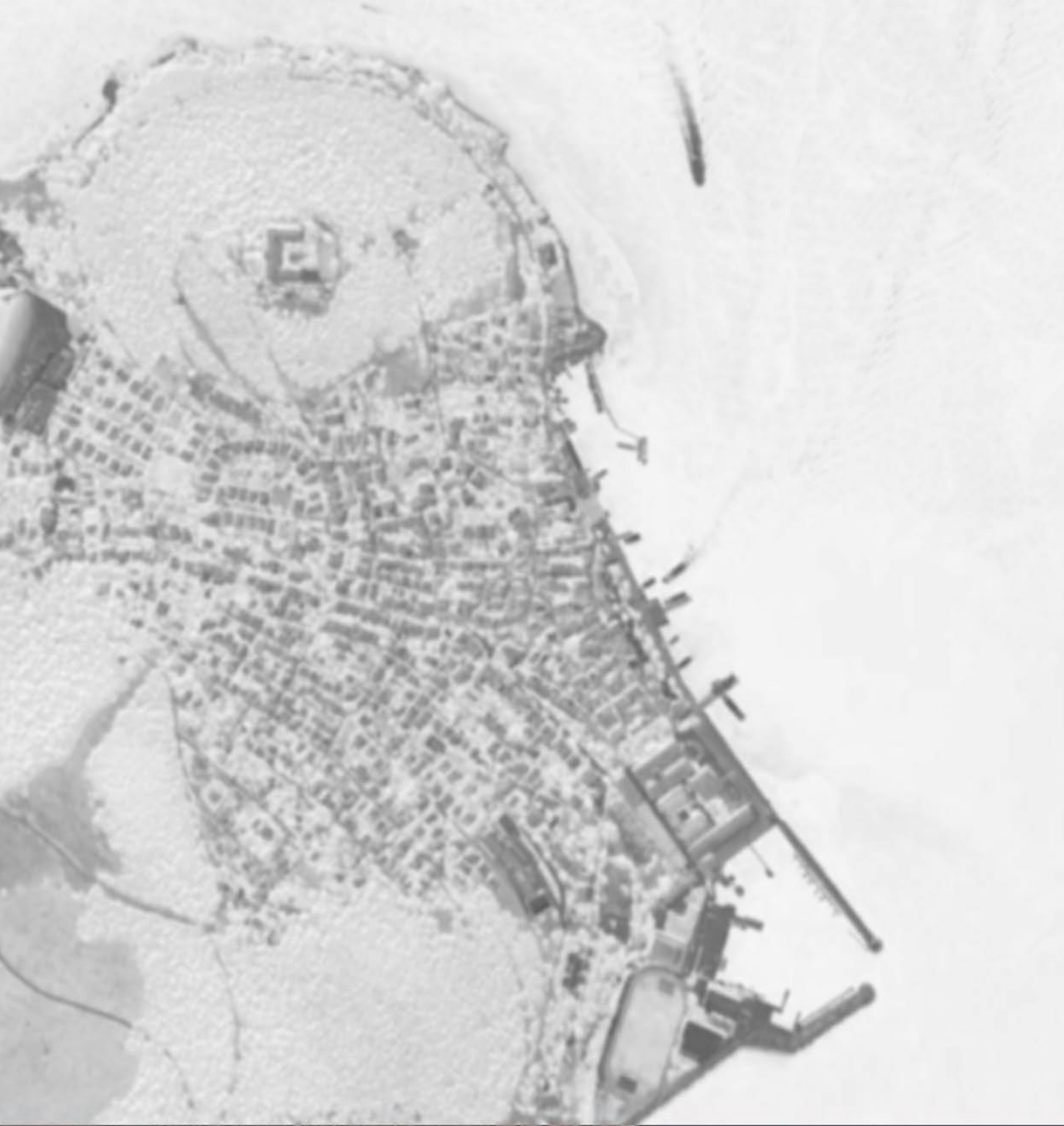
Going back to the 4th century BC, Heybeliada was called “Demonisa Island” after the miner Demonisos, who operated the first copper mine. All of the islands were called “Demonisos Islands”. In other words, the Islands were originally miners’ islands before the Princes’ Islands, and their other names were given later.

After all, mining in Heybeliada ended at the beginning of the 18th century, but it left traces that preserve its place today: First of all, the uniquely beautiful Çam Liman Bay, which is the subject of songs and poems. Çam Harbor beach, where swimming is difficult and dangerous despite its beauty. And lastly – perhaps most importantly – the love of preserving and cultivating the pine tree...

06 CONCEPT



Figure 47: Image showing axis through the Sanatorium
Source: Author



CONCEPT

Rehabilitation for Post War Traumatic Syndrom through Landscape

When a previously exploited place is abandoned, it becomes a neglected area. Its sources are diverse and include agriculture, industry, urbanism, tourism, etc. Wasteland and neglected places are the same thing.

The Third Landscape's ambiguous nature reflects the evolution that all of the biological organisms that inhabit the area were permitted to pursue in the absence of any human judgment.

When we consider the Heybeliada the most important landscape factors are sea and the pine trees. Agriculture was very effective till 18th century and also mining was very active till 19th of century in the island. After that the island became more military control.

In the history Heybeliada names known as Halki which means copper in greek. In Aristoteles's book "Mirabilibus Auscultationibus 834.58" states that divers have extracted copper here under two fathoms of water. At the same time, It is understood from the verses of Aristotle that copper is called diver's copper/khalkon kolymbeten and was used to make statue at the Temple of Apollo in Sikyon(The NEMSUS Project by Ahmet Bilir,2022).

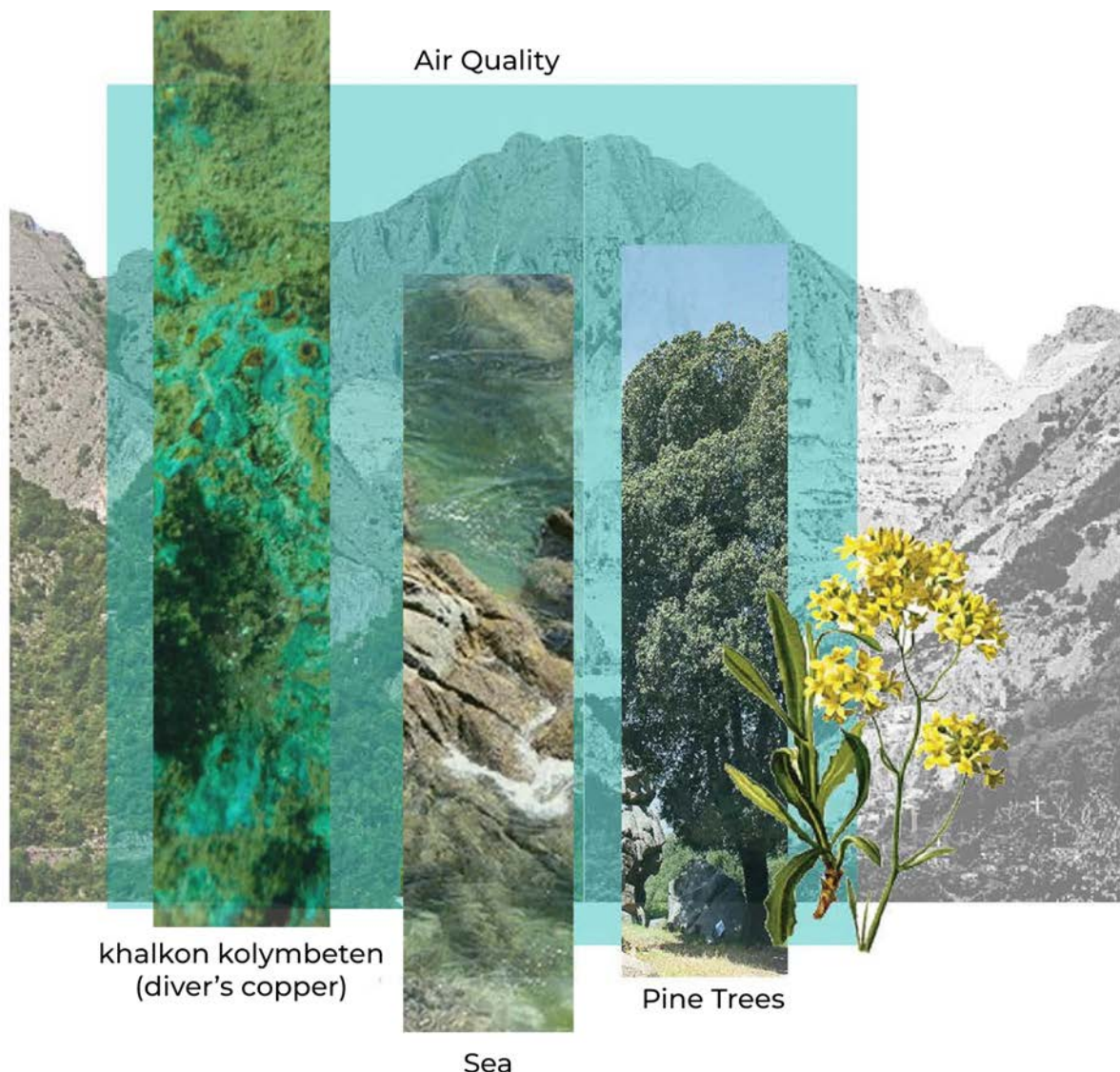


Figure 48: Image show 3 main element for the concept
Source : Author



Figure 49: Image showing 2 axis for the sanatorium and the port
Source : Author

CONCEPT

THE INSPIRATION OF THE WILD

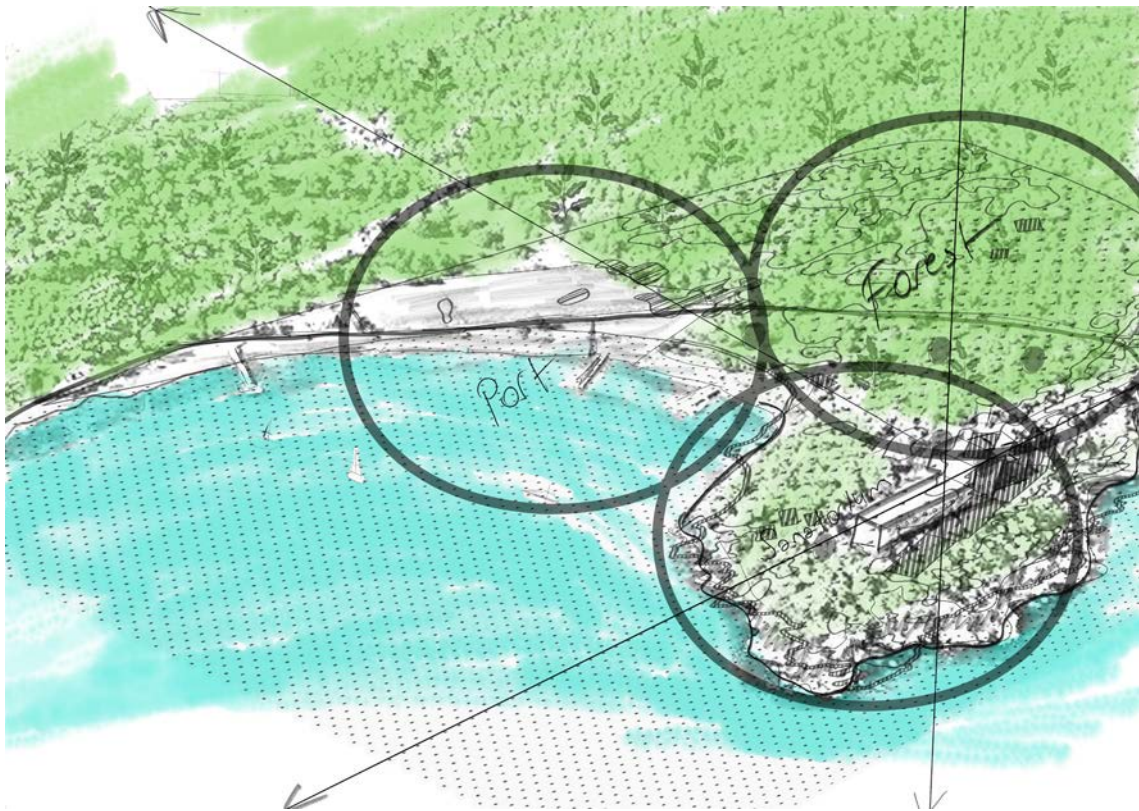


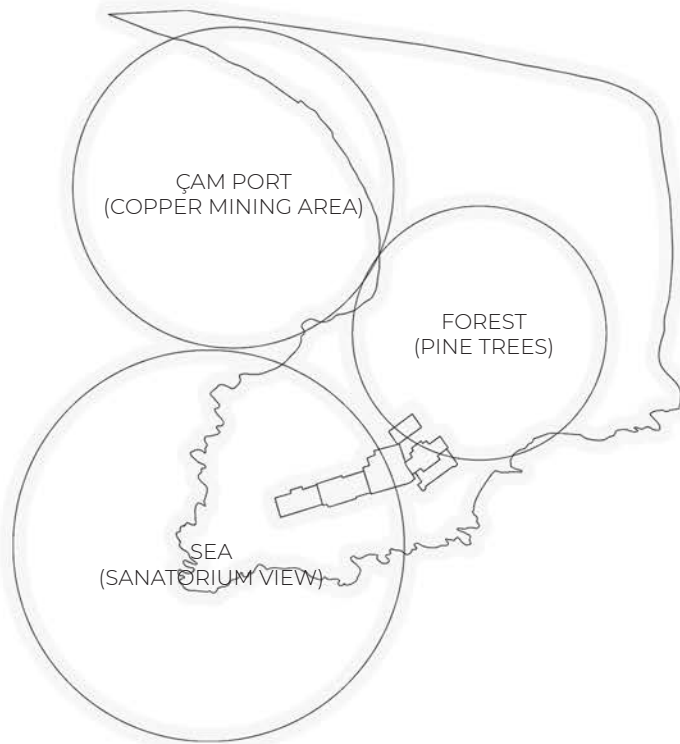
Figure 50: Image show 3 main area for the concept
Source : Author

As a metaphor, this 3 context shown what is importance of island in the history and present. The air quality one of the well known factor in the site which supports with pine trees and the sea. Also copper is the one of the main factor that current morphological structure of the island.

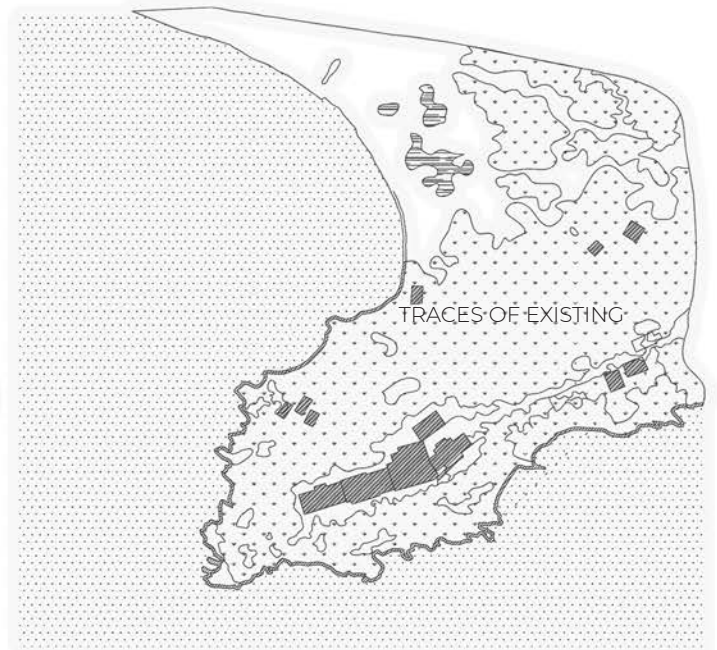
In the drawing, shows axis through site which is connecting with our 3 ecological contexts. This different axis will provide us definition for the site context which is absence of and human judgement. Evolution of that biological organisms will allow us to understand and touch to our rehabilitation context.

As Island people believes the air quality of the island helps to cure every mental and physical health problem. Same as sea water in the Çam port include high iodine level.

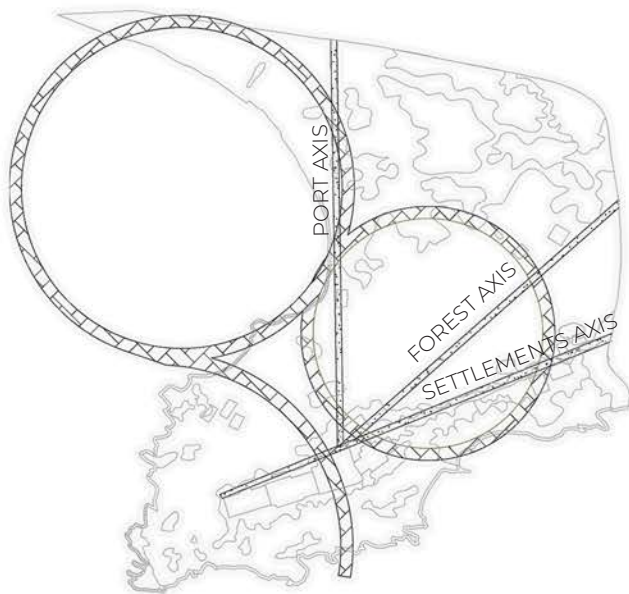
SITE READINGS



SURROUNDING FORCES



TRACES OF FORMER LANDSCAPE



ACCESSES AND CIRCULATION



CONCEPT

Figure 51: Image shows site reading for the concept
Source : Author

OUR WILD HEARTS

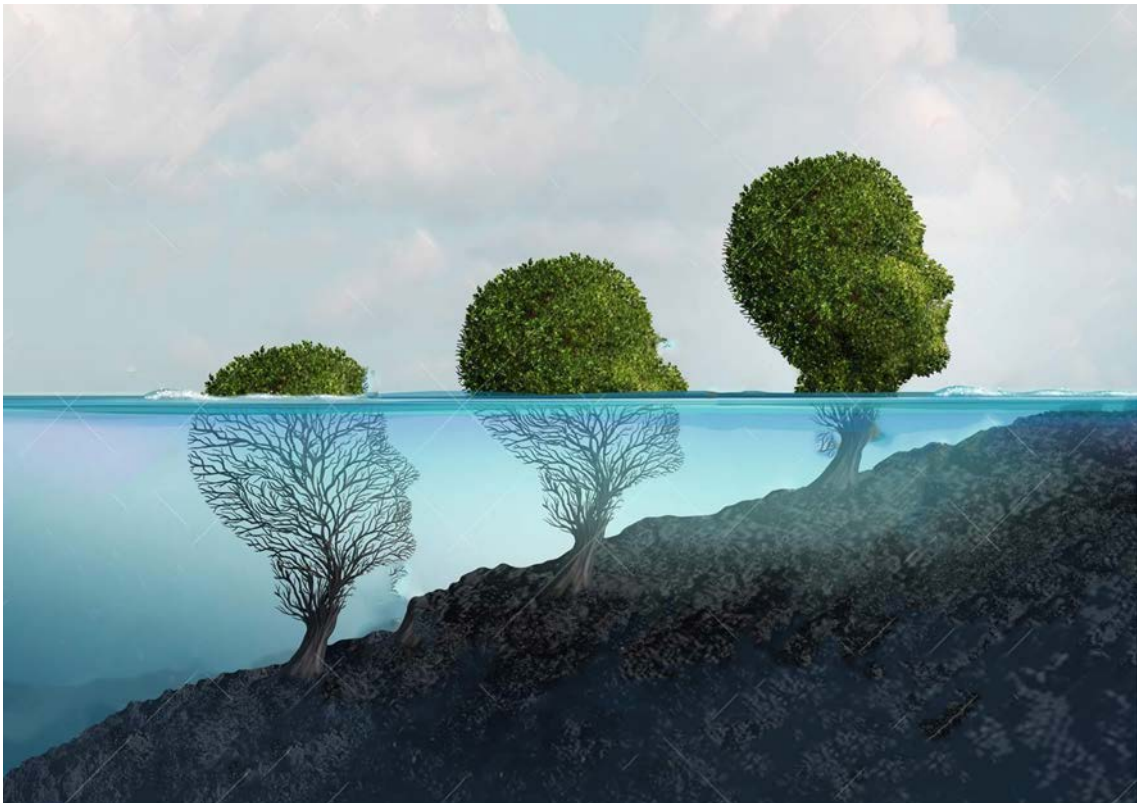


Figure 52: mental illustration with nature
Source : Dreamstime.com / Author

Natural landscape may be experienced on a physical and emotional level. Our mental connections with the wilderness serve to intensify the sensory event of travelling through a forest, brushing up against trees, and emerging into a clearing. Some of the most beautiful combinations of natural and cultural connections have a fairy tale aspect to them. For example, a coastal live oak forest's gothic sublimity appears to be a Jurassic playground, while the gloomy folds of an Appalachian cove woodland may be the scene for a Grimm brothers story. The attraction of these locations lies not just in their unique regional expression, but also in the sense of familiarity that each of these settings evokes a moment of the universal, emphasized by a local landscape.

While emotions are fundamentally subjective, we all share common evolutionary responses to our environment. Imagine walking down a path that bends behind a dark, contorted thicket. What do you feel? Fear? Caution? Perhaps even a tinge of curiosity? Even while the feelings aren't precisely the same as another person's, they do have certain common characteristics. Imagine climbing a mountain and admiring the view once you arrive at the summit. The British geographer Jay Appleton coined the term "pleasant feeling of scenery" to explain how we naturally favor situations that are simple to perceive and traverse. (Planting in a Post-wild World by Thomas Rainer and Claudia West,2015)

Although psychologists have long held that people's preferences for particular landscapes have evolutionary roots, few have applied this theory to the minute details of plant design. Consider this: for thousands of years, our ancestors traveled across forests and fields. They had an intimate connection to plants. Plants helped them navigate their environments, treat their wounds, and feed themselves. Knowing how to distinguish between an edible and nonedible plant was a matter of life and death.

We may not rely on plants as much as our predecessors did, but we still have memories and emotions. The exact recollection may be gone, but we still have the primitive circuitry that produces emotions in response to our perceptions of safety or opportunity. When we see a certain plant or group of plants, it can create an emotional response within us, the feeling of a larger, natural landscape.

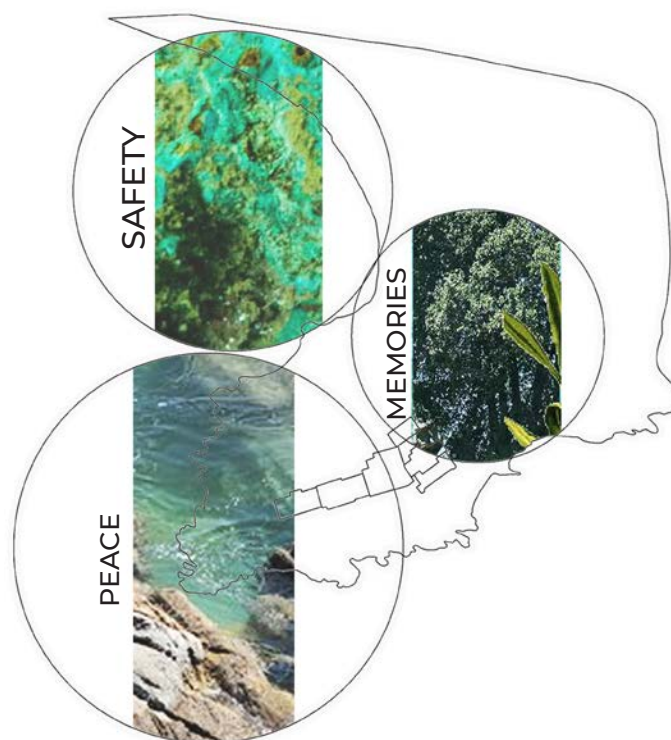


Figure 53: 3 main emotions for the site
Source : Author

The emotions may not be exactly the same as someone else's, but they share similar characteristics.

07 STRATEGY

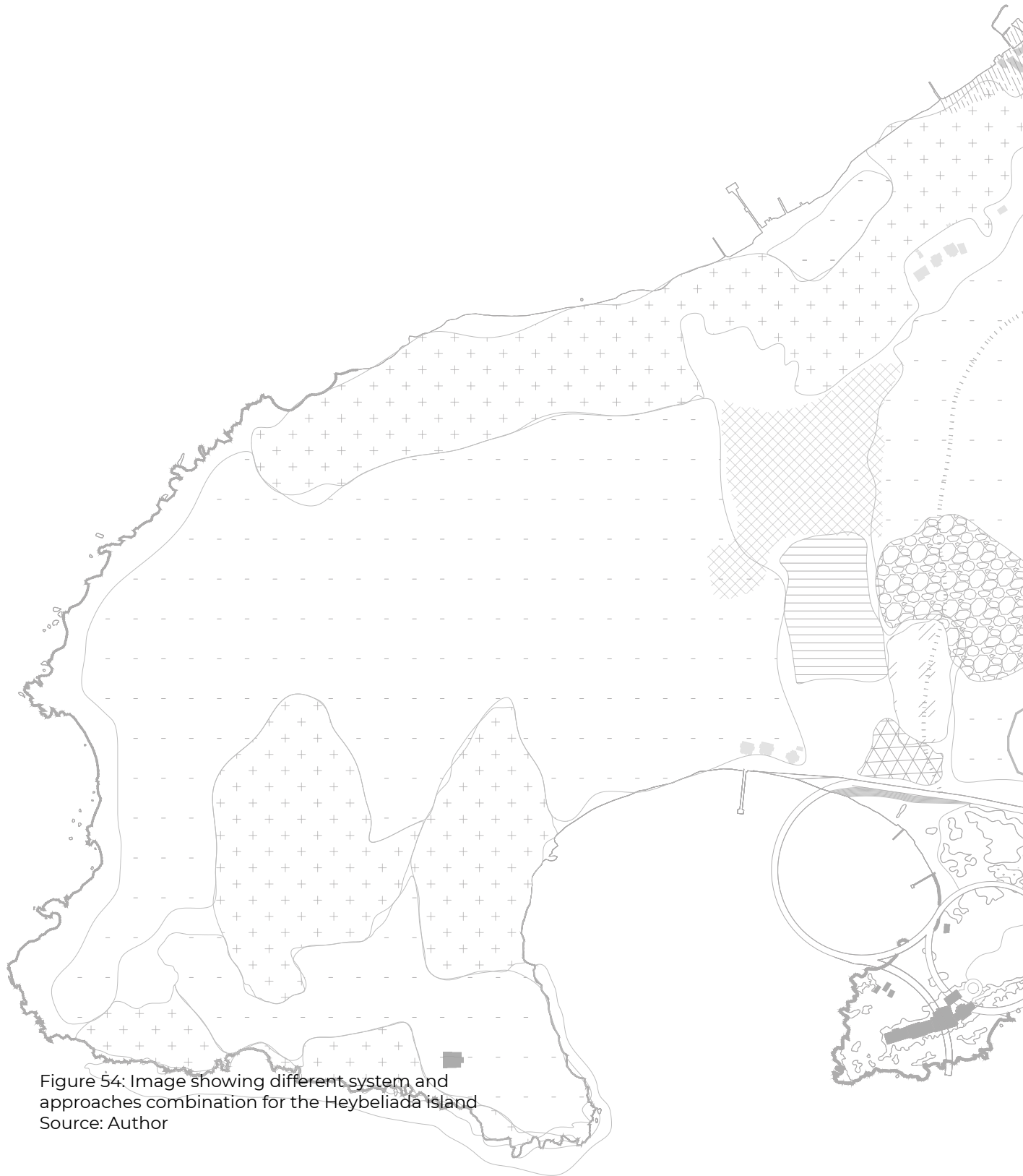


Figure 54: Image showing different system and approaches combination for the Heybeliada island
Source: Author



STRATEGIES

HONORING THE LAND

Honoring the land of Heybeliada requires collaboration among various stakeholders. This collaboration can take many forms, such as public-private partnerships, community-based initiatives, and collaborations among government agencies. One approach is to work with local residents, community groups, and businesses to identify ways to preserve and enhance the natural and cultural heritage of the island. This may involve initiatives such as community gardening projects, tree planting, and conservation efforts.

Another important aspect of honoring the land of Heybeliada is the integration of sustainable practices into development and planning. This involves collaboration among urban planners, architects, and environmental experts to ensure that development projects are environmentally friendly, energy-efficient, and socially responsible. Such projects may include the development of green spaces, the use of renewable energy sources, and the promotion of low-carbon transportation options.

Collaboration among different sectors can also help to promote the island's economic development while preserving its natural and cultural heritage. For example, collaboration between tourism and agriculture sectors can support local businesses and provide visitors with an authentic experience of the island's rural life. Additionally, partnerships between government and private sectors can help to promote the island as a model of sustainable development and a showcase of best practices in environmental conservation.

In summary, honoring the land of Heybeliada requires collaboration among various stakeholders and the integration of sustainable practices into development and planning. Collaboration between residents, community groups, businesses, and government agencies can help to preserve the natural and cultural heritage of the island, promote economic development, and showcase best practices in sustainable development.

STRATEGIES FOR ISLAND



Figure 55: Satellite view of the Island
Source : Author

NARRATING BEYOND THE PRESENT

Heybeliada has a rich natural and cultural history that has to be conserved for future generations. The preservation of historic structures and sites, the protection of species and their habitats, and the development of eco-friendly tourism are all examples of conservation strategies.

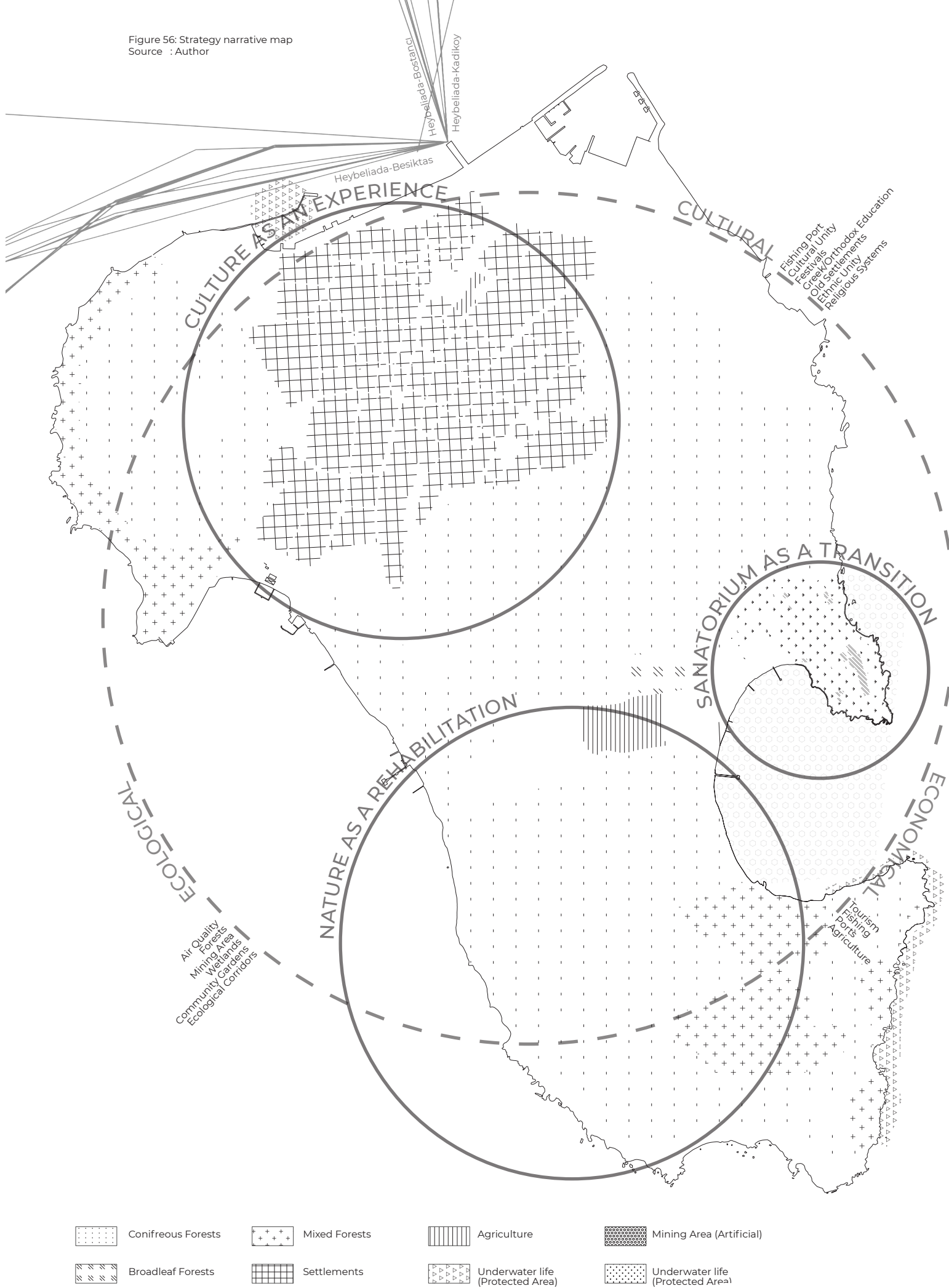
The **Culture-Nature and Sanatorium** axis has to be strengthened in order to preserve those areas. In order to comprehend how each component of our system will function effectively, we may separate it into three pieces. Firstly, let's look at how culture influences everyone on the island and conjures up experiences of our own through architecture, smells, and physical sensations. Secondly, It will create transition with sanatorium. How would Sanatorium get in touch with us and teach us how to use a neglected area? In the end, nature will cure our bodies and produce rehabilitation so that we can observe every step we take going forward with effort. This entire mechanism will eventually produce our Pangea (a supercontinent which broken million years ago). Of course, this is a metaphor for understanding the approach system. Here, creating and using landscape as a kind of treatment for recovery is our core strategy.









The fact that the Island is an old fishing town makes culture slam the door when we first arrive. At the same time the Island once provided a haven for communities who were being persecuted. It is because of this that this Island is home to several religious and cultural groups. Between such seminaries, churches, and mosques, despite the ethnic groups' yearly changes, the island's history is nevertheless obscured. Island's **culture** is offering you a special **experience** with such components.

Islands feature a lot of ports and coastlines. This combines with many components include pine trees and the water. **Sanatorium** is establishing a precise **transition** zone for the Island between those cultures and the natural world. Locals have long believed that good air quality may heal individuals.

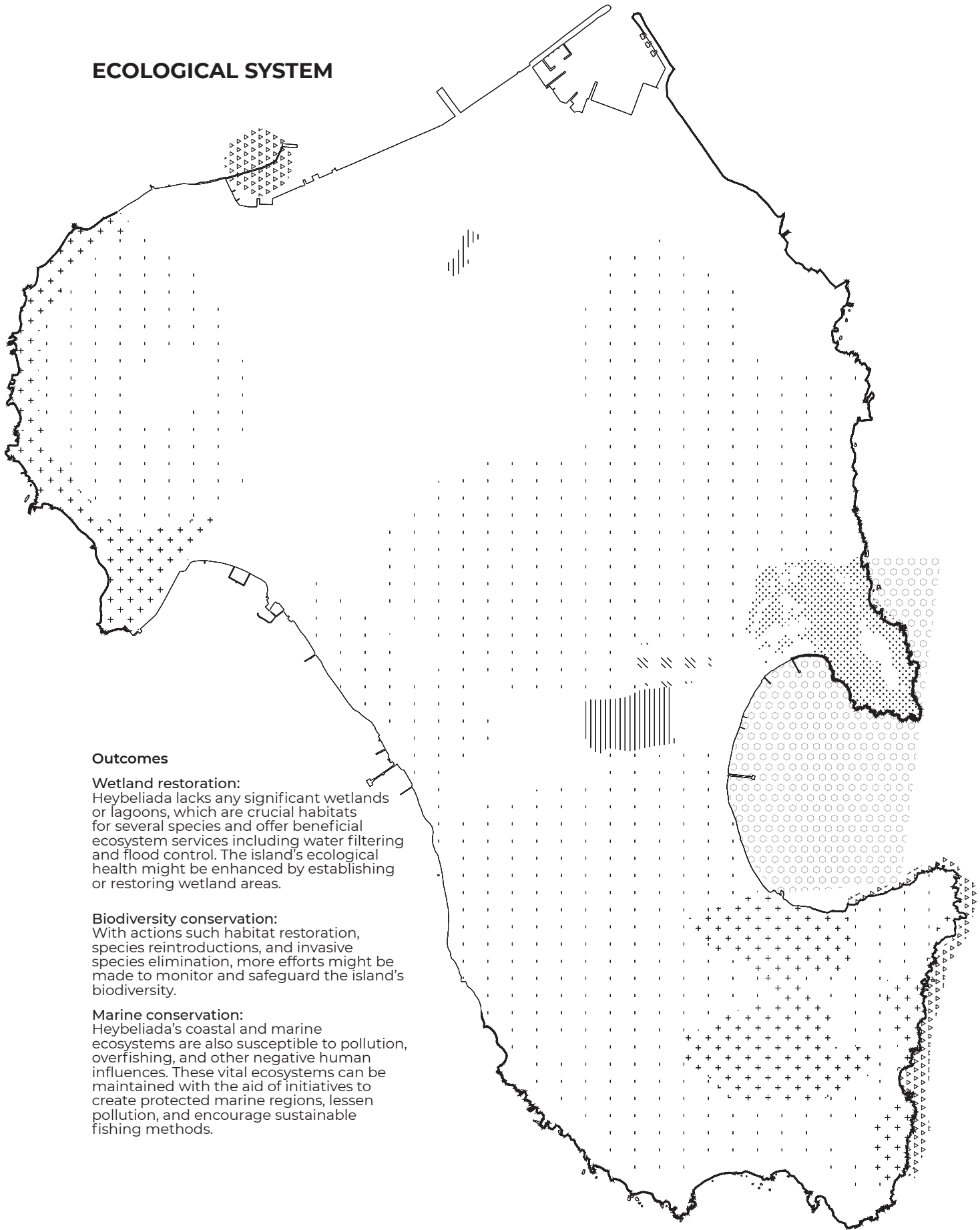
Coniferous forests are waiting for us to finish the **rehabilitation** with stone pines, red junipers, and thorn oaks, but most importantly with the air quality and healing power. The Island has many opportunities to develop new pathways and avenues for the future because to the abundance of natural beauty and biological variety.

Figure 56: Strategy narrative map
Source : Author



- | | | | |
|--|---|--|---|
|  Coniferous Forests |  Mixed Forests |  Agriculture |  Mining Area (Artificial) |
|  Broadleaf Forests |  Settlements |  Underwater life (Protected Area) |  Underwater life (Protected Area) |

ECOLOGICAL SYSTEM



Outcomes

Wetland restoration:

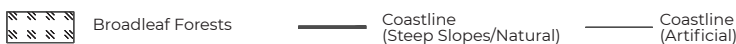
Heybeliada lacks any significant wetlands or lagoons, which are crucial habitats for several species and offer beneficial ecosystem services including water filtering and flood control. The island's ecological health might be enhanced by establishing or restoring wetland areas.

Biodiversity conservation:

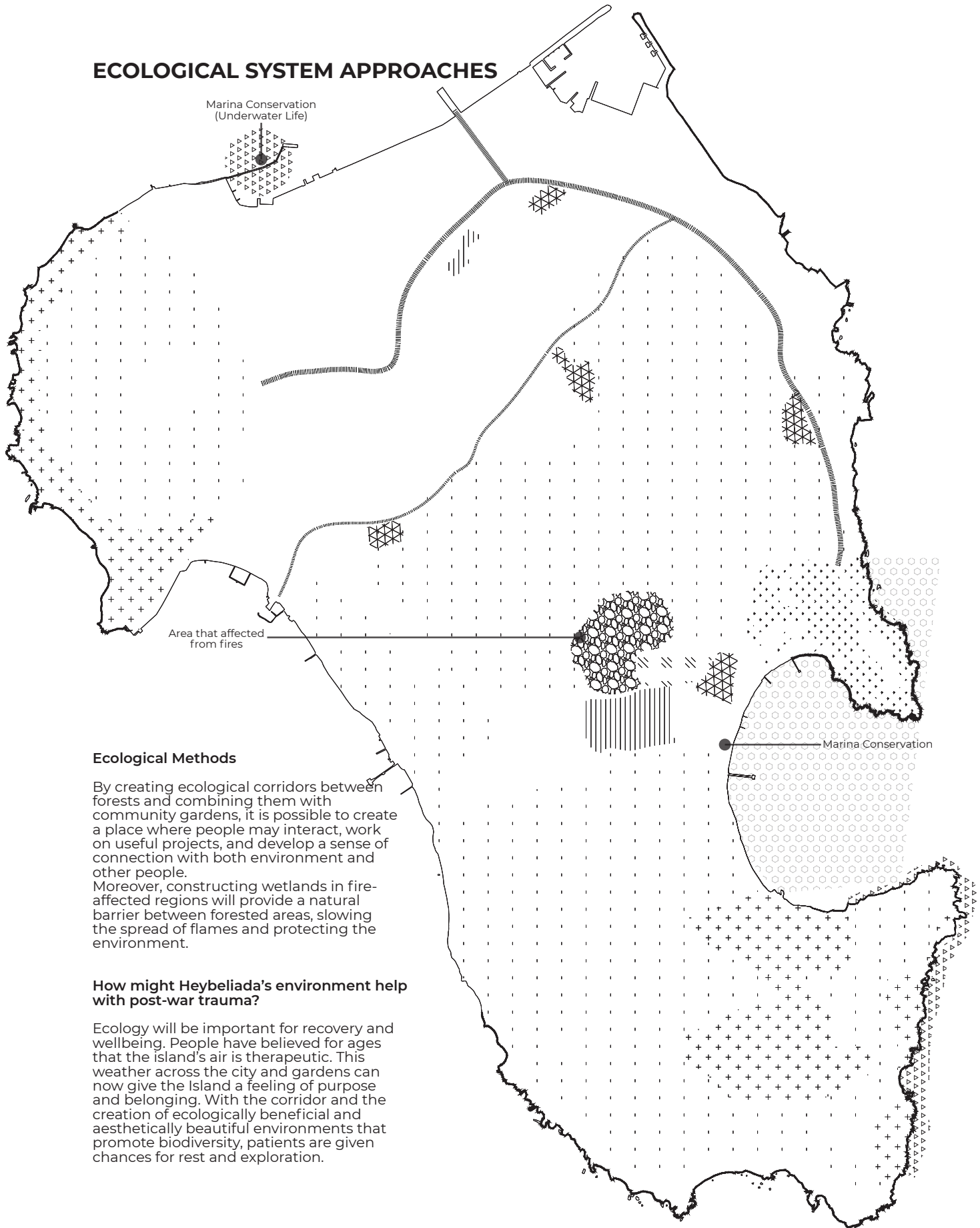
With actions such as habitat restoration, species reintroductions, and invasive species elimination, more efforts might be made to monitor and safeguard the island's biodiversity.

Marine conservation:

Heybeliada's coastal and marine ecosystems are also susceptible to pollution, overfishing, and other negative human influences. These vital ecosystems can be maintained with the aid of initiatives to create protected marine regions, lessen pollution, and encourage sustainable fishing methods.



ECOLOGICAL SYSTEM APPROACHES



Ecological Methods

By creating ecological corridors between forests and combining them with community gardens, it is possible to create a place where people may interact, work on useful projects, and develop a sense of connection with both environment and other people.

Moreover, constructing wetlands in fire-affected regions will provide a natural barrier between forested areas, slowing the spread of flames and protecting the environment.

How might Heybeliada's environment help with post-war trauma?

Ecology will be important for recovery and wellbeing. People have believed for ages that the island's air is therapeutic. This weather across the city and gardens can now give the Island a feeling of purpose and belonging. With the corridor and the creation of ecologically beneficial and aesthetically beautiful environments that promote biodiversity, patients are given chances for rest and exploration.

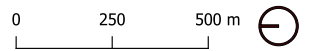
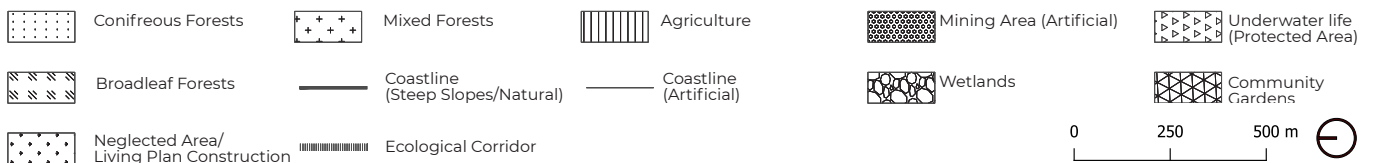
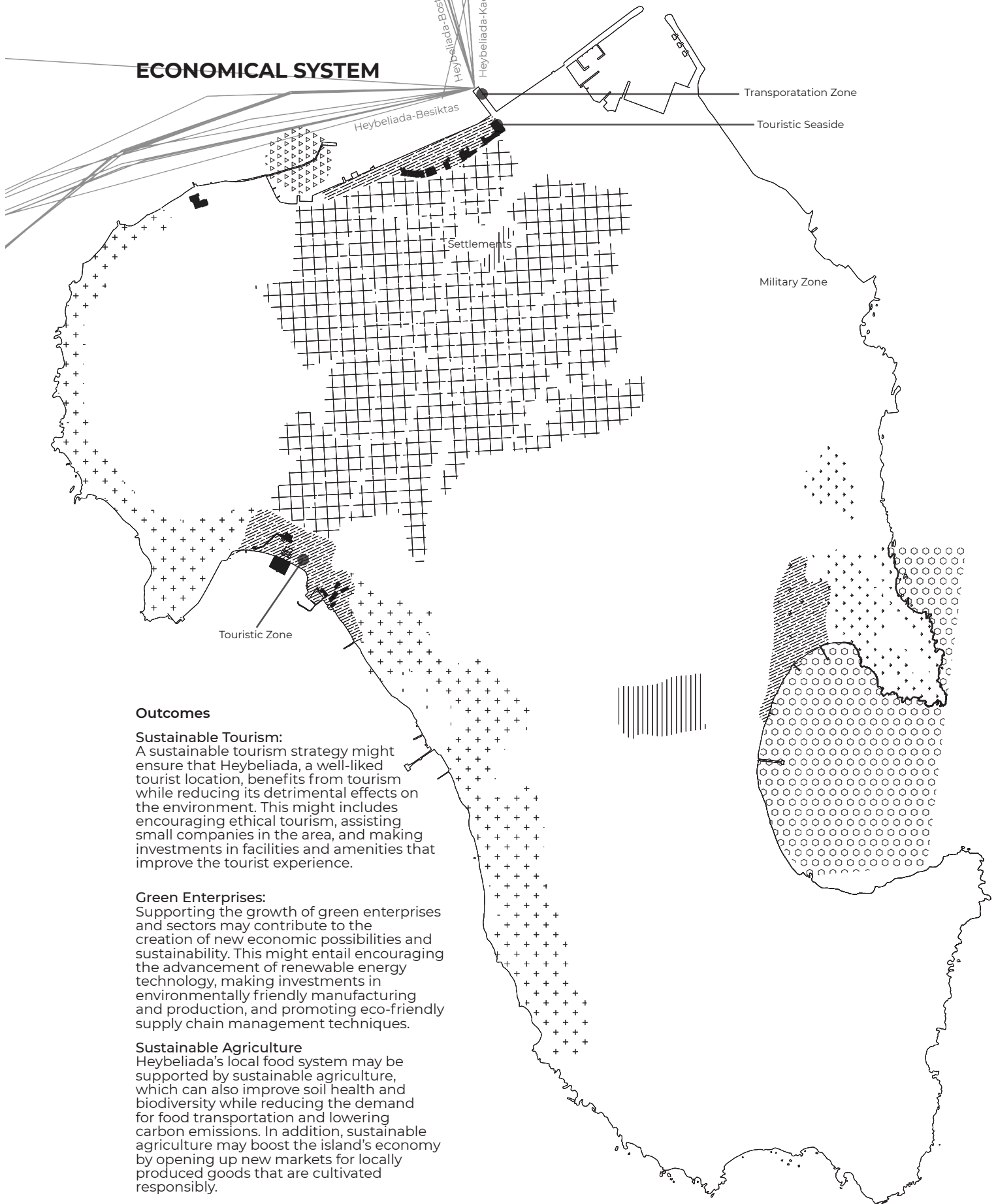


Figure 59: Current Economical System
Source : Author

ECONOMICAL SYSTEM



Outcomes

Sustainable Tourism:

A sustainable tourism strategy might ensure that Heybeliada, a well-liked tourist location, benefits from tourism while reducing its detrimental effects on the environment. This might include encouraging ethical tourism, assisting small companies in the area, and making investments in facilities and amenities that improve the tourist experience.

Green Enterprises:

Supporting the growth of green enterprises and sectors may contribute to the creation of new economic possibilities and sustainability. This might entail encouraging the advancement of renewable energy technology, making investments in environmentally friendly manufacturing and production, and promoting eco-friendly supply chain management techniques.

Sustainable Agriculture

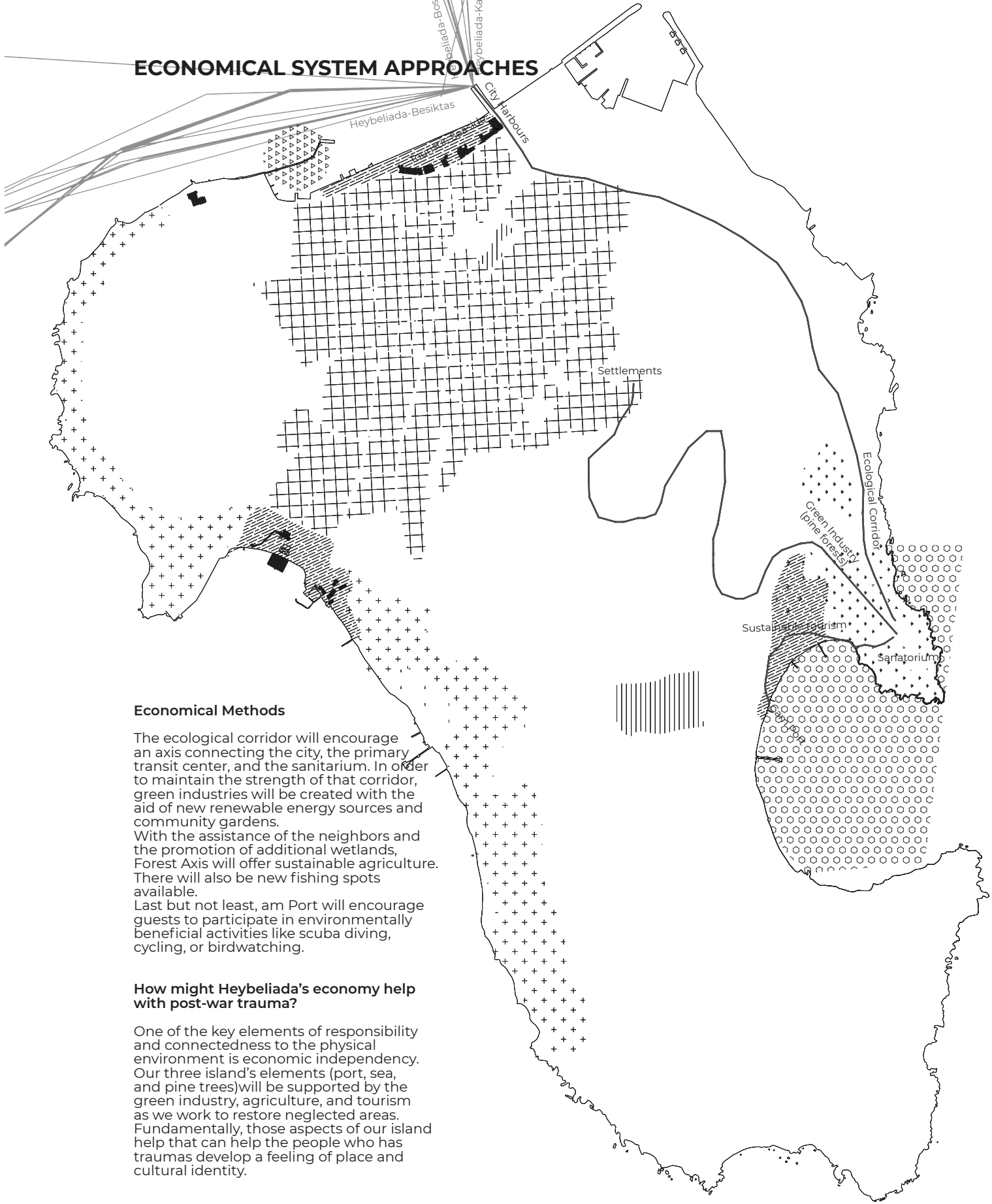
Heybeliada's local food system may be supported by sustainable agriculture, which can also improve soil health and biodiversity while reducing the demand for food transportation and lowering carbon emissions. In addition, sustainable agriculture may boost the island's economy by opening up new markets for locally produced goods that are cultivated responsibly.

- | | | | |
|------------------------------------|--------------------|----------------------------------|-----------------|
| Recreation Areas/
Natural Parks | Agriculture | Cam Port
(Former mining area) | Fishing port |
| Settlements | Touristic Seasides | Touristic Areas | Neglected Areas |



Figure 60: Economical System Approaches Map
 Source : Author

ECONOMICAL SYSTEM APPROACHES



Economical Methods

The ecological corridor will encourage an axis connecting the city, the primary transit center, and the sanitarium. In order to maintain the strength of that corridor, green industries will be created with the aid of new renewable energy sources and community gardens. With the assistance of the neighbors and the promotion of additional wetlands, Forest Axis will offer sustainable agriculture. There will also be new fishing spots available. Last but not least, am Port will encourage guests to participate in environmentally beneficial activities like scuba diving, cycling, or birdwatching.

How might Heybeliada's economy help with post-war trauma?

One of the key elements of responsibility and connectedness to the physical environment is economic independency. Our three island's elements (port, sea, and pine trees) will be supported by the green industry, agriculture, and tourism as we work to restore neglected areas. Fundamentally, those aspects of our island help that can help the people who has traumas develop a feeling of place and cultural identity.

- | | | | | |
|------------------------------------|-------------------|----------------------------------|-----------------|---------------------|
| Recreation Areas/
Natural Parks | Agriculture | Cam Port
(Former mining area) | Fishing port | Economical
Paths |
| Settlements | Touristic Seaside | Touristic Areas | Neglected Areas | |

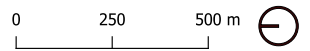
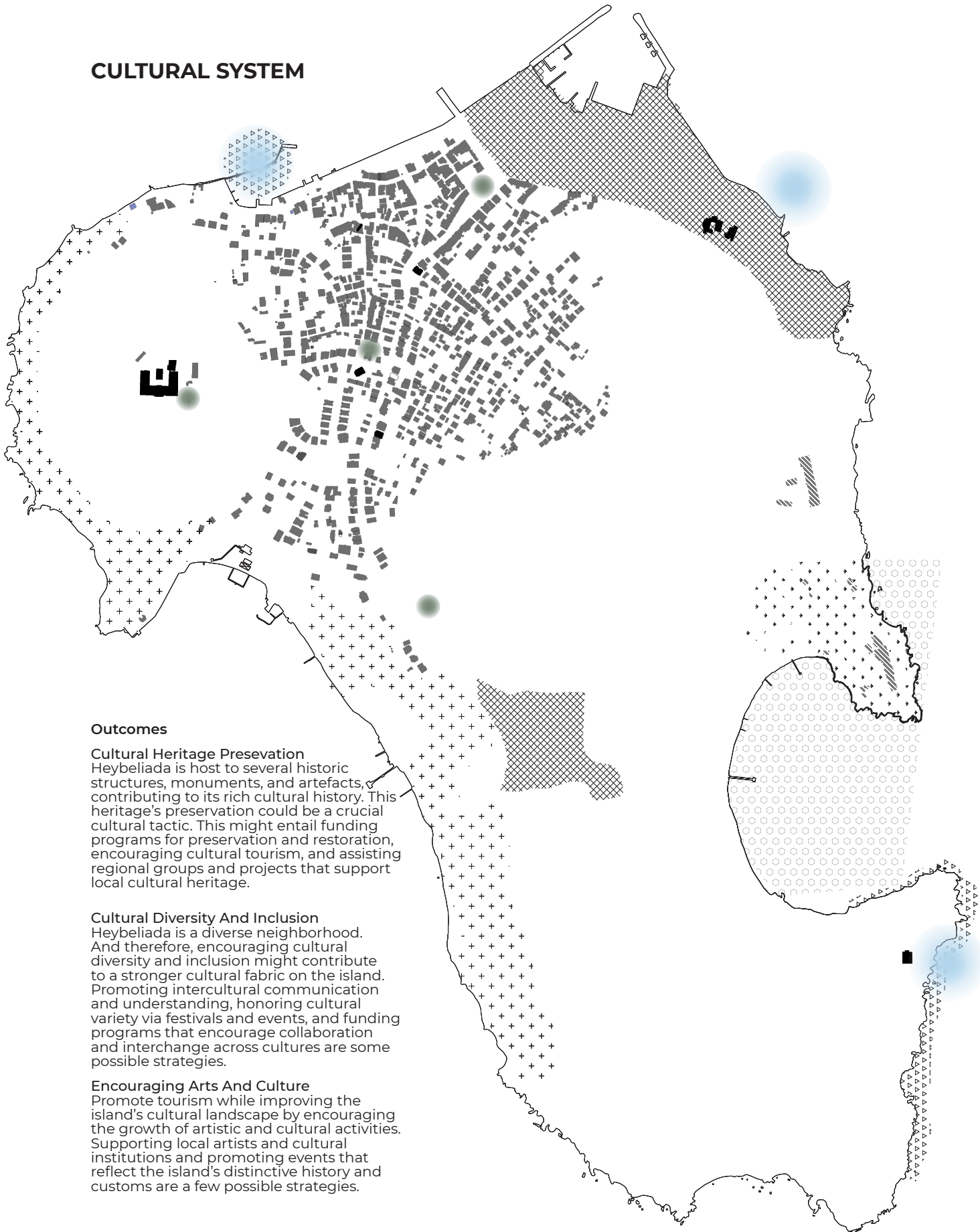


Figure 61: Current Cultural System
 Source : Author

CULTURAL SYSTEM



Outcomes

Cultural Heritage Presevation

Heybeliada is host to several historic structures, monuments, and artefacts, contributing to its rich cultural history. This heritage's preservation could be a crucial cultural tactic. This might entail funding programs for preservation and restoration, encouraging cultural tourism, and assisting regional groups and projects that support local cultural heritage.

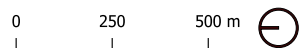
Cultural Diversity And Inclusion

Heybeliada is a diverse neighborhood. And therefore, encouraging cultural diversity and inclusion might contribute to a stronger cultural fabric on the island. Promoting intercultural communication and understanding, honoring cultural variety via festivals and events, and funding programs that encourage collaboration and interchange across cultures are some possible strategies.

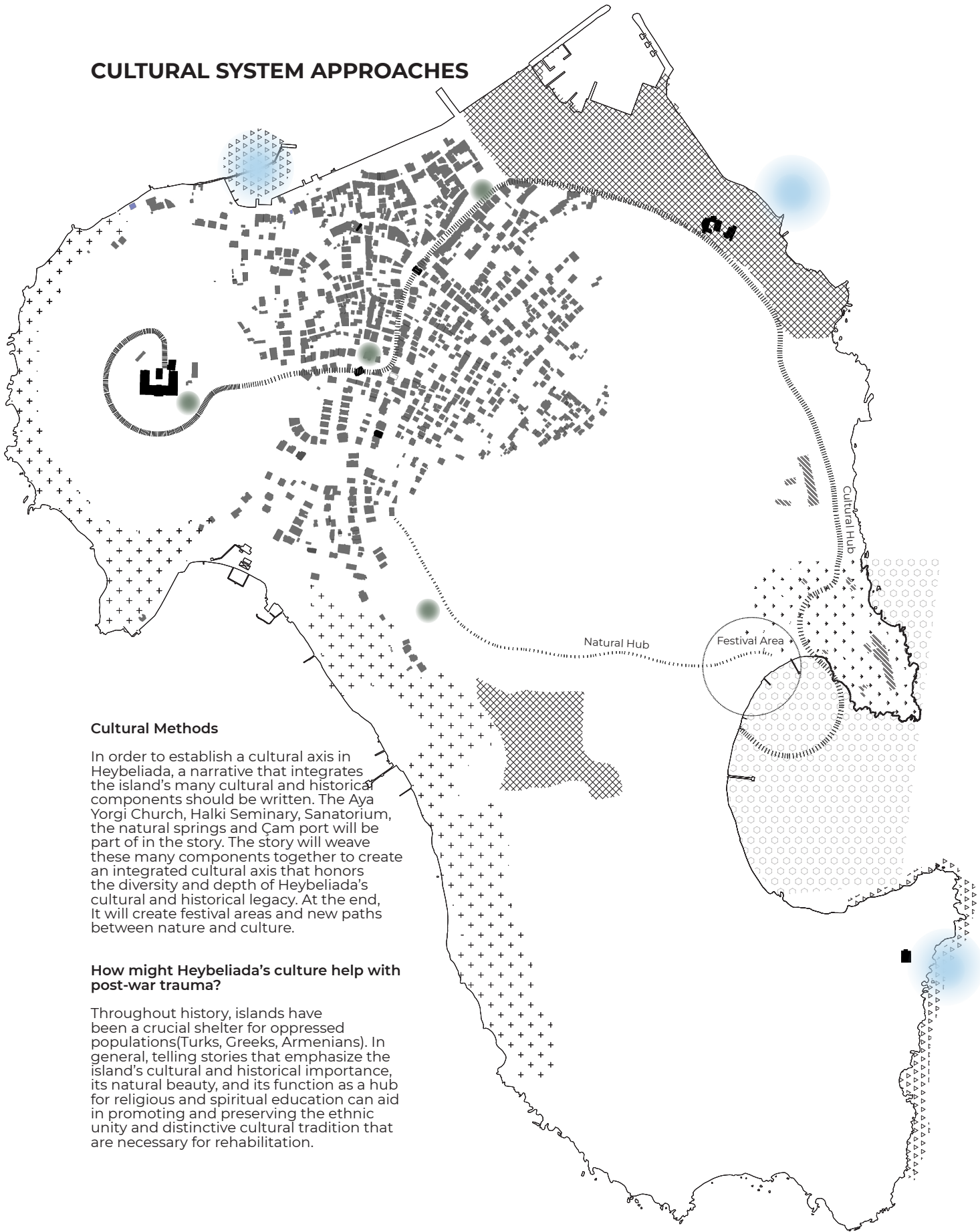
Encouraging Arts And Culture

Promote tourism while improving the island's cultural landscape by encouraging the growth of artistic and cultural activities. Supporting local artists and cultural institutions and promoting events that reflect the island's distinctive history and customs are a few possible strategies.

- | | | | | |
|--|---------------|--------------------------|---------------------|-----------------|
| Cultural Buildings (Religious, museum etc) | Natural Parks | Mining Area (Artificial) | Neglected Landscape | Fishing Areas |
| Residential Buildings | Military Area | Underwater Area | Abandoned Building | Natural Springs |



CULTURAL SYSTEM APPROACHES

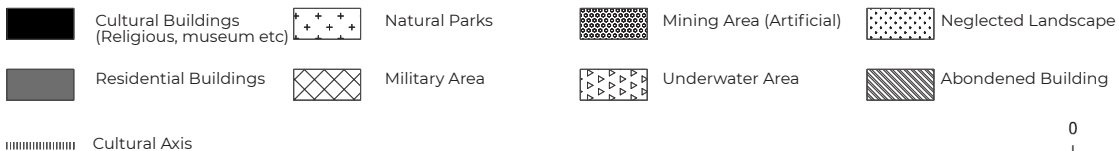


Cultural Methods

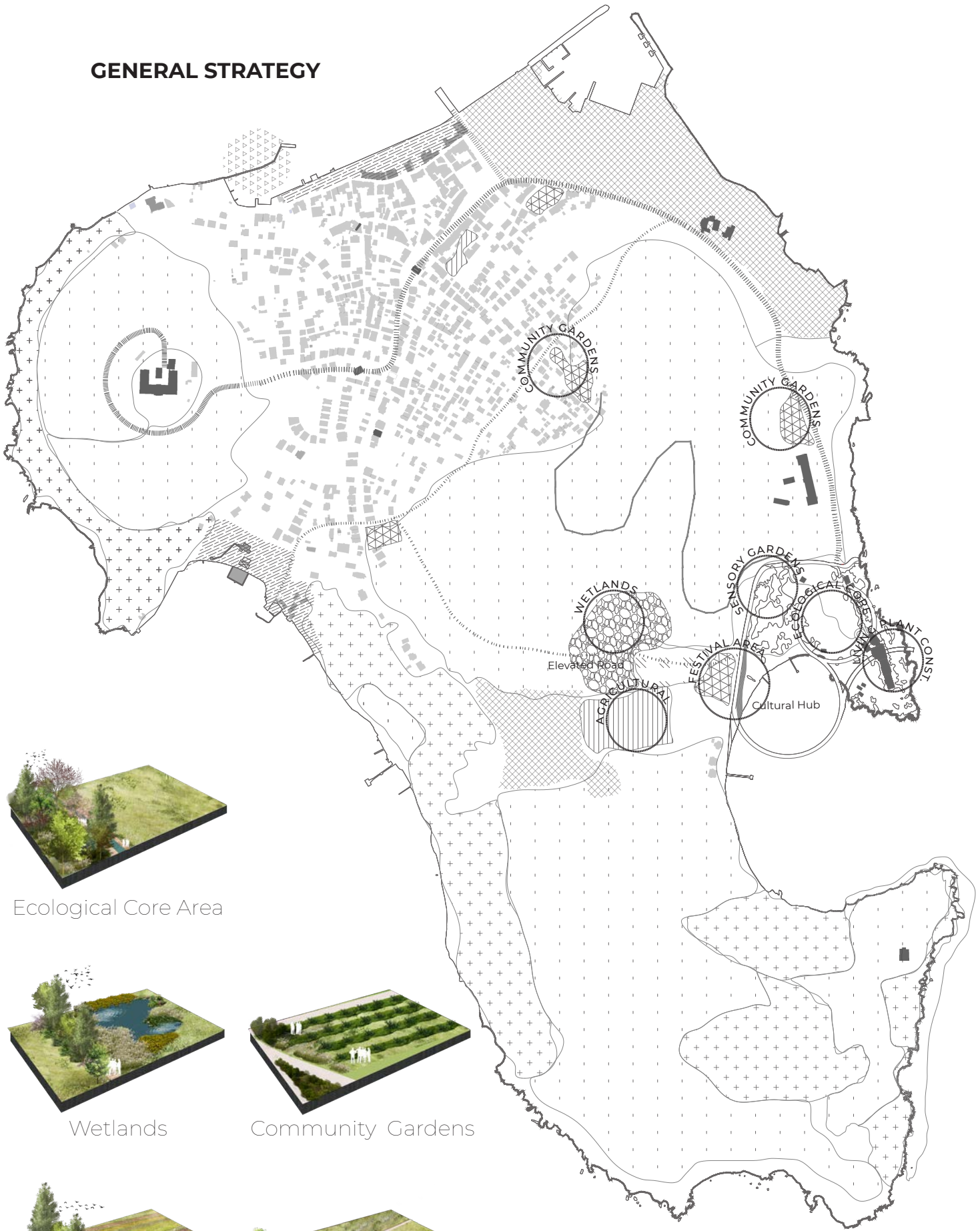
In order to establish a cultural axis in Heybeliada, a narrative that integrates the island's many cultural and historical components should be written. The Aya Yorgi Church, Halki Seminary, Sanatorium, the natural springs and Çam port will be part of in the story. The story will weave these many components together to create an integrated cultural axis that honors the diversity and depth of Heybeliada's cultural and historical legacy. At the end, It will create festival areas and new paths between nature and culture.

How might Heybeliada's culture help with post-war trauma?

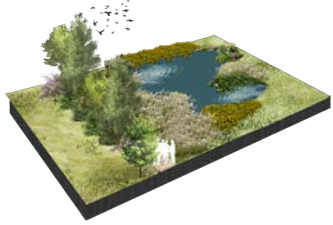
Throughout history, islands have been a crucial shelter for oppressed populations (Turks, Greeks, Armenians). In general, telling stories that emphasize the island's cultural and historical importance, its natural beauty, and its function as a hub for religious and spiritual education can aid in promoting and preserving the ethnic unity and distinctive cultural tradition that are necessary for rehabilitation.



GENERAL STRATEGY



Ecological Core Area



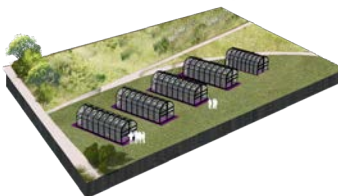
Wetlands



Community Gardens



Sensory Gardens
90



Greenhouses



Figure 64: Masterplan
Source : Author

MASTER PLAN (Island)



08 DESIGN

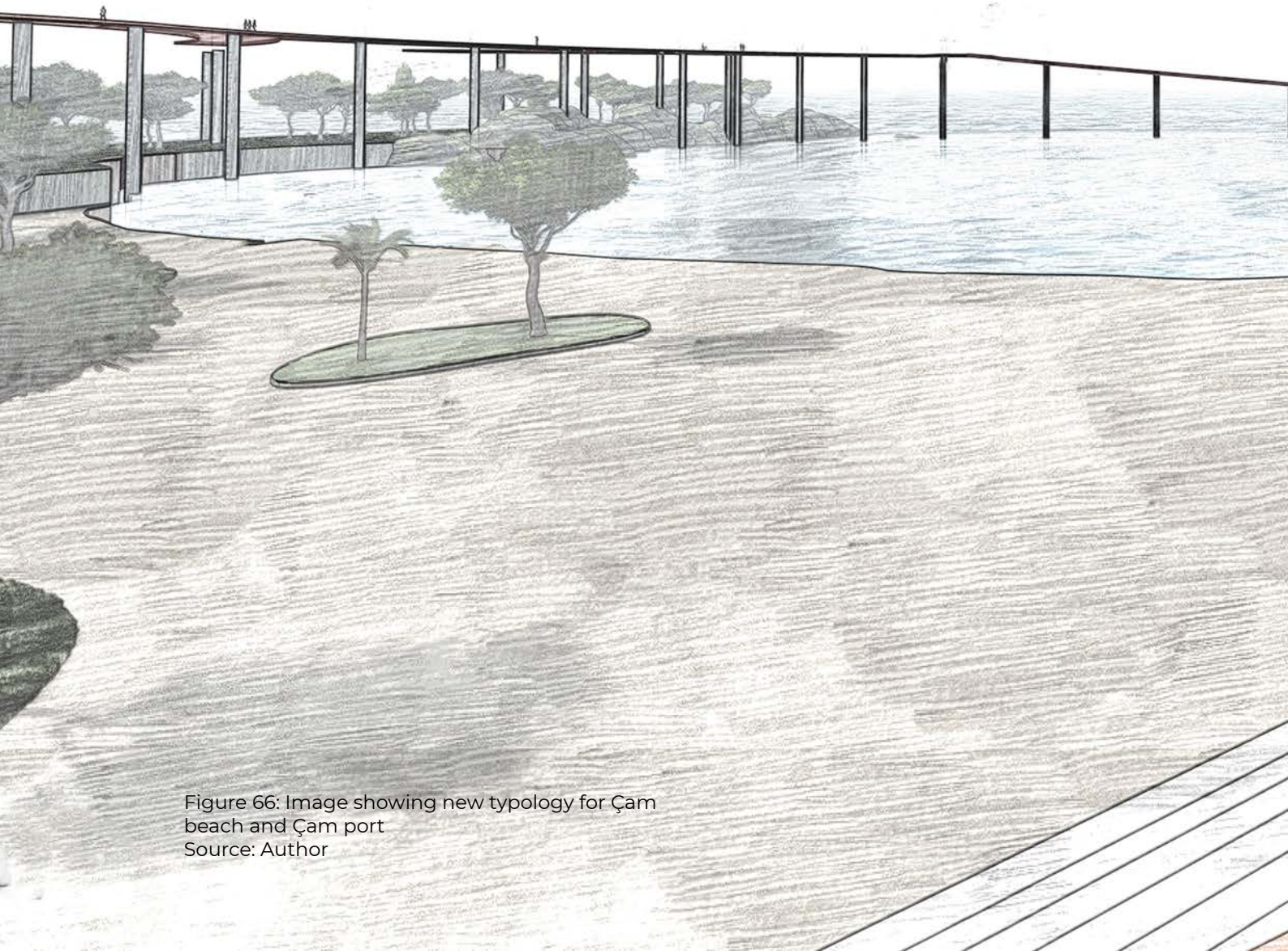
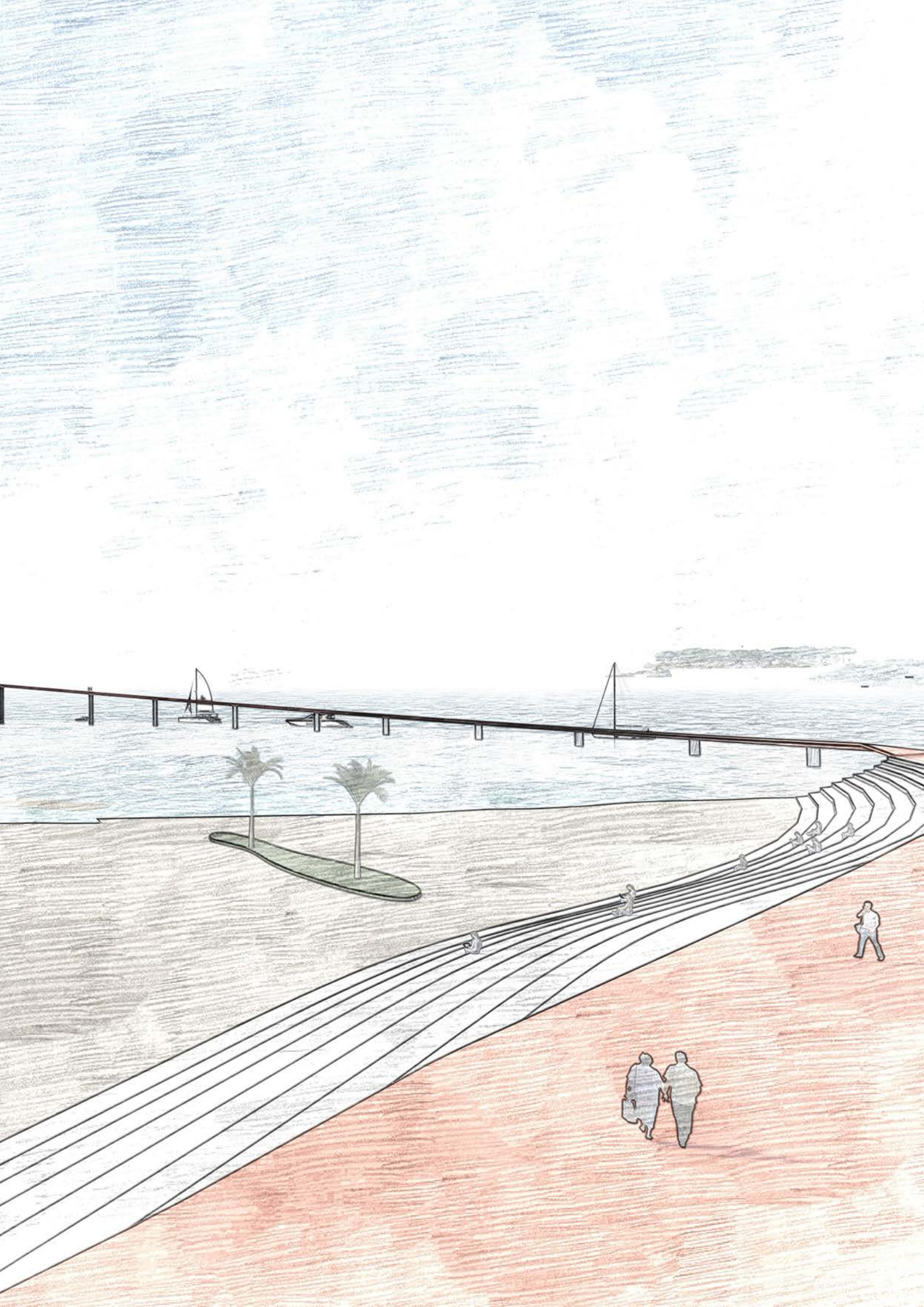


Figure 66: Image showing new typology for Çam beach and Çam port
Source: Author



PLANTING IN A NEGLECTED AREA

There are several strategies and designs that can be implemented for the sanatorium site to enhance its potential for Therapy Rehabilitation Through Landscape For Those With Post-War Traumatic Syndrome. Some of these strategies include:

Restoring and enhancing natural ecosystems: The sanatorium site can be designed to include natural habitats, such as forests, meadows, and wetlands, which can provide opportunities for patients to engage with nature and benefit from the therapeutic effects of greenery.

Creating sensory gardens: The site can also include sensory gardens, which are designed to stimulate the senses and provide a calming and therapeutic environment. This can include gardens with aromatic plants, tactile elements, and soothing sounds.

The sanatorium site might be planned to incorporate areas for meditation and reflection, such as peaceful gardens or contemplation areas, which can aid patients in processing their experiences and feelings.

Giving patients the chance to exercise: The location may provide locations where patients may exercise, such as walking trails, bike routes, and outdoor gyms, which can assist patients improve their physical health and general well-being.

Providing chances for social connection: The facility may also provide areas for such interaction, such as communal gardens or outdoor meeting areas, which can aid patients in forming relationships with others and creating a feeling of community.

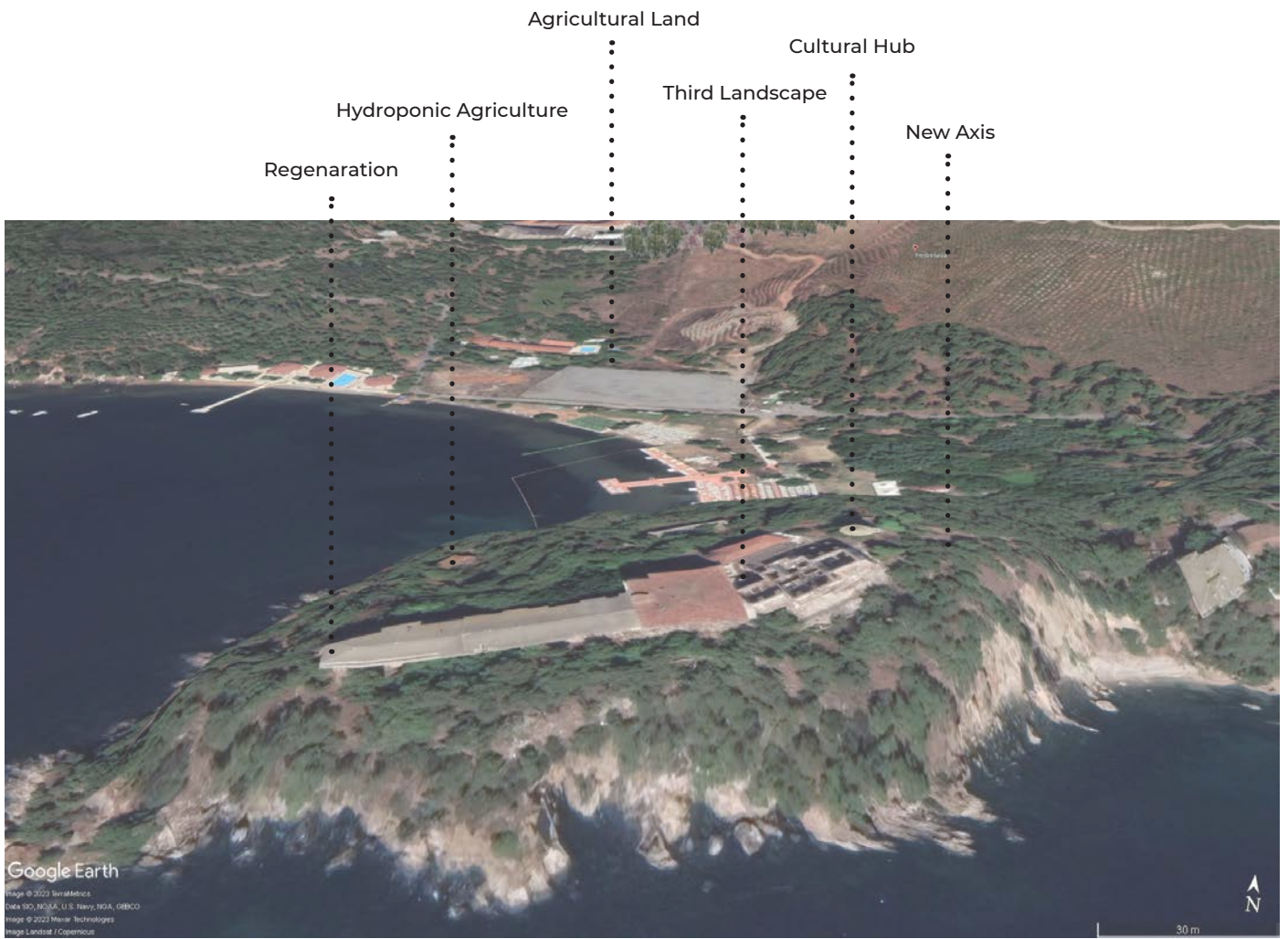


Figure 67: Image Show new land interventions
Source : Author

DESIGN DESCRIPTION

The therapeutic landscape is intended specifically for persons with post-war trauma. The goal of design is to link new ecological and economic centres with cultural contexts like sanatoriums, seminaries, and other institutions. The site will benefit from enough interaction between the neglected natural area and new ecological enhancements.

The main goal of design is to target islands and sanatorium sites using various tactics at various scales. The sanatorium serves as an island-wide cultural catalyst, linking through the forest, the sea, and the port. When we take a look at those scales:

First, on an island scale, the design intends to link cultural hotspots, create new routes between them, and include innovative natural-based solutions to support the island's ecological plan. Additionally, the island's many economic locations, which will become centers with new corridors, will be supported by the new routes.

Second, the Sanatorium area serves as the hub for the island's cultural, ecological, and economic interventions. Through the port and forest, the region is bridging with already-existing cultural corridors and establishing new ones as well. Three distinct areas with a sea, forest, and port setting are provided by that divide.

Finally, three zooms—the sea, the forest, and the port—create distinct interventions with new connections. With the sanatorium building at the site's highest point, the sanatorium area seeks to provide users with a more peaceful environment. Additionally, there are new additions that include workshops and plant laboratories for learning and healing. Then, through the forest, gardens that appeal to our senses restore our memories. We are beginning a voyage between our routes with the assistance of fragrant and textured elements. Additionally, this region supports new economic initiatives including environmentally friendly tourism and new agricultural regions that support modern amenities. The port area is our lowest point in the zone and its safest location. It is sort of an artificial port that was created before the 18th century for mining because the area has always had copper mining. Sanatorium and port reunite for peace and safety with new route. Additionally, it is building a bike route and new activity trail for the area that visitors may utilize for new extreme sports.

Through landscape: for thousands of years, our ancestors traveled across forests and fields. They had an intimate connection to plants. Plants helped them navigate their environments, treat their wounds, and feed themselves. Knowing how to distinguish between an edible and nonedible plant was a matter of life and death (Planting in a Post-wild World by Thomas Rainer and Claudia West, 2015).

RE-CONSIDERING THE APPROACH

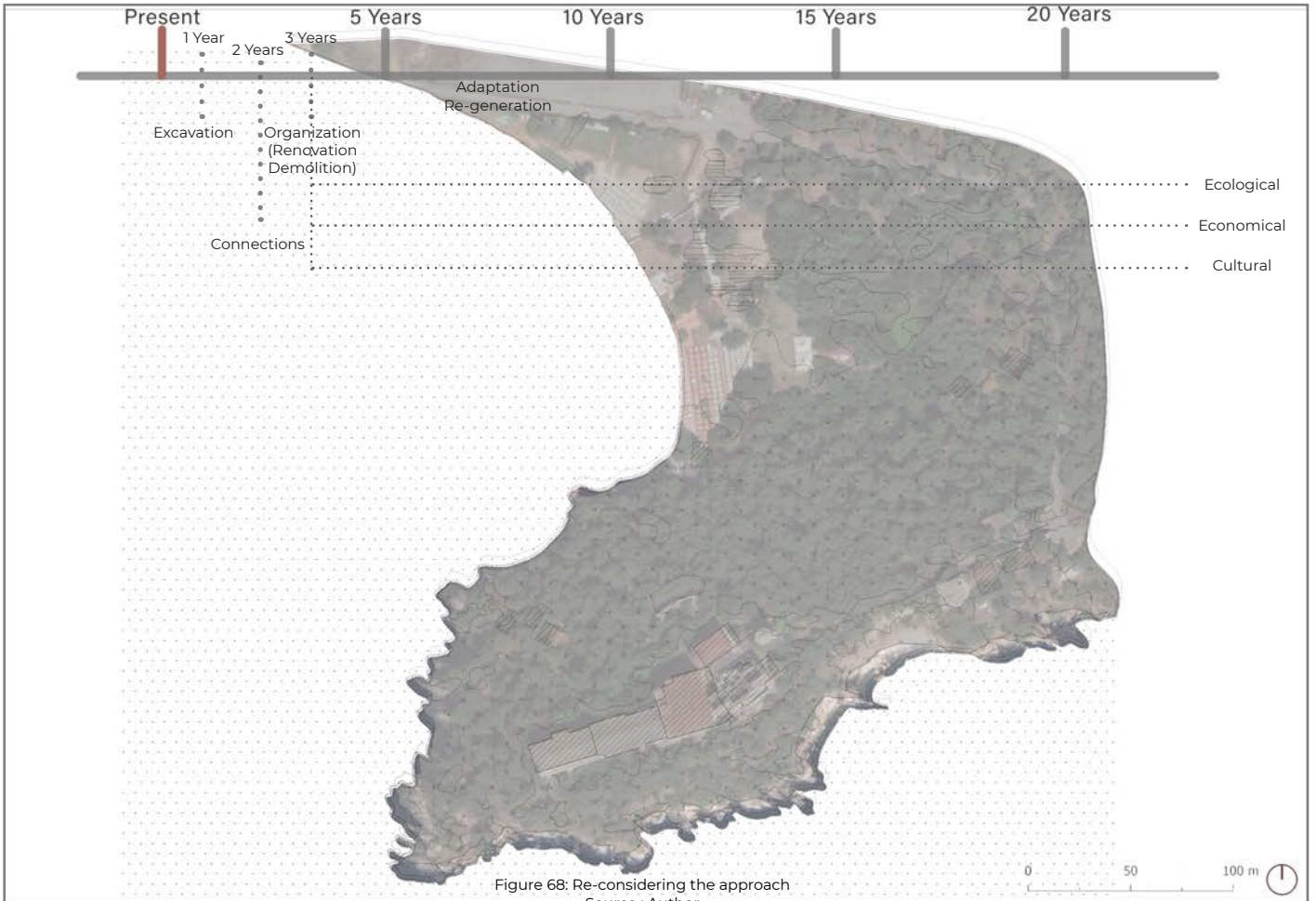


Figure 68: Re-considering the approach
Source : Author

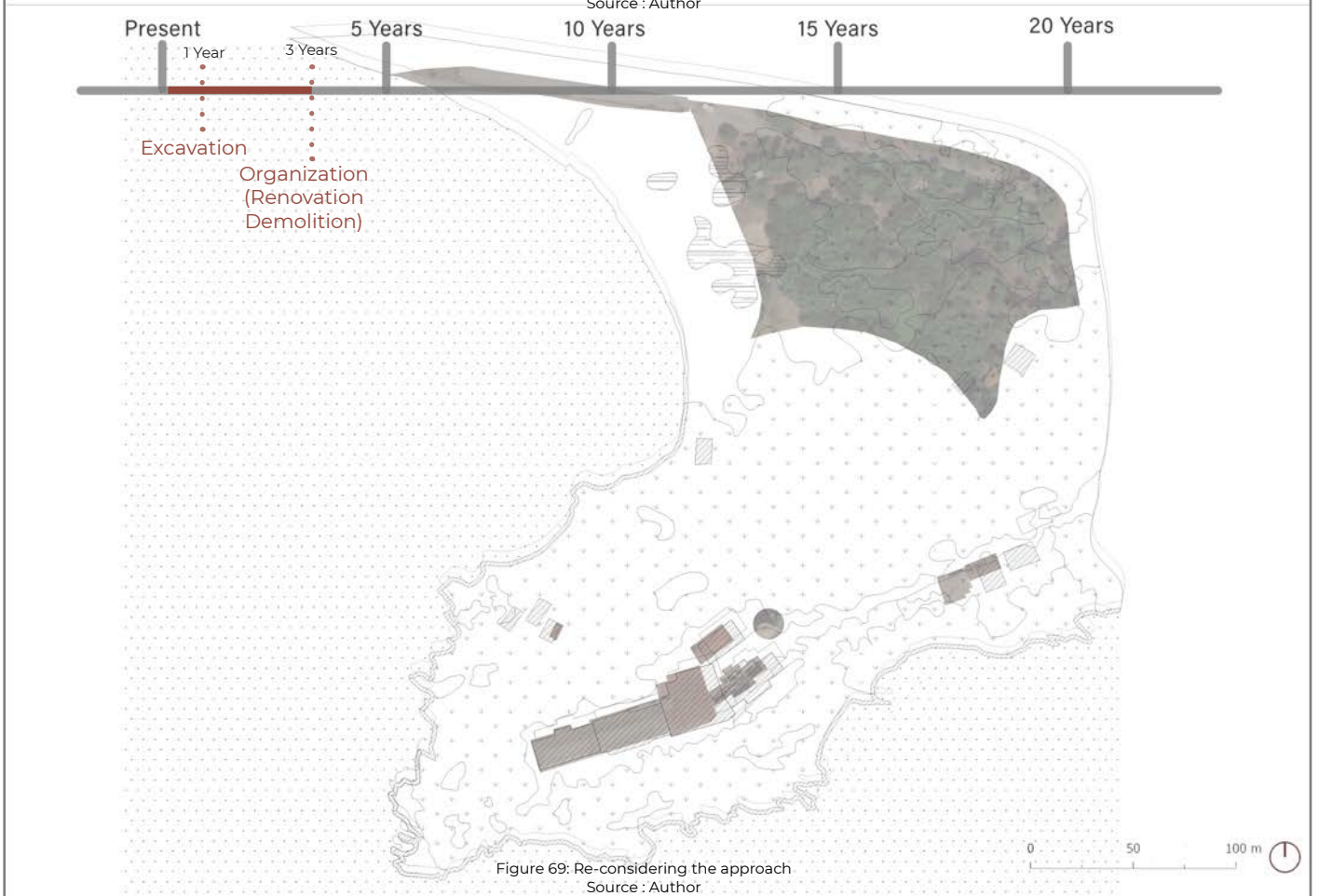
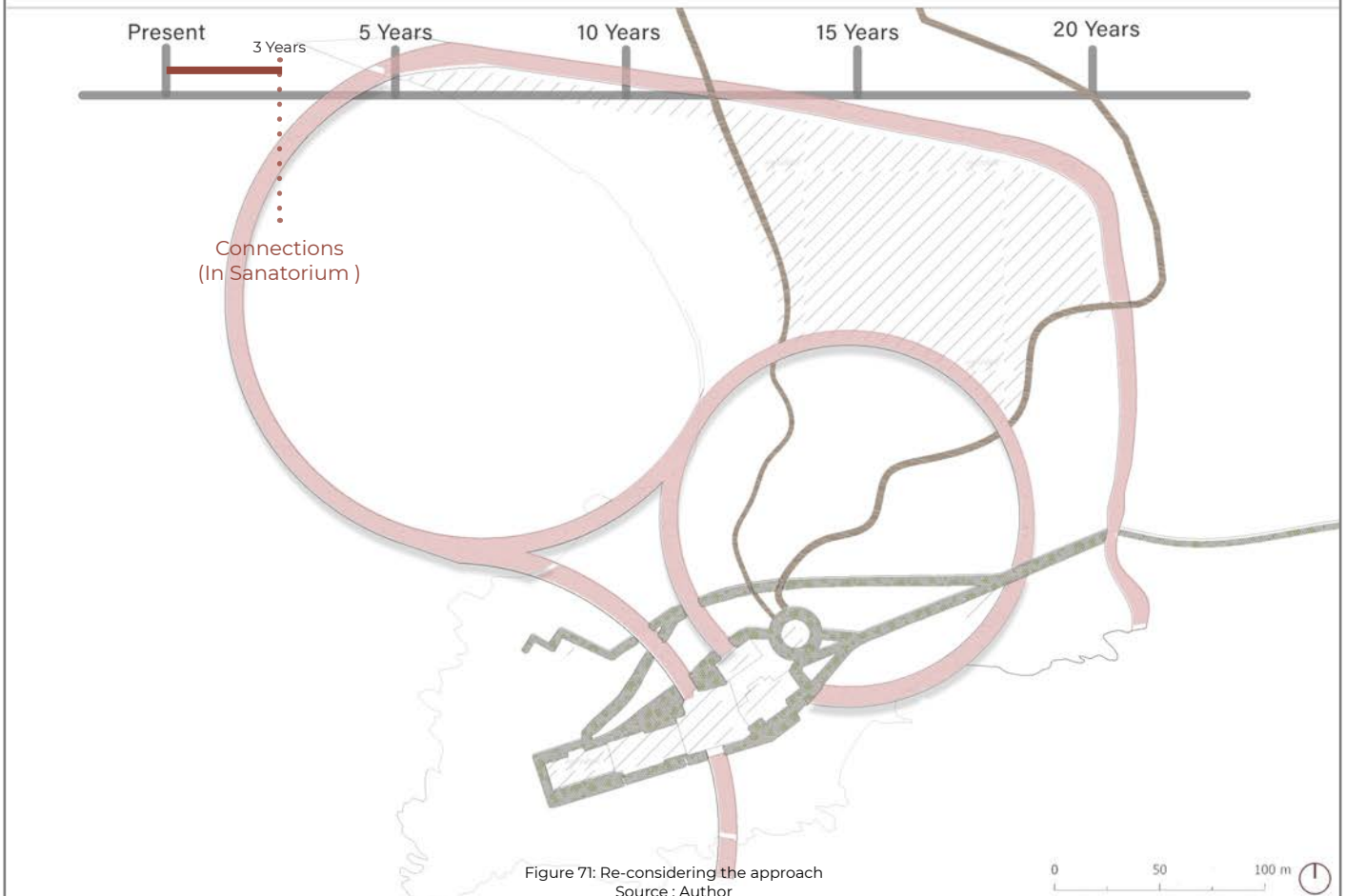
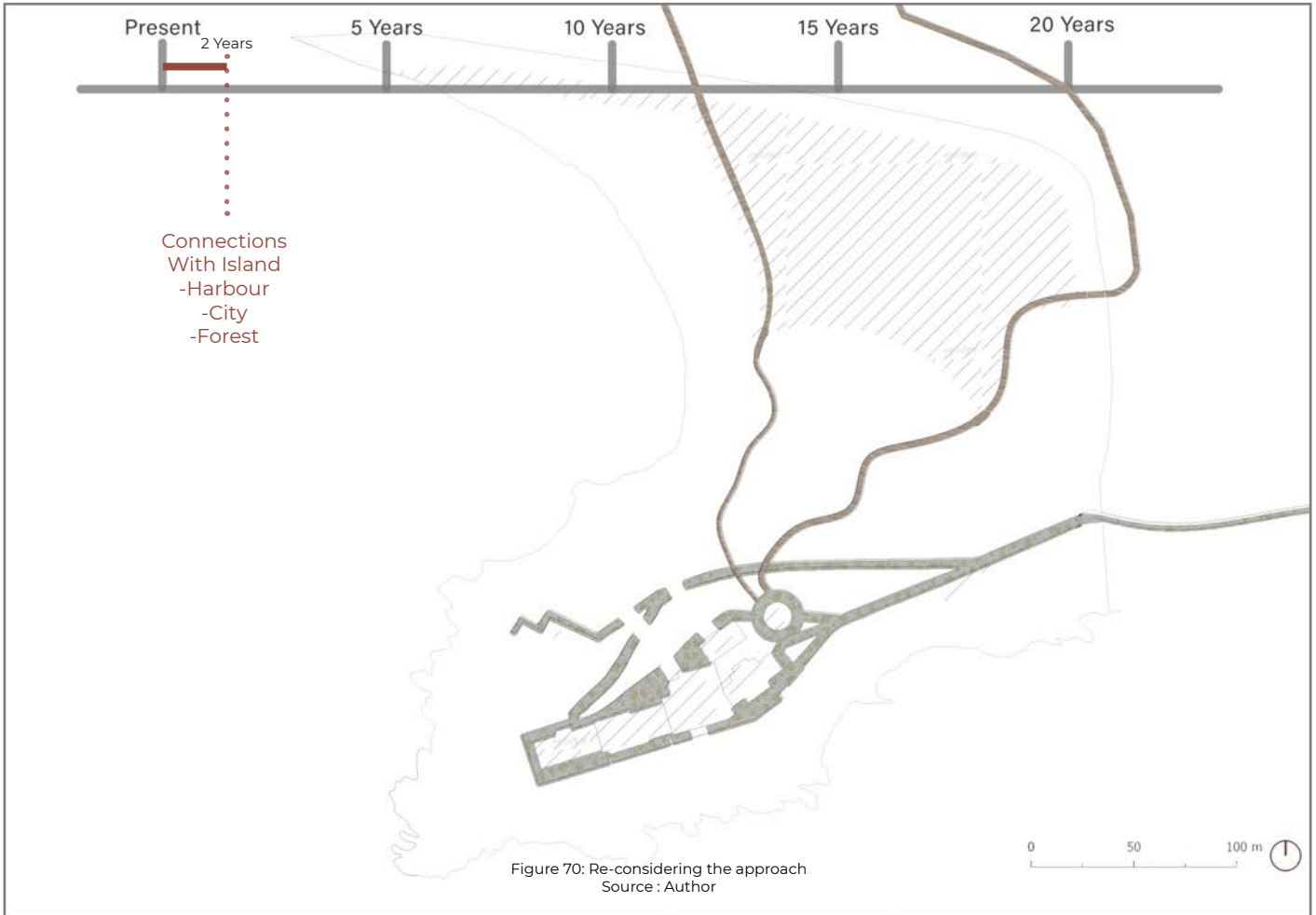


Figure 69: Re-considering the approach
Source : Author

RE-CONSIDERING THE APPROACH (Site Connections)



RE-CONSIDERING THE APPROACH (Adding Functions)

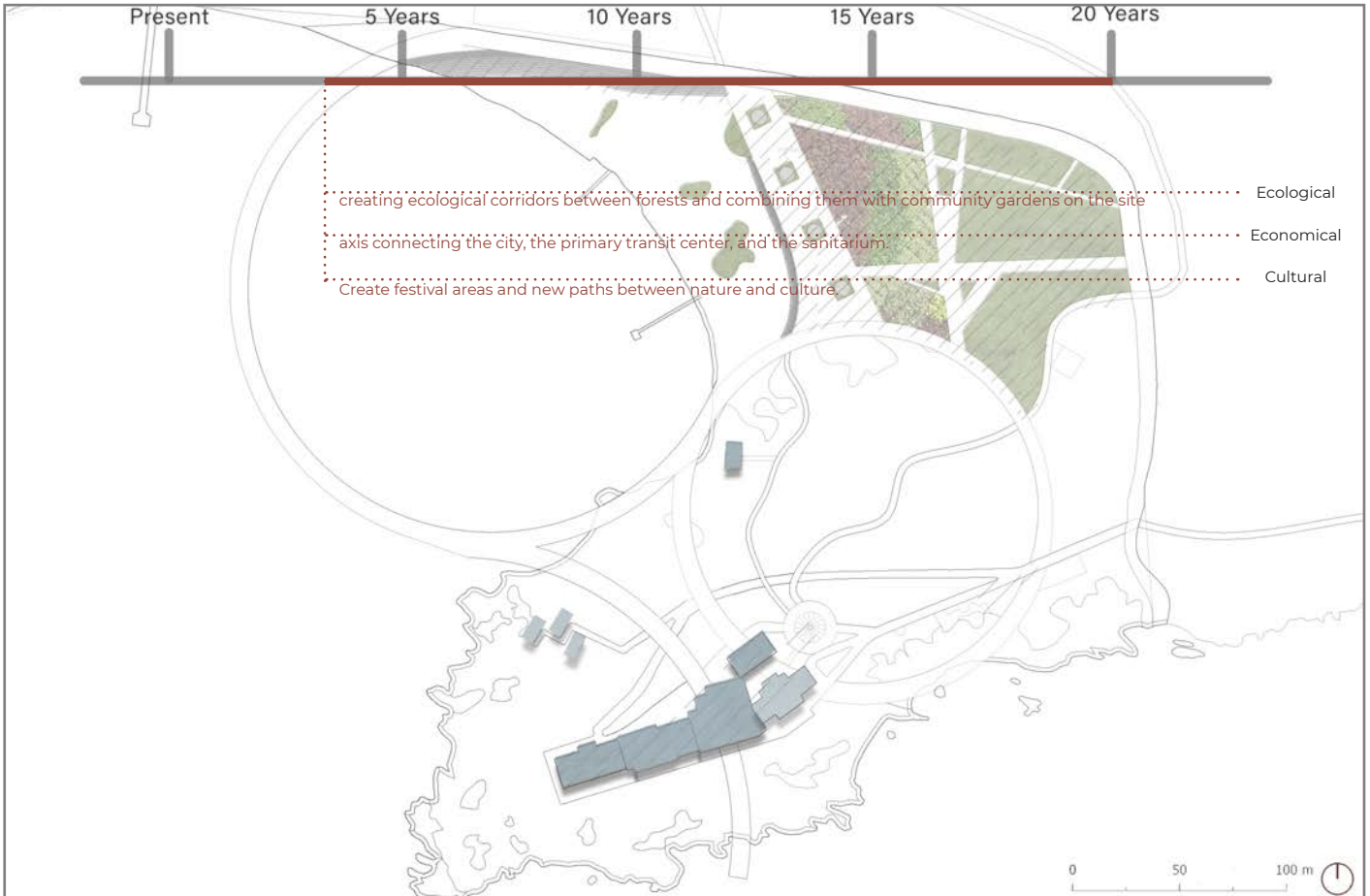


Figure 72: Re-considering the approach
Source : Author

STAKEHOLDERS

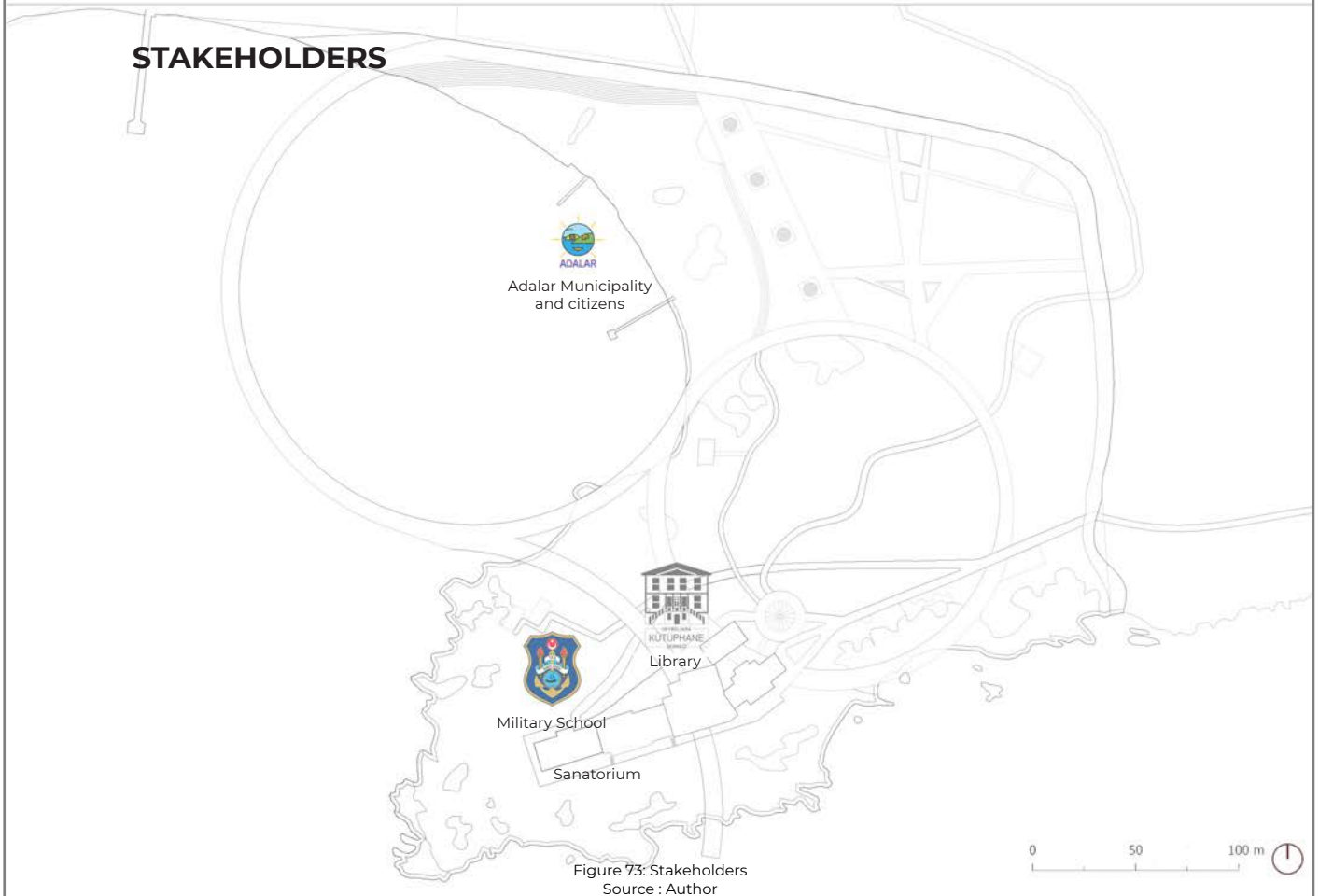


Figure 73: Stakeholders
Source : Author

Figure 74: Masterplan for Sanatorium
Source : Author





AXOS

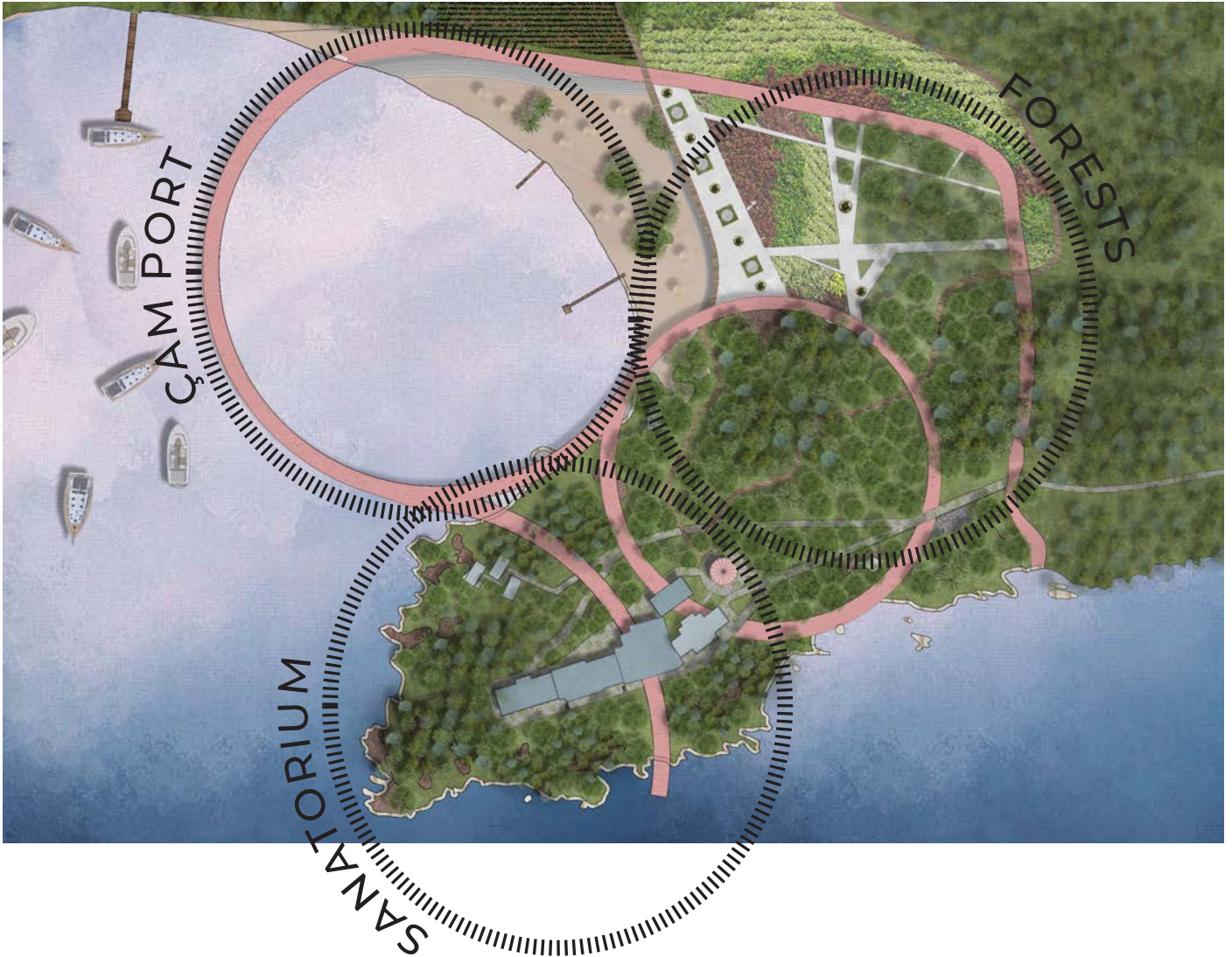


Figure 75:Axos location on Masterplan
Source : Author

As in the concept, Axos are also dividing 3 different zone which are giving the importance of either site and island. Port, Sanatorium and forests are 3 different tangible element for the island and each playing a unique role in the island's history and identity.

Sanatorium: The Sanatorium plays a significant role in the history and culture of Heybeliada, and its preservation can help the island maintain its special character and provide a connection to the past.

Forests: These forests are not only important for their ecological value, but also for their recreational and cultural value.

Çam Port: Port is a historic port on Heybeliada that has been used for centuries as a landing point for ships and boats. The port is a significant part of Heybeliada's maritime history and continues to be a hub of activity for fishermen and other boaters.

SANATORIUM AXO

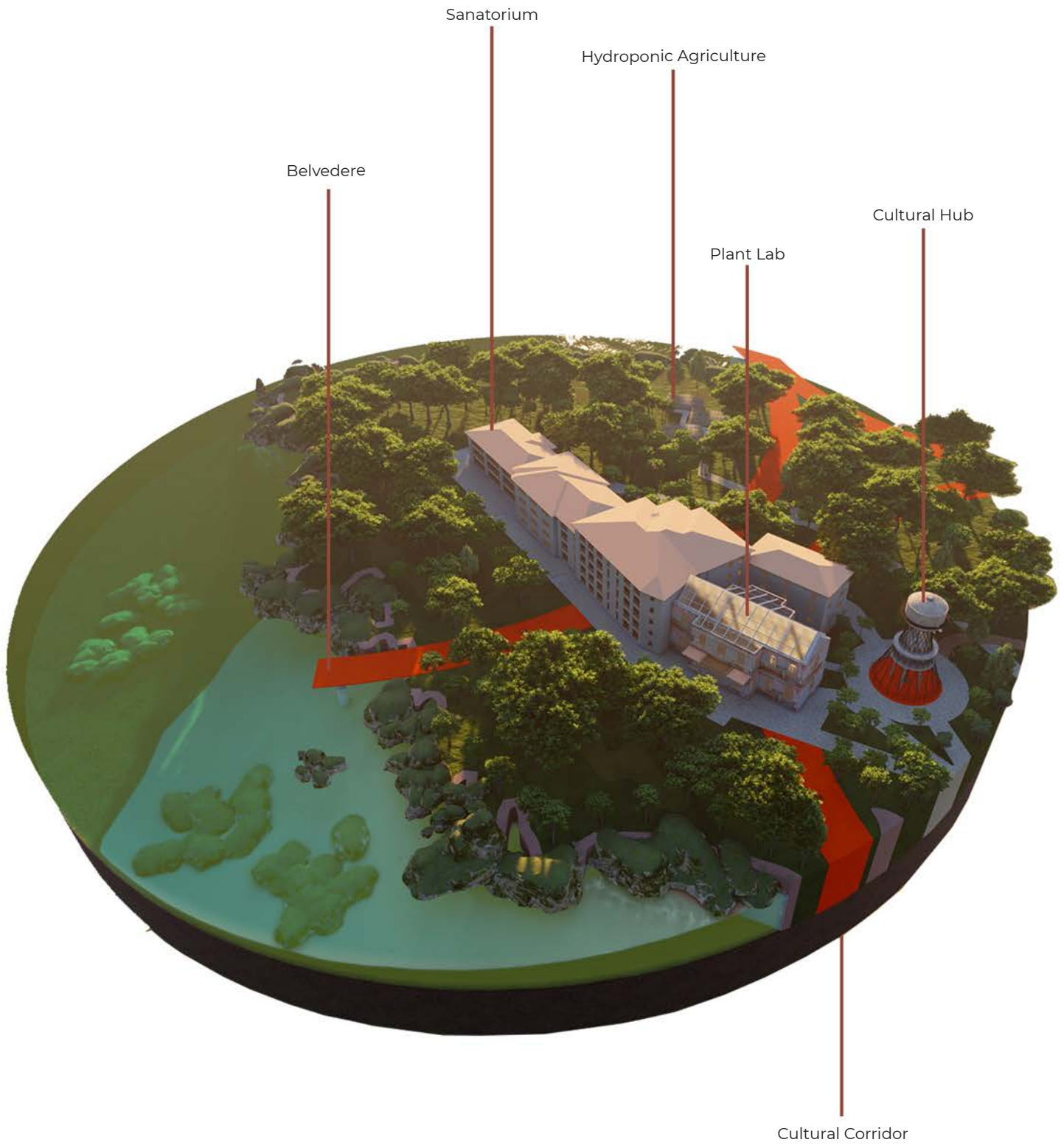


Figure 76: Axos for Sanatorium
Source : Author

FOREST AXO

Sensory Gardens
(Textural plants)

Sensory Gardens
(Scented plants)

Çam Beach

Sensory Gardens

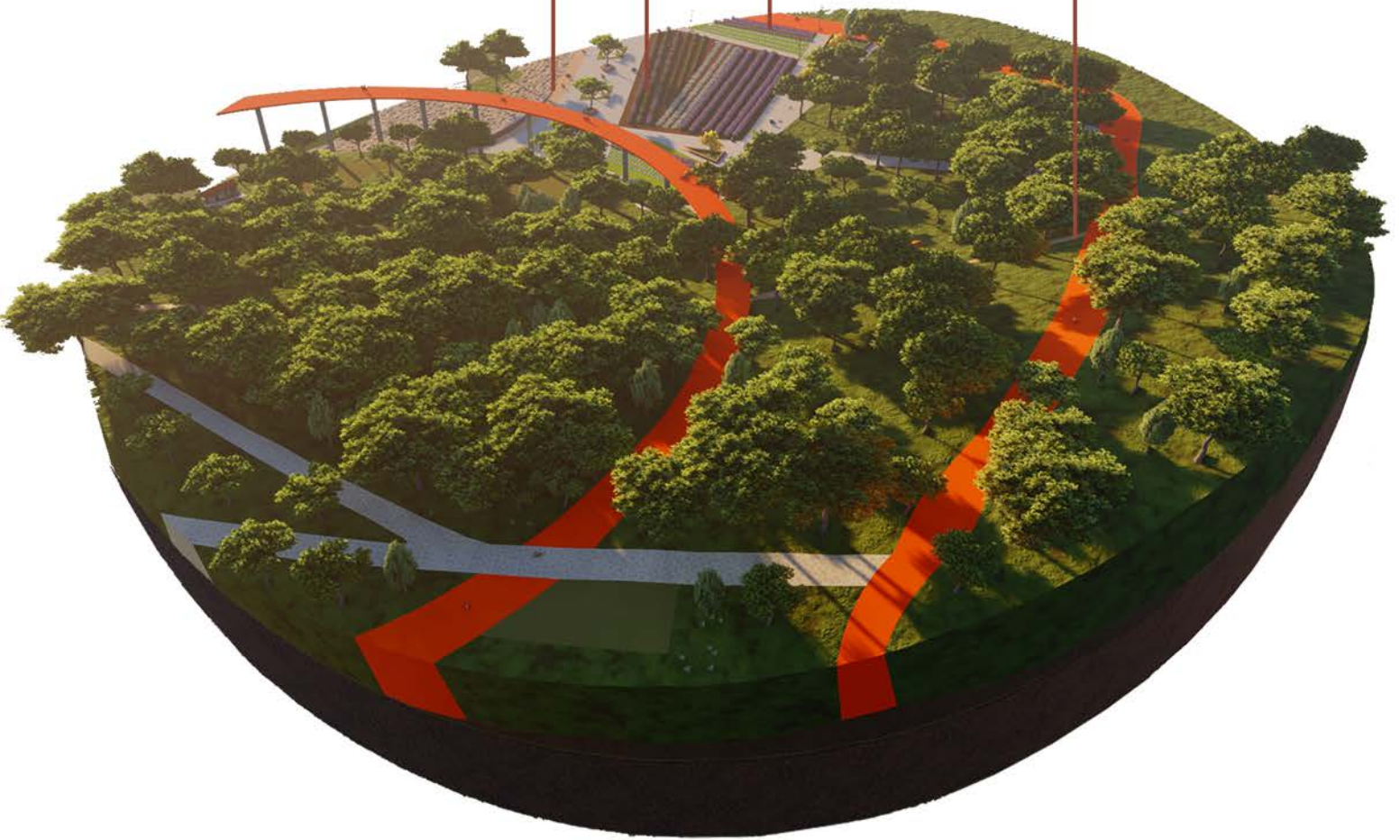


Figure 77: Axes for Forest
Source : Author

ÇAM PORT AXO

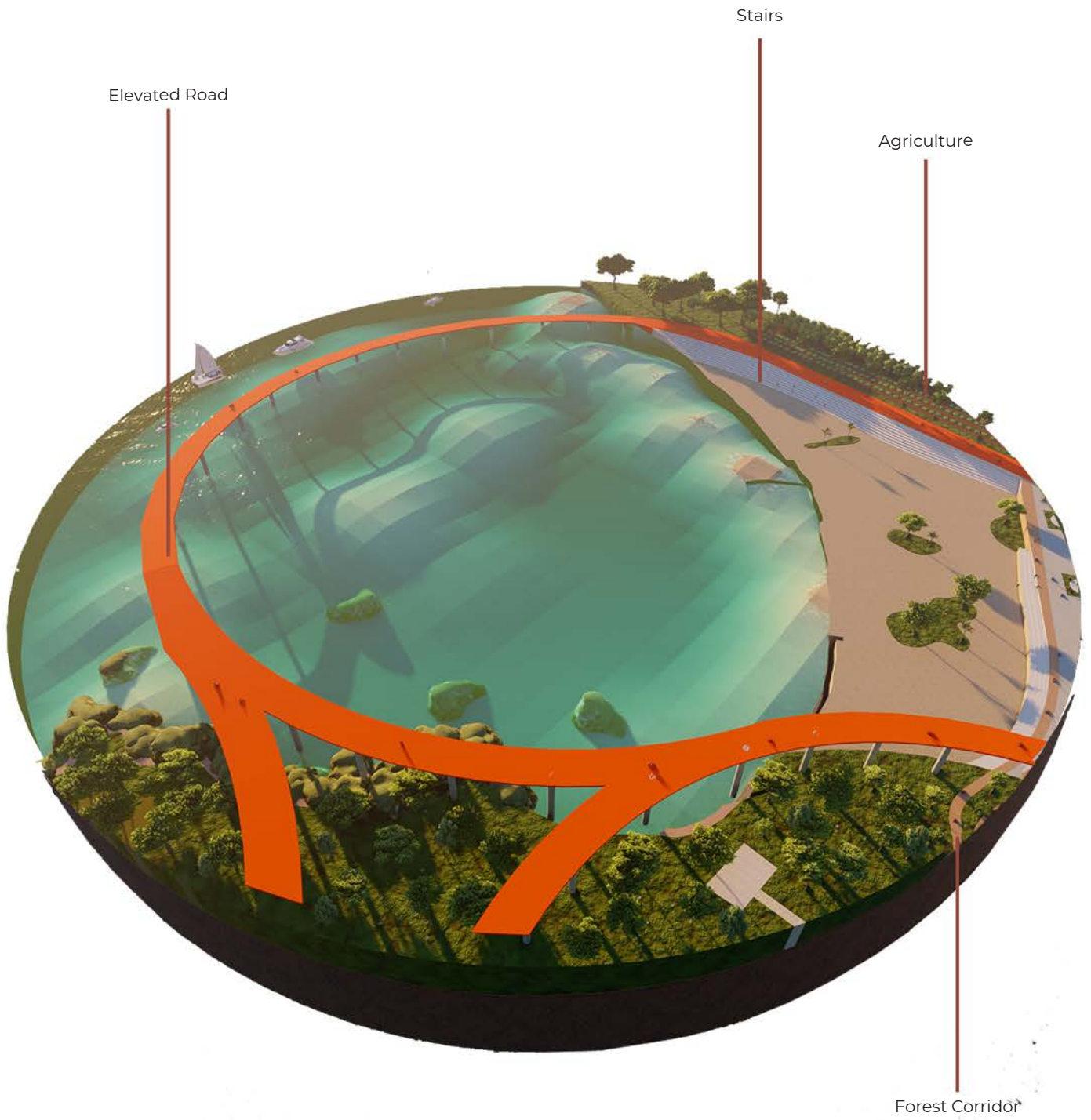


Figure 78: Axes for Cam Port
Source : Author

VIEWS



Figure 79: Image showing renovation of watertank and sanatorium and creating new paths in the area.
Source: Author

VIEWS



Figure 80: Image showing sensory gardens and forests
Source: Author

VIEWS



Figure 81: Image showing new axis between agricultural area and the Çam port.
Source: Author

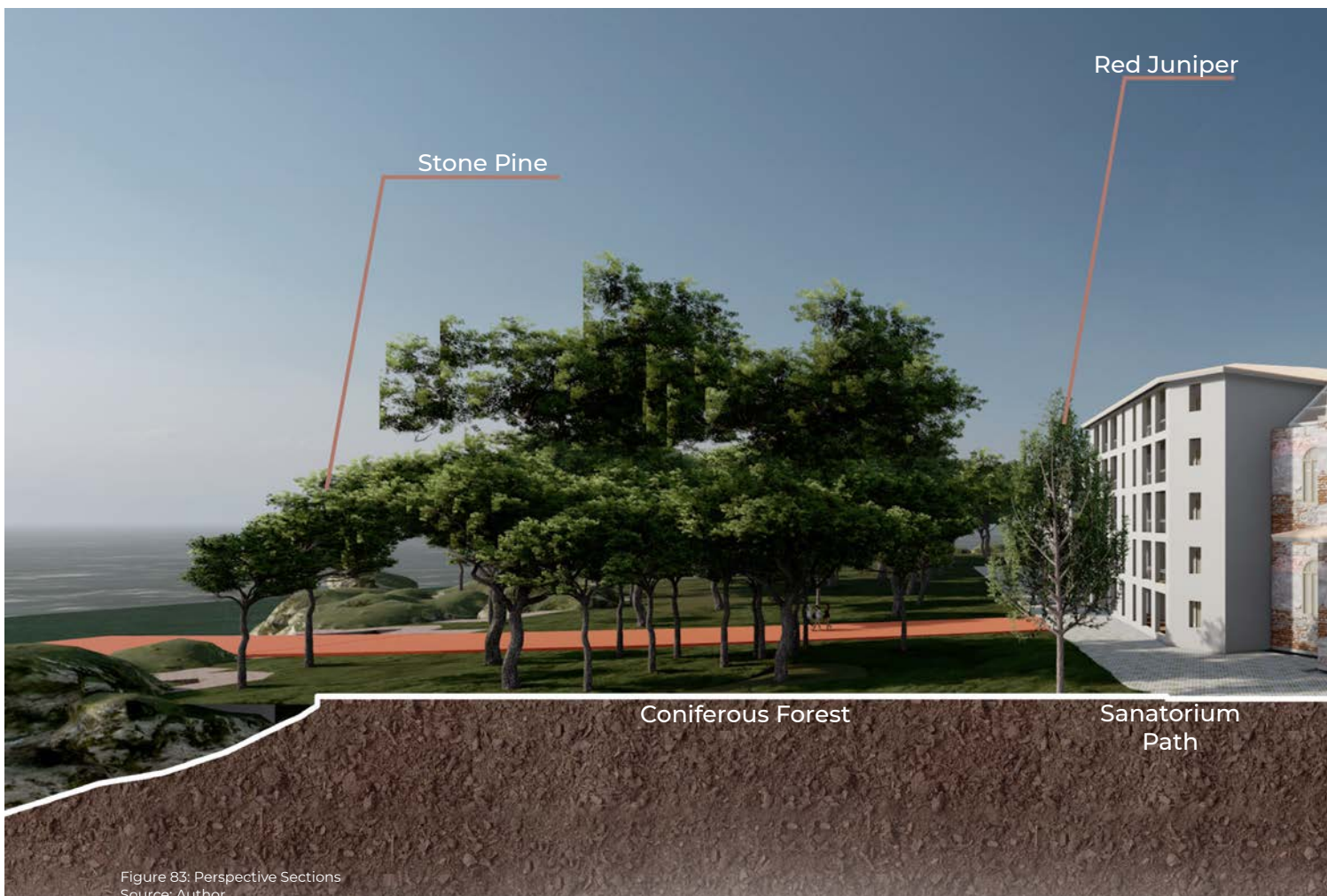
VIEWS



Figure 82 : Image showing hydroponic agricultures
Source: Author

Integration with Plants

Integration plants in Heybeliada might provide a variety of advantages. the likes of sensory gardens. It may be an outstanding alternate to Heybeliada, especially for people who have experienced post-traumatic stress. All of the senses, including touch, sight, smell, sound, and taste, are intended to be stimulated by sensory gardens, which have been shown to be particularly successful in promoting relaxation, lowering stress levels, and enhancing general wellbeing.



The following are some suggestions for including sensory gardens in Heybeliada:

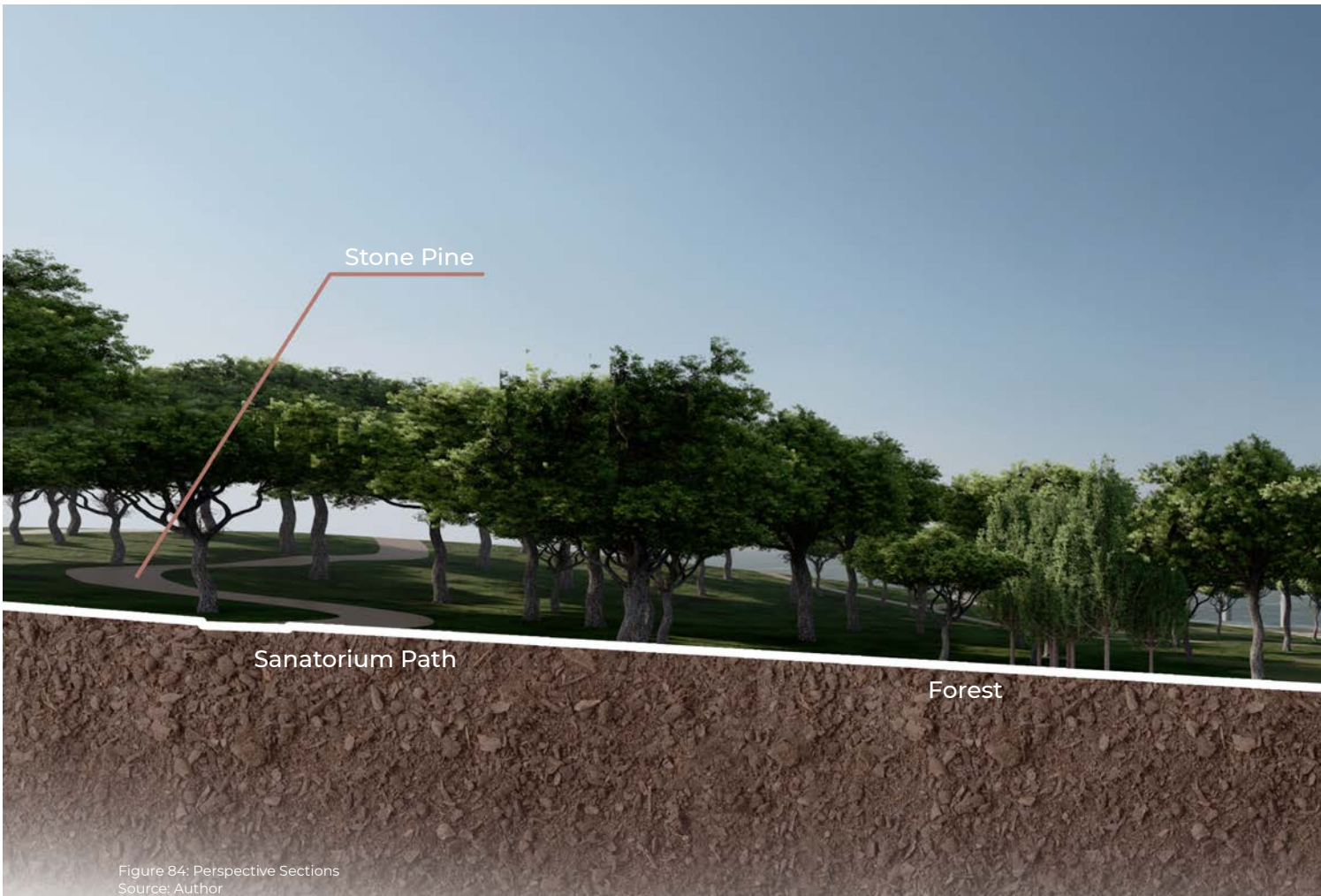
Scented Plants: For those suffering from post-traumatic stress disorder, using plants with potent, pleasing aromas like lavender, rosemary, and jasmine may create a tranquil and relaxing environment.

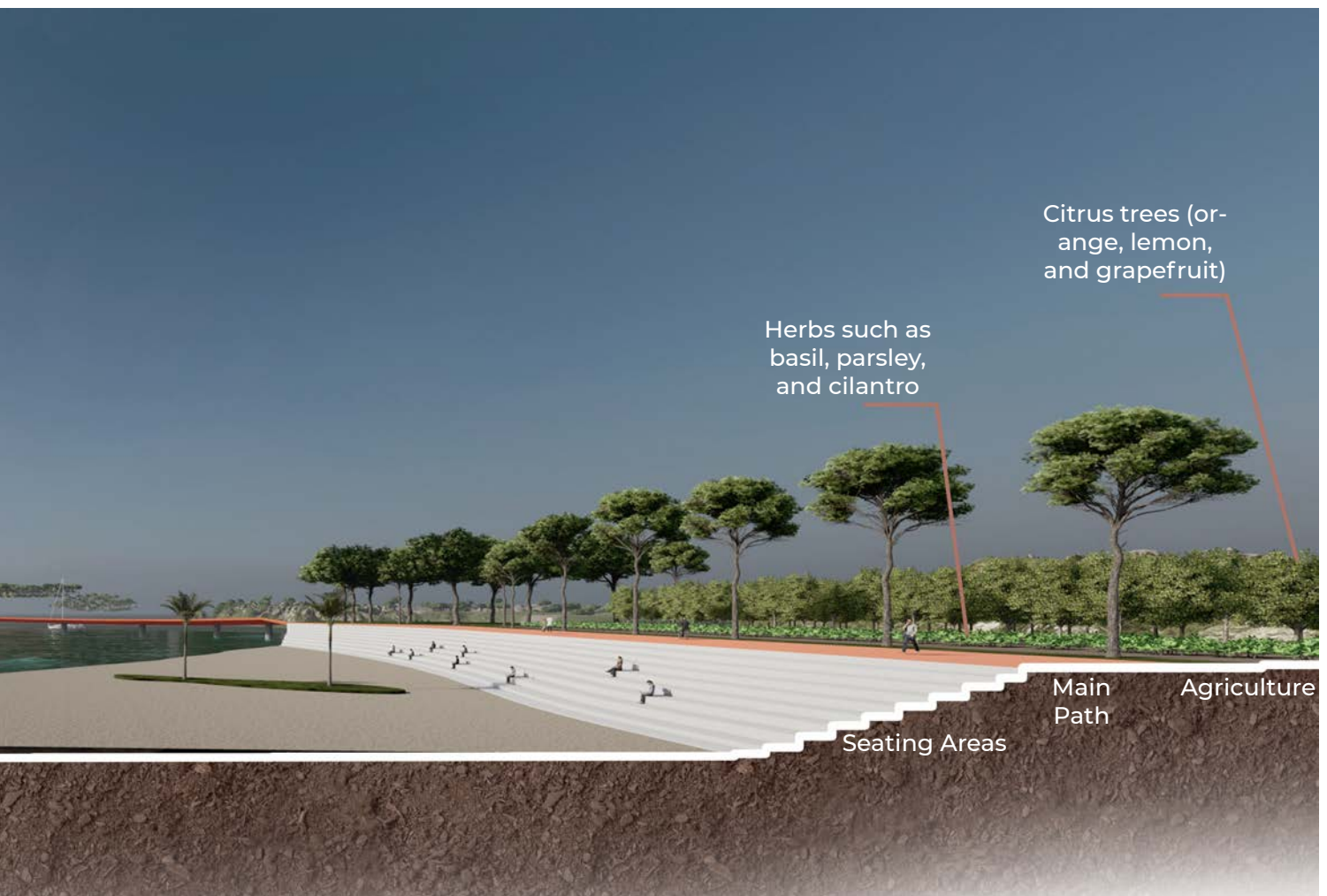
Textural plants: Including a range of plants with various textures, such as plush lamb's ear or fuzzy sage, may provide visitors a tactile experience and pique their sense of touch.

Edible plants: Adding herbs and other edible plants, including mint, basil, and strawberries, may enhance flavor and encourage a balanced diet.

Seating Areas: Offering inviting seating spots inside the garden might entice guests to unwind and spend time there, taking in the sensory experience.







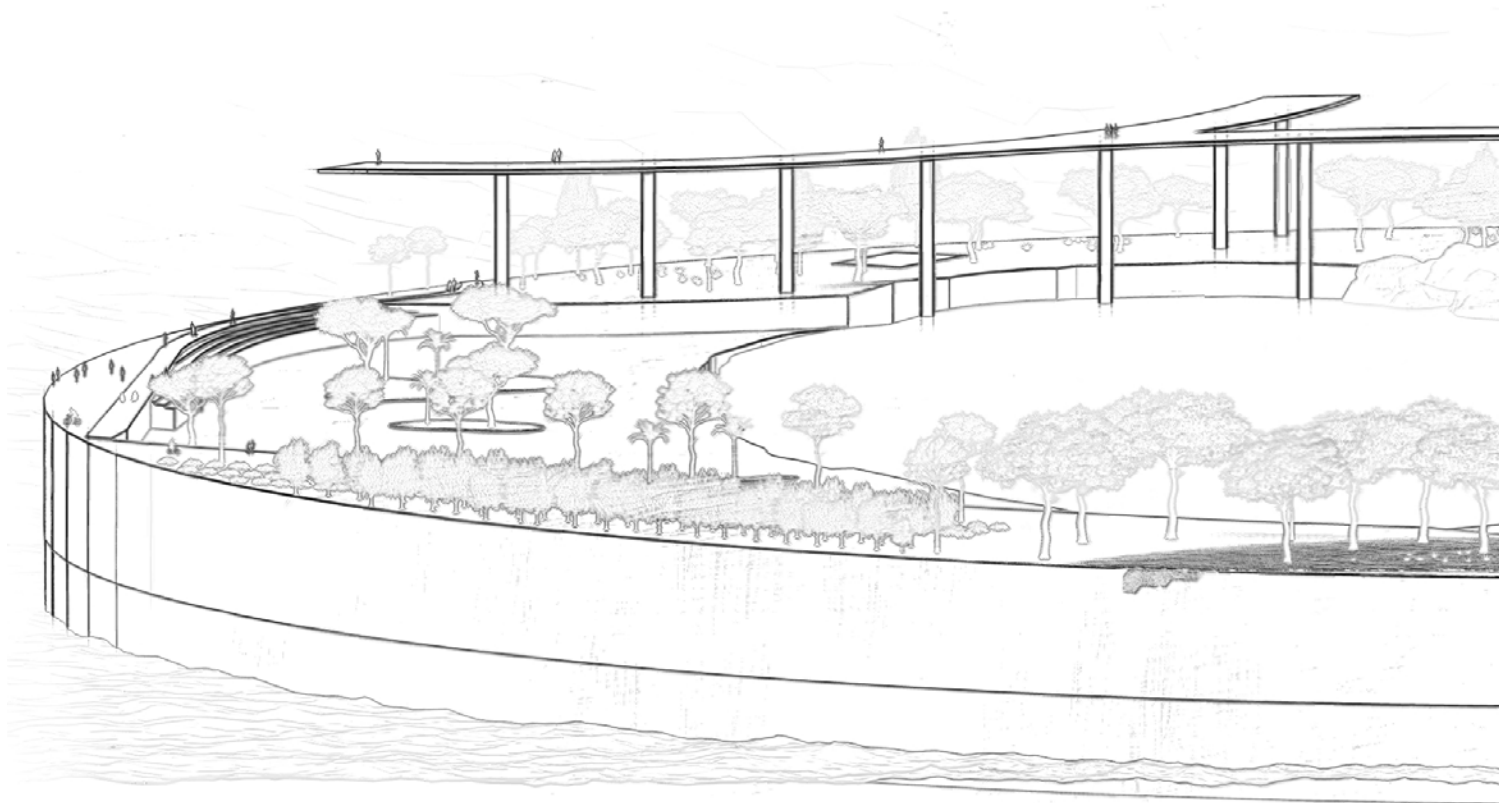
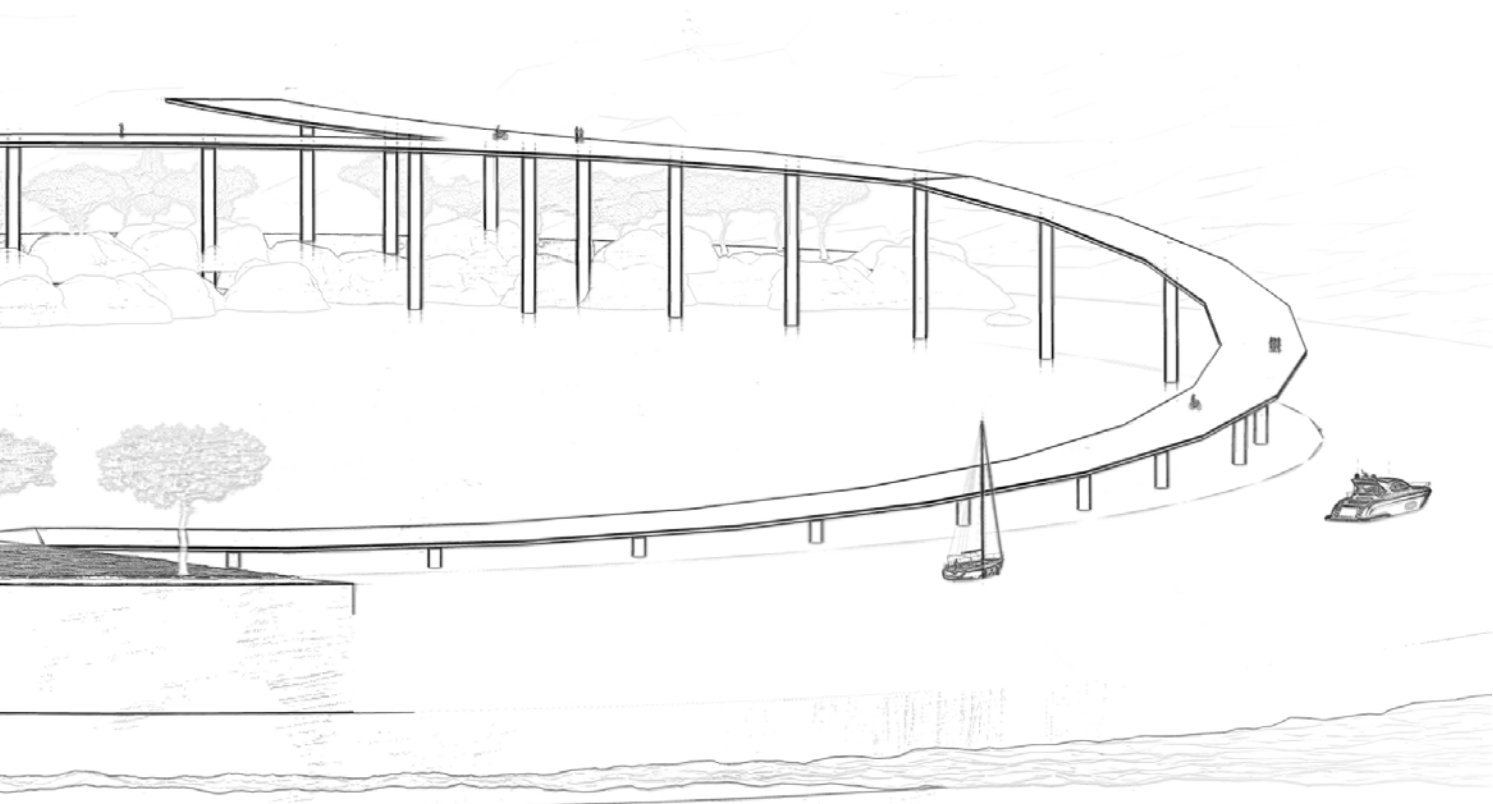


Figure 86: Perspective view for Port and path integration
Source: Author



CONCLUSION

As a result, Therapy Rehabilitation Through Landscape For Individuals With Post-War Traumatic Syndrome may be a useful strategy to treat the mental health issues faced by people who have experienced war and violence. This strategy can aid in the promotion of healing, the reduction of post-traumatic stress disorder symptoms, and an improvement in general wellbeing by offering a holistic and nature-based setting that gives physical, psychological, and social support.

The Therapy Rehabilitation Through Landscape approach can be used in the context of Heybeliada Island through a variety of interventions, such as the renovation of the Sanatorium as a healing space, the creation of sensory gardens and agricultural areas, and the implementation of programs for horticultural and forest therapy.

A sustainable and resilient community that can serve as a model for other areas dealing with post-war trauma can be created by using the Therapy Rehabilitation Through Landscape approach, which is in line with the UN's Sustainable Development Goals. Heybeliada Island can benefit from this development in terms of its economy, society, and environment.

The Heybeliada Island Sanatorium has the potential to be a key component of the Therapy Rehabilitation Through Landscape strategy for people with post-traumatic stress disorder.

The Sanatorium may be utilized to support post-war trauma rehabilitation research and training, which will help not just Heybeliada but also other communities struggling with related difficulties. The Sanatorium may be transformed into a great cultural and economic asset for the island by being restored and used in a thoughtful and sustainable way, drawing tourists and boosting small enterprises.

Even so, this strategy needs cooperation and coordination from a variety of stakeholders, including the public sector, nonprofit groups, and the commercial sector, in order to be successful. Moreover, it calls for a sustained commitment to sustainability and community involvement to make sure that the interventions are in line with the needs and ambitions of the neighborhood.

“Nature is not only a place of beauty and inspiration but also a place of refuge and healing. It can offer a space for those affected by post-war trauma to reflect, connect with their senses, and find comfort in the present moment. By designing landscapes with purpose and intention, we can create environments that aid the healing process and promote a sense of renewal and hope.”

Author

BOOKS

- Manifesto of the Third Landscape by Gilles Clément
Planting in a Post-wild World by Thomas Rainer and Claudia West
LANDSCAPE AND SUSTAINABILITY BY JOHN BENSON AND MAGGIE ROE
PLANETARY GARDEN BY GILLES CLEMENT
LOL LANDSCAPE ARCHITECTS
HEYBELİADA HALKI DİMONİSOS
POST-CONFLICT REHABILITATION: THE HUMANITARIAN DIMENSION_ Michael Pugh
Alain Roger_Life and Death of the Landscapes
Walker Simo_The Garden as Art
Peter Walker, Melanie Simo, From Backyard to Center City
Post conflict recovery and peacebuilding_ Anke Hoeffler, Syeda Shahbano Ijaz, Sarah von Billerbeck
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Juhani Pallasma, The eyes of Skin
Gaston Bachelard, The poetics of Space
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- Manifesto of the Third Landscape by Gilles Clément
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The Studies on the Underwater Cultural Heritage of Istanbul from the Anatolian Side to the Prince Islands: The NEMSUS Project by Ahmet Bilir

Datasets from Istanbul Metropolitan Municipality

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